National Grid Reporting Requirements - Affected System Operator Studies

# Paragraph 4 Monthly Report

July 15, 2021

The Narragansett Electric Company (NECo) is experiencing Distributed Generation (DG) saturation in certain regions and at certain substations that indicate the potential need for an Affected System Operator (ASO) study that would affect three or more DG applications or more than 15 MW of DG capacity in the following 6 months. Below is a list of the specific regions and substations where NECo is experiencing DG saturation. This Paragraph 4 Monthly Report (Paragraph 4 Report) provides an update since NECO's previous Paragraph 4 Report on the potential need for an ASO study in such regions and substations, as well as the actions NECo is taking to prevent, mitigate, and prepare for such an occurrence while working with its transmission provider, New England Power (NEP). The information in this Paragraph 4 Report is in addition to the other information and reporting NECo is providing under the Reporting Requirements with respect to potential and ongoing ASO studies.

### Paragraph 4 Attachment

Paragraph 4 Attachment lists the substations with on-going ASO Studies currently being reported under the Reporting Requirements as well as substations for which any future applications over 1MW that propose to be connected to one of these substations will require an ASO study due to DG saturation over 5MW at an individual substation and/or over multiple substations fed from a common transmission injection point.

## **Potential ASO Studies for Pending Applications**

The below table lists the substations that have the potential need for an ASO study that would affect three or more DG applications or more than 15 MW of DG capacity in the following 6 months. Please note that these stations are not part of any of the ongoing ASO Studies. NECo identified the potential need based on the fact that at least one of the Generator Notification Forms (GNFs) for each of these substations that was presented to ISO-NE was returned for further analysis. Please note that in addition, five substations, Chase Hill, Coventry, Kent County, Putnam Pike, and West Kingston, which do not meet the above criteria, are identified in the below list because they are expected to be part of the Company's ASO Area Study #3 which is not yet active. This upcoming study is expected to begin in the next 1-2 months.

| Substation Name            | Region  | DG Penetration Level |
|----------------------------|---------|----------------------|
| BRISTOL SUBSTATION         | Coastal | Between 5MW and 15MW |
| CHASE HILL SUBSTATION      | Capital | >15MW                |
| CHOPMIST SUBSTATION        | Coastal | Between 5MW and 15MW |
| CLARKSON STREET SUBSTATION | Capital | <5MW                 |

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|------------------------------|------------------------|-----------------------|
| COVENTRY SUBSTATION          | Capital                | Between 5MW and 15MW  |
| DAVISVILLE SUBSTATION        | Coastal                | <5MW                  |
| DEXTER SUBSTATION            | Capital                | >15MW                 |
| DRUMROCK SUBSTATION          | Capital                | >15MW                 |
| HIGHLAND PARK SUBSTATION     | Capital                | Between 5MW and 15MW  |
| HOPE VALLEY SUBSTATION       | Coastal                | <5MW                  |
| HOPKINS HILL SUBSTATION      | Coastal                | >15MW                 |
| JEPSON SUBSTATION            | Coastal                | >15MW                 |
| JOHNSTON SUBSTATION          | Capital                | >15MW                 |
| KENT COUNTY SUBSTATION       | Coastal                | >15MW                 |
| KENYON SUBSTATION            | Coastal                | >15MW                 |
| KILVERT ST. SUBSTATION       | Coastal                | Between 5MW and 15MW  |
| LAFAYETTE SUBSTATION         | Coastal                | >15MW                 |
| MINK STREET SUBSTATION       | MA                     | Between 5MW and 15MW  |
| NASONVILLE SUBSTATION        | Capital                | >15MW                 |
| NEW LONDON AVE SUBSTATION    | Coastal                | >15MW                 |
| OLD BAPTIST ROAD SUBSTATION  | Coastal                | >15MW                 |
| PARK ST SUBSTATION           | Coastal                | <5MW                  |
| PAWTUCKET SUBSTATION         | Capital                | Between 5MW and 15MW  |
| POINT STREET SUBSTATION      | Capital                | Between 5MW and 15MW  |
| PONTIAC SUBSTATION           | Capital                | Between 5MW and 15MW  |
| PUTNAM PIKE SUBSTATION       | Capital                | >15MW                 |
| RIVERSIDE SUBSTATION         | Capital                | Between 5MW and 15MW  |
| STAPLES SUBSTATION           | Capital                | Between 5MW and 15MW  |
| TIOGUE AVE SUBSTATION        | Capital                | <5MW                  |
| TIVERTON SUBSTATION          | Coastal                | >15MW                 |
| TOWER HILL SUBSTATION        | Coastal                | >15MW                 |
| VALLEY SUBSTATION            | Coastal                | Between 5MW and 15MW  |
| WAMPANOAG SUBSTATION         | Coastal                | Between 5MW and 15MW  |
| WARREN SUBSTATION            | Capital                | Between 5MW and 15MW  |
| WASHINGTON SUBSTATION        | Coastal                | Between 5MW and 15MW  |
| WATERMAN AVE SUBSTATION      | Capital                | <5MW                  |
| WEST CRANSTON SUBSTATION     | Capital                | >15MW                 |
| WEST KINGSTON SUBSTATION     | Coastal                | Between 5MW and 15MW  |
| WESTERLY SUBSTATION          | Coastal                | Between 5MW and 15MW  |
| WICKFORD JUNCTION SUBSTATION | Coastal                | >15MW                 |
| WOOD RIVER SUBSTATION        | Coastal                | >15MW                 |
| WOONSOCKET SUBSTATION        | Coastal                | >15MW                 |
|                              |                        |                       |
|                              |                        |                       |

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### Action Plan/Next Steps

NECo is taking the following actions to prevent, mitigate, and prepare for such an occurrence for the above applications:

- NECo will continue to submit notification to NEP for all pre-ISA projects as soon as they reach the 20-business day mark during the distribution impact study stage.
- For the substations listed above, NECo will provide NEP the list of pending applications for NEP to consider as part of its initial assessment in coordination with ISO-NE as to what level of ASO study will be required.
- NECo will provide notification to the PUC and send notifications to affected customers per Paragraph 1 or Paragraph 5 and Paragraph 6 of the Reporting Requirements.

### **Potential ASO Studies for Future Applications**

The below table indicates the list of substations where an ASO study will be required for any future application connecting to that substation. Future applications to these substations for over 1 MW will require ASO studies due to DG saturation at these substations.

Substation Name Region DG Penetration Level **BRISTOL SUBSTATION** Between 5MW and 15MW Coastal CHASE HILL SUBSTATION Capital >15MW COVENTRY SUBSTATION Capital Between 5MW and 15MW DAVISVILLE SUBSTATION Coastal <5MW DEXTER SUBSTATION Capital >15MW DRUMROCK SUBSTATION >15MW Capital Between 5MW and 15MW FARNUM PIKE SUBSTATION Capital **HIGHLAND PARK SUBSTATION** Capital Between 5MW and 15MW HOPE VALLEY SUBSTATION Coastal <5MW HOPKINS HILL SUBSTATION Coastal >15MW JEPSON SUBSTATION Coastal >15MW JOHNSTON SUBSTATION Capital >15MW KENT COUNTY SUBSTATION Coastal >15MW **KENYON SUBSTATION** Coastal >15MW **KILVERT ST. SUBSTATION** Between 5MW and 15MW Coastal LAFAYETTE SUBSTATION Coastal >15MW MINK STREET SUBSTATION MA Between 5MW and 15MW NASONVILLE SUBSTATION Capital >15MW NEW LONDON AVE SUBSTATION Coastal >15MW OLD BAPTIST ROAD SUBSTATION Coastal >15MW PAWTUCKET SUBSTATION Capital Between 5MW and 15MW

#### **Distributed Generation Interconnection**

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|--------------------------------------|-------------------|----------------------|
| POINT STREET SUBSTATION              | Capital           | Between 5MW and 15MW |
| PUTNAM PIKE SUBSTATION               | Capital           | >15MW                |
| RIVERSIDE SUBSTATION                 | Capital           | Between 5MW and 15MW |
| STAPLES SUBSTATION                   | Capital           | Between 5MW and 15MW |
| TIVERTON SUBSTATION                  | Coastal           | >15MW                |
| TOWER HILL SUBSTATION                | Coastal           | >15MW                |
| WAMPANOAG SUBSTATION                 | Coastal           | Between 5MW and 15MW |
| WARREN SUBSTATION                    | Capital           | Between 5MW and 15MW |
| WASHINGTON SUBSTATION                | Coastal           | Between 5MW and 15MW |
| WEST CRANSTON SUBSTATION             | Capital           | >15MW                |
| WEST KINGSTON SUBSTATION             | Coastal           | Between 5MW and 15MW |
| WESTERLY SUBSTATION                  | Coastal           | Between 5MW and 15MW |
| WICKFORD JUNCTION SUBSTATION         | Coastal           | >15MW                |
| WOOD RIVER SUBSTATION                | Coastal           | >15MW                |
| WOONSOCKET SUBSTATION                | Coastal           | >15MW                |

#### Action Plan/Next Step

NECO is taking the following actions to prevent, mitigate, and prepare for such an occurrence for the above applications:

- NECo will publish on its website (<u>https://ngus.force.com/s/article/RI-DG-Group-Transmission-Study-Update</u>), the above list of substations that will require ASO study for future applications.
- In all future pre-application reports in these areas, NECo will notify the proposed project of the status of a likely ASO study in the future if the request may be served from one of the substations mentioned above.

#### Force Majeure Event

NECo is informing all new applicants that due to the developing COVID-19 crisis, NECO declared a Force Majeure Event (Event) pursuant to the Standards for Connecting Distributed Generation, RIPUC No. 2180 ("Tariff") Section 3.0., that the Company will notify customers whose DG project is directly impacted by this Event, and that all customers will be kept informed of the scope and duration (to extent known) of this Force Majeure Event and of the steps the Company is taking to mitigate the effects of the Event on its performance through periodic updates on the Company's distributed generation website: <a href="https://ngus.force.com/s/article/RI-Force-Majeure-Declarations">https://ngus.force.com/s/article/RI-Force-Majeure-Declarations</a>