nationalgrid

Request for Information (RFI)

Non-Wires Alternatives Solutions

Massachusetts

RFI Issue Date: March 31, 2025

Submission Deadline: May 6, 2025

Contents

REQUEST FOR INFORMATION

1 Introduction

National Grid (LSE: NG.; NYSE: NGG) (the "Company") is an international electricity and gas company and is one of the largest investor-owned energy companies in the world. Please refer to the below URL for more information. https://www.nationalgrid.com/about-us

The information contained within this Request for Information (RFI) is confidential and proprietary to National Grid and is to be used by the recipient solely for the purpose of responding to this RFI. This RFI does not constitute an offer by National Grid to enter into a contract, nor does any response to this RFI constitute an acceptance of an offer, nor does any response to this RFI bind National Grid in any way. Additionally, any costs incurred in responding to this RFI are the responsibility of the respondent. This RFI does not commit National Grid in any way to award a contract, pay any costs incurred in the preparation of a submission or procurement or contract for product or services of any kind whatsoever. National Grid will not reimburse the respondent for any cost associated with the response to this RFI.

Upon submission, the response to this RFI will be the sole property of National Grid. National Grid reserves the right to execute all ideas therein without compensating the respondent. National Grid reserves the right, in its sole discretion, to accept or reject any or all responses to subsequent RFI, to negotiate with any or all firms considered, or to cancel this RFI in whole or in part.

2 Background/Instructions

National Grid is conducting this RFI to gather information regarding (a) interest in Non-Wires Alternative (NWA) opportunities in our Massachusetts service territory and (b) the ability to respond to future potential Requests for Proposals (RFPs) for such NWA opportunities. National Grid appreciates any feedback or information that may be provided by respondents and will consider that feedback as it continues to develop its approach to NWAs.

Please provide responses to the RFI Questions in Section 7 by the response due date indicated in Section 3.

All responses should be submitted via the Piclo Flex platform at https://usa.picloflex.com/dashboard. For assistance using the platform, please contact support@piclo.energy. For other questions or assistance, please reach out to both support@piclo.energy and Non-WiresAlternativeSolutions@nationalgrid.com.

3 RFI Timeline

Please follow the timeline below for question and submittal deadlines.

Issue RFI	3/31/2025

Deadline to submit Supplier Clarification Questions	4/28/2025
National Grid Response to Clarification Questions	5/2/2025
Supplier Submit Response	5/6/2025

*This schedule is subject to change at any time and at the sole discretion of National Grid.

4 New Flexibility Services Standard Agreement

In order to simplify and streamline participation in NWAs, expedite the procurement process, and minimize time spent on negotiations for NWA opportunities, National Grid has recently developed the Flexibility Services Standard Agreement for its New York electric service territory. National Grid is currently developing a Massachusetts version of the agreement that will be finalized before the launch of any future RFPs.

National Grid encourages respondents of this RFI to provide thoughts and commentary on the existing Flexibility Services Standard Agreement in New York and the offerings described below in Section 5.

5 Service Types

5.1 Introduction

In its Flexibility Services Standard Agreement for New York, National Grid introduced two distinct offerings for the provision of flexible services for NWAs: **NWA Secure Service** moving forward this shall be known as **Real-Time Dispatch Service** and **NWA Sustain Service** moving forward this shall be known as **Scheduled Dispatch Service**. This set of offerings will enable National Grid to encourage multiple types of NWA solutions, and effectively manage and dispatch a portfolio of NWA solutions that align with our commitment to reliability, efficiency, and the integration of low carbon distributed energy resources.

Real-Time Dispatch Service requires DER(s) to provide services that can respond to low latency dispatches from National Grid with these dispatch signals being dependent on live grid conditions. Unlike the Real-Time Dispatch, the Scheduled Dispatch Service does not require real-time dispatch capabilities. Dispatch for Scheduled Dispatch Services is event-driven, based on contracted loads, with MW dispatch levels determined prior to the NWA dispatch event. Scheduled Dispatch Service can include single or aggregations of DERs that can operate based on the NWA service definition and will be called upon no less than 24 hours in advance by National Grid. These are similar to ‘event-based’ grid resources, akin to traditional demand response programs.

See Appendix A – Real-Time Dispatch Service Requirements and Appendix B – Scheduled Dispatch Service Requirements to read more about the monitoring and dispatch control requirements for both service offerings.

National Grid is encouraging future RFP participants to propose pricing on a per MWh structure based on the actual dispatches, in addition to continuing to allow the traditional fixed-price fee proposals. National Grid is also encouraging demand-side solutions to participate.

5.2 Summer 2025

National Grid intends to seek to procure flexible capacity for the upcoming summer (i.e. summer 2025). As the Real-Time Dispatch Service offering requires test dispatches and because National Grid is operating within a condensed time frame that will not allow for such testing, it will only seek bids for the Scheduled Dispatch Service for Summer 2025 needs.

Due to the short time constraints for a Summer 2025 need, National Grid is also only interested in awarding bids for existing assets. Any assets that are not yet constructed do not fit into the allowable timeline. Any new-build assets will be available to participate in Winter 2025 or later competitions should they be fully interconnected and commissioned by October 1, 2025.

5.3 Beyond Summer 2025

National Grid also intends to seek to procure flexible capacity for needs in these and other locations from 2025 until 2029 for both Summer and Winter needs. For future bid events – including events that seek capacity for winter 2025, we anticipate – both Real-Time Dispatch and Scheduled Dispatch Service bids may be accepted. National Grid may consider long term capacity contracts as well as seasonal contracts depending on market requirements and system planning needs.

6 NWA Opportunity Information

6.1 Need Statement

National Grid has identified three initial NWA opportunities beginning in summer 2025, which meets our suitability criteria as outlined in Table 1: Solutions Requirements below.

6.2 NWA Locations

Table 1: Solutions Requirements

	NWA Solution Requirements			Description
	North Foxboro	West Charlton	Whitins Pond	
Maximum MW Need and Timeline	Starting Summer 2025: 7.5 MW	Starting Summer 2025: 2.3 MW Reverse Power Flow; Turn Up Load Starting Winter 2029: 0.3 MW Reverse Power Flow; Turn Up Load	Starting Summer 2025: 0.93 MW Starting Winter 2029: 0.38 MW	Amount of load relief that is required to meet the need at peak loading, but should not limit the project size (i.e., projects with aggregate nameplate over or under 'Maximum MW Need' will be considered). National Grid will consider partial NWA solutions as well as portfolio solutions. Bidders are encouraged to offer partial solutions if a full solution is not possible.
Days of Week Needed	Weekdays and Weekends	Weekdays and Weekends	Weekdays and Weekends	Type of day when the NWA solution could be called on.
Service Window	Summer: May 1st - October 1st, 12-8pm EST	Summer: May 1st-October 31st, 3-6pm Winter: November 1st to April 20th from 12PM-8PM.	Summer: May 1st-October 31st, 12-8pm	Earliest and latest possible times of need by National Grid (based on projections, not continuous hours).

For more locational information please refer to Section 6.3 and the Piclo platform.

6.3 Other Locational Information

Table 2: Target Substations and Feeders

Target Substation	First Overload Asset	Target Distribution Feeders
North Foxboro	05_05_2285	05_05_3431W1
		05_05_3431W2
		05_05_3432W1
		05_05_3432W2
	05_05_2287	05_05_349W1
		05_05_3424W1
	05_05_2288	05_05_3424W3
		05_05_3424W5
West Charlton	05_01_415L2	05_01_415L2
		05_01_415L3
		05_01_415L5
Whitins Pond	05_05_320W5	05_05_320W1
		05_05_320W2
		05_05_320W3

		05_05_320W4
		05_05_320W5

For more information regarding the targeted substations and feeders listed above, including but not limited to hosting capacity and distributed generation (DG) applications in National Grid's interconnection queue at those locations, respondents may access the National Grid System Data Portal here: https://www.nationalgridus.com/Business-Partners/MA-System-Portal

Any combination of resources located downstream of the substation feeders listed in Table 2: Target Substations and Feeders has the potential to solve the loading issues. Some solutions may require a full interconnection study to be undertaken by National Grid. Respondents should utilize the Piclo platform (https://usa.picloflex.com/dashboard) and visit the National Grid Massachusetts System Data Portal cited above to search for the substations and feeders under the Distribution Assets Overview tab.

6.4 Eligible Flexibility Solutions

The technical requirement statements for these NWA Projects listed in are to maintain ongoing reliability improvements to service the increasing customer demand and growth on the feeders listed in Table 2: Target Substations and Feeders.

National Grid will consider resources that may include one or more, or a combination of the following technologies for future RFPs:

- Renewable or Sustainable Distributed Generation
- Aggregations of DER
- Energy Storage
- Demand Response
- Energy Efficiency
- Other resources that can meet the identified load relief needs

7 RFI Questions

The questions in Section 7 are separated into four sections. Each question is optional to respond, and all feedback or information submitted will be used to continue to develop National Grid's approach to NWAs. National Grid thanks you in advance for your time.

Asset Information:

a) Does your firm have any assets located in any of the areas in Table 2: Target Substations and Feeders that are currently operational or in the interconnection queue? If applicable, please include the application or case number.

b) What type of DER(s) can your firm dispatch/operate in Massachusetts? (select all that apply):

   i) Aggregation of residential thermostats

ii) Aggregation of residential BTM batteries

iii) Aggregation of residential EV chargers/vehicles

iv) Aggregation of fleet EV chargers/vehicles

v) C&I demand response (please specify customer types and technologies/systems utilized)

vi) Standalone FTM battery energy storage system

vii) Solar (distributed generation) plus battery energy storage system

viii) Other (please specify)

c) Are those DERs (select all that apply):

i) Planned

ii) In the interconnection queue

iii) Constructed (but not in operation)

iv) Operational

v) Other (please specify)

d) Which type of offering(s) would your company be interested in (see section 5.1 above for definitions):

i) Real-Time Dispatch Service

ii) Scheduled Dispatch Service

iii) Both

iv) Other types of service (please describe)

e) Can your firm provide any of the telemetry information listed below as a report post event (select all that apply):

i) Hourly data

ii) 15 minute data

iii) 5 minute data

iv) Less than 1 minute data

v) Other

Procurement:

f) Does a scheduled service window impact your bid price or availability? Please describe.

g) What is your estimated price range for such a solution in terms of ($/MWhr)? (submission is non-binding)

h) Do different contract lengths (e.g., monthly, seasonal, multi-year) affect your participation? Please describe.

i) Would your firm be interested in a fixed capacity or reservation price per year from National Grid or a per MWh price based on the number and length of each dispatch per year, or some combination of both? Please describe.

j) What is the approximate size of the bid (submission is non-binding) your firm could deliver for all the feeders (https://usa.picloflex.com/dashboard) listed in Table 2: Target Substations and Feeders for:

In MW/year:

i) Summer 2025

ii) Winter 2025-2026

iii) Summer 2026

In MWh / dispatch:

iv) Summer 2025

v) Winter 2025-2026

vi) Summer 2026

k) How much lead time (in months) does your firm typically need to respond to an RFP?

l) How much lead time (in months) does your firm need from a notice to proceed or contract award to delivery of the solution for:

i) Summer 2025

ii) Winter 2025-2026

iii) Summer 2026

iv) Future years

Dispatching and Operations:

m) Have any of the DERs you dispatch/operate been integrated into a utility SCADA or DERMS platform in a previous project/installation? Please describe briefly.

n) Is your firm concerned about double commitments or conflicts with other markets or services? Please describe your concern.

o) How much advance notice would you require in order to respond to a dispatch signal for the Real-Time Dispatch Service (see section 5.1 above for definitions)?

p) If your firm was called to be dispatched, how long would you need before you can participate in another dispatch (hours, days, etc.)? Please specify how your answer might differ between customer type, DER type, # of consecutive dispatches, etc.

q) Is your firm able to provide a contingency offering with automatic response based on grid conditions or signals from National Grid with no advance notice for future needs in summer 2026 and beyond?

Communications/Future Opportunities:

r) What additional information does your firm need to understand a need statement or opportunity?

s) How did you hear about this RFI?

t) How should National Grid update your firm regarding future opportunities?

u) What similar programs (that aim to procure flexible DERs in localized areas to mitigate distribution grid constraints) are you familiar with that National Grid should consider as a reference (names, contacts, use cases…)?

v) Is your firm currently enrolled in any National Grid demand response programs (e.g. Connected Solutions)? If so, please specify.

w) Is there any additional information you would like to share with National Grid on this topic to help us be successful in implementing Non-Wires Alternatives in Massachusetts?

x) If the locations in Section 6.2 were to proceed to an RFP, how likely would your firm be to build a proposal and bid for this project? Why or why not? Please describe.

Appendix A – Real-Time Dispatch Service Requirements

Monitoring and Dispatch Control Requirement for Real-Time Dispatch Service

For parallel-connected generation connecting to National Grid's electric power system (EPS), the proposed solution must be compliant with National Grid's Electric System Bulletin (ESB) No. 756 – Requirements for Parallel Generation Connected to a National Grid-owned EPS (ESB 756).

https://gridforce.my.site.com/electric/s/article/Electric-Specifications

In addition to requirements under ESB 756, the proposed solution must also have communication capability to provide telemetry data so National Grid Operations can monitor real-time status of the NWA solution (DER facility or the DER aggregation) and issue real-time dispatch basepoints to the NWA solution. Dispatch basepoint may be telemetered as quickly as 6 second intervals and therefore the bidder's proposed operation must meet the ability to receive dispatch signals at the same rate. However, the dispatch basepoint is expected to change values at one-minute intervals.

The bidder is expected to support integration of a National Grid-owned and managed DER gateway, real-time automation controller, or other similar equipment that will utilize the DNP3 communication protocol standard for SCADA telemetry unless otherwise specified by National Grid. The DER gateway will be provided and installed by National Grid at the DER facility and the bidder or DER facility owner may be required to install make-ready provisions (e.g., mounting structure, control power) that must meet National Grid's equipment specifications. For proposed DER aggregations, the bidder will be expected to designate a centralized location within National Grid's service area for National Grid DER gateway to be installed that best facilitates integration with the bidder's aggregation dispatch system.

Dispatch Coordination Expectations

Real-Time Dispatch Service providers will be expected to respond to real-time dispatch basepoints telemetered by National Grid during the Service Window defined in this RFI for each day it has been activated. In this manner, DERs providing Real-Time Dispatch Service will act similar to 'load-following' grid resources.

Dispatch Notification (day-ahead) Process: National Grid will provide activations for Real-Time Dispatch at least 24 hours (i.e., day-ahead) prior to an NWA dispatch call (see Appendix B Service Terms in the Standard Flexibility Contract for more details). Providers are to confirm receipt and availability when notified of activation.

Real-time Dispatch Process: NWA solution providers are to provide at a minimum the required dispatch response based on dispatch basepoints received from National Grid. However, Providers' responses may exceed the basepoint within the limits of any interconnection allowances (e.g., if renewable on-site generation can exceed the dispatch response requested).

Any response in excess of the dispatch basepoint will not be compensated for grid services procured by this NWA solicitation.

Metering

Metering and associated communications are necessary to ensure that National Grid must be able to measure and verify the load relief that was delivered during an NWA event. The Real-Time Dispatch Service provider shall be responsible for all metering and communication devices and associated costs. For parallel connected generation connecting to National Grid's EPS, the proposed solution must be compliant with the revenue metering requirements within ESB 756. Revenue metering must be, at a minimum, hourly interval meters to support National Grid's dispatch measurement and verification (M&V) process.

Appendix B – Scheduled Dispatch Service Requirements

Monitoring and Dispatch Control Requirements for Scheduled Dispatch Service

Scheduled Dispatch Service providers will not require real-time telemetry between National Grid and individual DERs or the DER aggregation.

However, for parallel-connected generation connecting to National Grid's EPS and seeking to provide Scheduled Dispatch Service, the proposed solution must still be compliant with the ESB 756 .

For aggregated DER co-located with retail load and are non-exporting facilities that do not fall under the scope of ESB 756, the third-party aggregator is responsible for installing, commissioning, operating, and maintaining all necessary telemetry equipment that the aggregator needs to maintain visibility and control of DER to third party aggregator. However, no real-time telemetry is required between the aggregator (or its DER) and National Grid. In the case of aggregations, only the aggregator will be notified of the NWA event. The aggregator is responsible for notifying resources within its respective aggregation(s).

Dispatch Coordination Expectations

Scheduled Dispatch Service providers will be expected to provide pre-agreed fixed (flat level) responses during the Service Window for each day activated. In this manner, DERs providing Scheduled Dispatch Service will serve similar to 'event-based' grid resources, akin to traditional demand response programs.

Dispatch Notification (day-ahead) Process: National Grid will provide activations for Scheduled Dispatch Service at least 24 hours (i.e., day-ahead) prior to a dispatch event. Providers are to confirm receipt and availability when notified of activation. See the New York Standard Flexibility Contract Appendix B for details.

Real-time Dispatch Process: Providers are to provide at minimum the required dispatch response based on the pre-agreed fixed (flat level) response contracted when selected during the procurement event. However, providers may have responses exceed the basepoints within the limits of any interconnection allowances, such as additional load curtailment. Any responses in excess of the pre-agreed responses will not be compensated for grid services procured by this NWA solicitation.

Metering

Metering and associated communications are necessary to ensure that National Grid must be able to measure and verify the load relief that was delivered during an NWA event. The customer shall be responsible for all metering and communication devices and associated costs.

For NWA solutions that do not have SCADA capabilities or fully dispatchable such as behind the meter assets, participants must have National Grid interval metering in place to participate. All performance will be measured using National Grid's interval meter data.

All DER facilities providing Real-Time Dispatch Service and Scheduled Dispatch Service must have National Grid-approved revenue grade interval metering requirements regardless of the flexibility service type.

For parallel-connected generation connecting to National Grid's EPS, the proposed solution must be compliant with the revenue metering requirements within ESB 756. Revenue metering must be at minimum hourly interval meters to support National Grid's dispatch M&V process.

Any resource requesting interval metering must submit a request to National Grid requesting the installation of a new meter and ensure the interval meter is in place in time by the in-service date. The customer taking electric service from National Grid is responsible for the metering and installation costs. The metering and installation costs are available from National Grid's representatives. Metering communications are necessary for administration of the NWA solution.