## **March 2025 PEX Meeting**

March 26, 2025

Mathew McCarthy mathew.mccarthy@nationalgrid.com



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National Grid 2

# 01

## Safety Moment – High Heat Michael Blaney arthur.blaney@nationalgrid.com



## Safety Spotlight – High Heat

During the first few days in warm or hot environments, workers should be encouraged to:

- Consume adequate fluids (water and sport drinks)
- Work shorter shifts,
- Take frequent breaks, and
- •Quickly identify any heat illness symptoms.



## Safety Spotlight – High Heat

### **HEAT STROKE Signs: Call 911 for help if present**

- Extremely high body temperature (above 103 F)
- Red, hot and dry skin with no sweat
- Rapid, strong pulse
- Dizziness, confusion or unconsciousness

### **HEAT CRAMPS Signs:**

 Muscle pains or spasms in the stomach, arms or legs

### **HEAT EXHAUSTION Signs:**

 Heavy sweating, paleness, muscle cramps, tiredness, weakness, fast or weak pulse, dizziness, headache, fainting, nausea, vomiting



# Energy Metering – Sapient Industries (Introduction by Michael Blaney) Michael Blaney arthur.blaney@nationalgrid.com



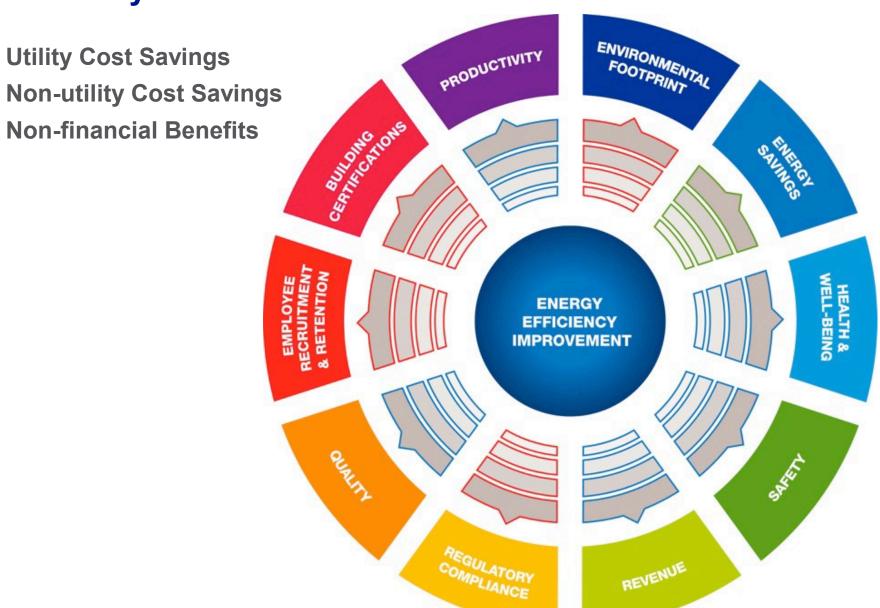
## Data Trending Making the Invisible Visible

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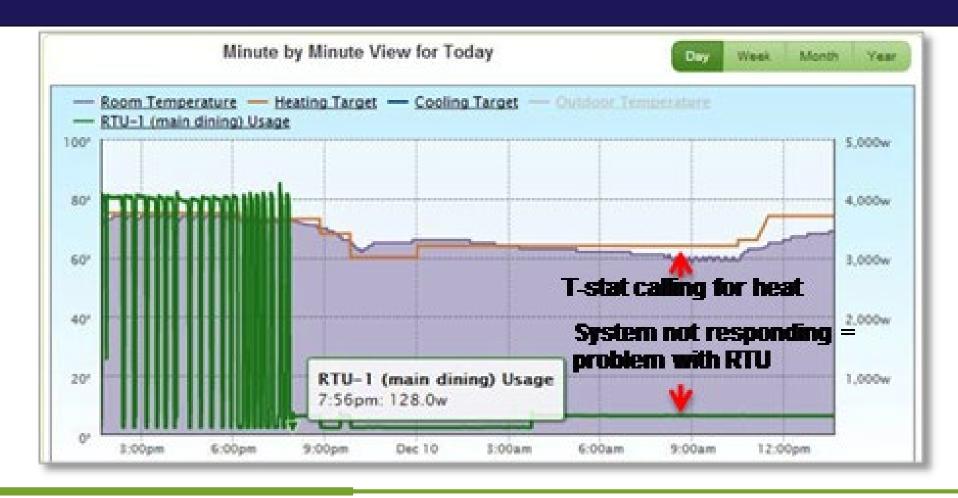


## **Energy Efficiency Benefits Wheel**



## Irregular performance Followed by RTU Failure

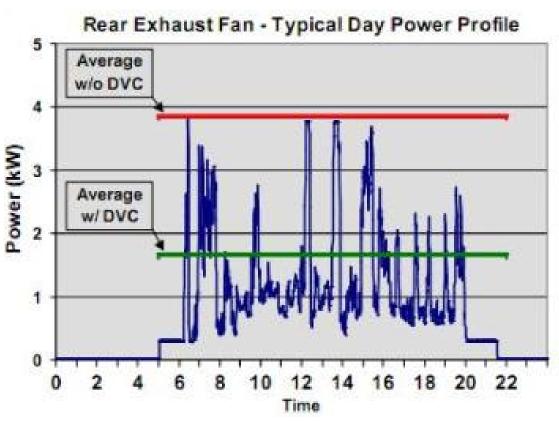
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## Kitchen Hood Demand Control Ventilation-Country Club





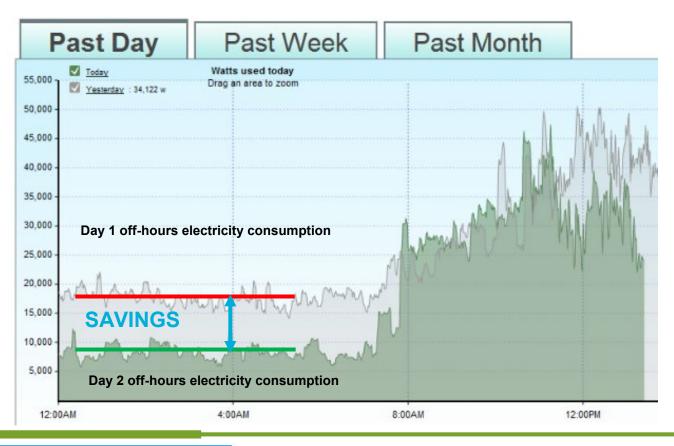


Annual Savings \$5,177/yr, ROI 1.9 years



## **HVAC Controls Reduce Costs**

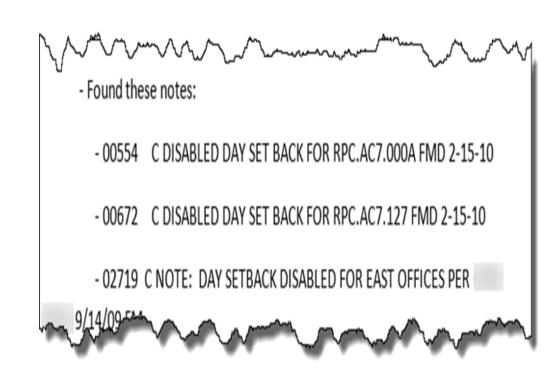
RTU running too hard during off-hours due to poorly-programmed t-stat



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## Planned Remediation - Disabled Capability Revelation

- Analysis showed that 135 of 525 VAV boxes were not responding to command to reduce air flow. Why?
- Discovered controllers had the code required to operate with lower air flow but 6 years prior it was "commented out" disabling the function



While we had planned to enable air flow reduction at the VAV's we thought we had to add automation code instead we found it already existed, it was just disabled

## **Questions**



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# Sapient Energy Monitoring System Overview

Introduction

Trusted by:













## Leading the NBA - The Most Comprehensively Monitored Arena in the NBA



GG

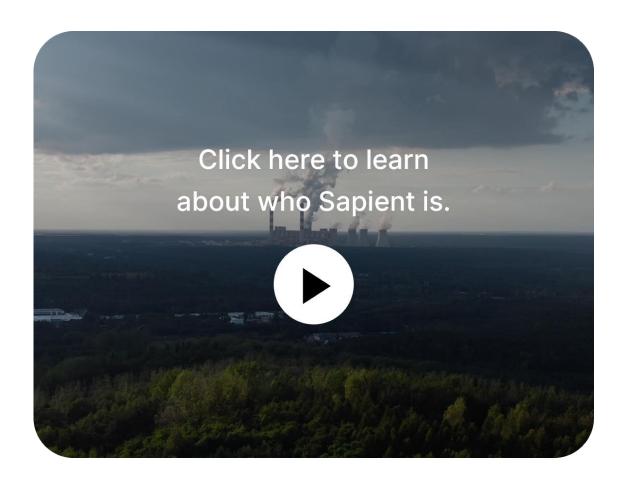


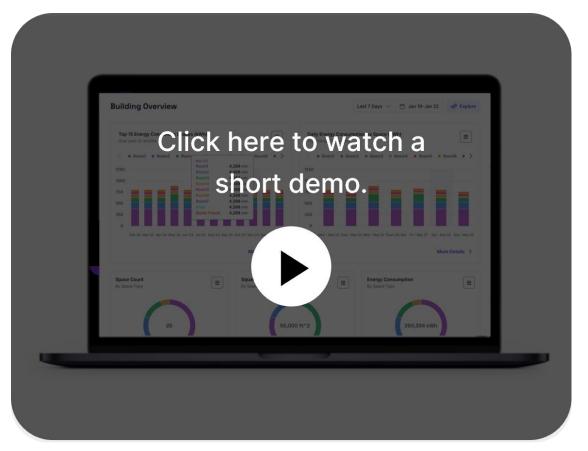


We must abide by very strict stadium-experience rules that limit the energy-saving actions we can take. Sapient has been an integral partner to by giving us real-time, out-of-the-box recommendations that are easy to execute.

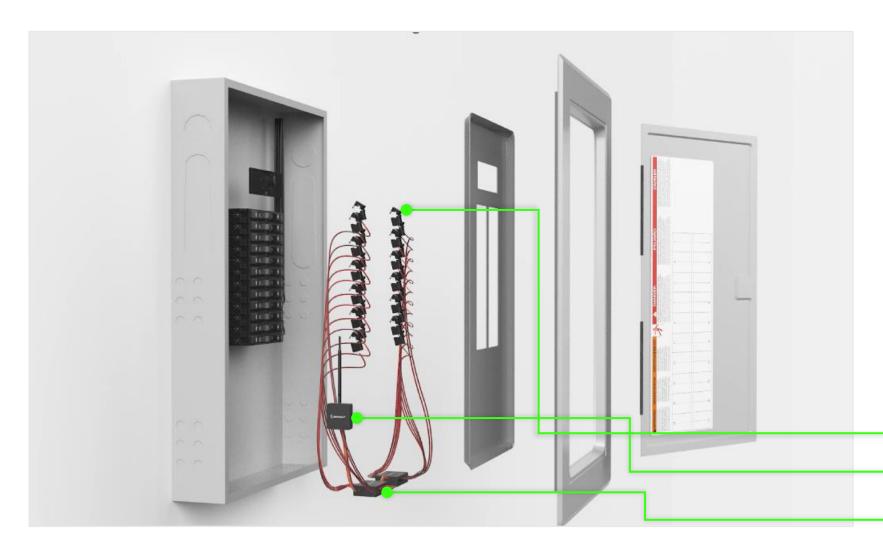


Andrew Graham, Director of Engineering, Barclays Center





## **Sapient Hydra**



#### Sapient Hydra

## Transform Decades-Old Panels into Smart Panels.

#### In Minutes.

- Capable of monitoring any size load and electrical configuration
- ✓ Fully independent connectivity to the cloud NO customer Wi-Fi or IT systems are touched
- Robust, military-grade long-range wireless mesh networking technology for easy deployment across complex facilities
- ✓ Installs in 30-90 minutes per panel or switchgear, on average
- Can be installed safely without de-energizing panels\*
- Quick-to-install snap on CTs capture real-time energy data on any load size.
- Long-range wireless 900Mhz network penetrates concrete and steel.
- Modular design allows for capture of up to 48-circuits with one device and in tight panels.

## **Sapient Hydra**



Sapient Hydra

Transform
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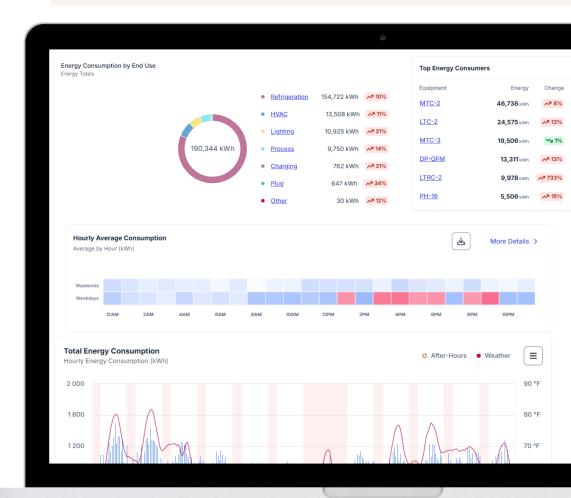
## Sapient Cloud

Digital-twin Modelling: Going Beyond Sensor Data

- Within moments of install, real-time data begins flowing through the Sapient cloud analytics software
- "Building digital twin model" contextualizes data so it is easy to navigate and get insights.
- Pre-built dashboards and visualizations provide actionable insights right-off-the-bat, with advanced suite of tools for sophisticated deep-dive analysis.
- ✓ Data is contextualized by spaces, end-uses, equipment, systems, tenants, and production lines



#### NO Recurring Software fees





## Opportunities for Project Expediters (PEX)



## Drive New Business Opportunities

Stay in front of customers and use data to identify and upsell additional energy efficiency projects.



## Offset Declines in Lighting and Capitalize on Data / Al Revolution

Capitalize on the data / Al revolution with a popular, building-agnostics energy and building analytics tool.



## Install as Part of Large Projects & Improve Bids

The incremental cost of adding Sapient is negligible on large projects, but it brings substantial, outsized value.



## Monetize High Margin Ongoing Energy Consulting Services

Offer services on top of the date – continuous commissioning, energy consulting, etc.



**S**SRPIENT

Please contact us with any questions:

sales@sapient.industries www.sapient.industries

## Verdant Commercial Capital Christopher Herman - <a href="mailto:cherman@verdantcc.com">cherman@verdantcc.com</a>





A Presentation For National Grid MA March 26, 2025

## Introduction to Verdant Commercial Capital



As the 6th largest independent equipment finance company in the United States, we have the expertise and discipline of a bank, but the flexibility of an entrepreneurial independent.

- \$3 billion + in funding since Verdant's inception in July 2017
- Experienced Energy Efficiency / Electrification Team
- Private equity backed company by two large insurance companies and a family office
- Staying true to the mission of helping our contractor partners achieve their goal of closing more EE projects through financing.
- Doing the right thing / Conducting business the right way.

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## Utility / Green Bank / State Agency Programs























NYS Clean Heat **Statewide Heat Pump Program** 



verdantcc.com

## Low-Cost Financing Program Overview





## **Electrification Financing Program**

"Interest rates are bought-down by National Grid to as low as 0%, depending on the project's energy savings and incentives available."

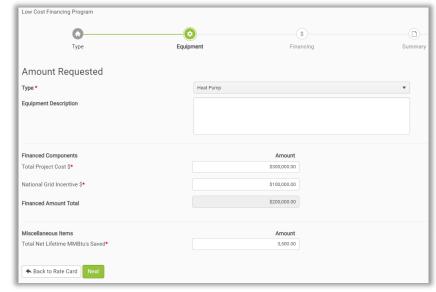
- Doesn't affect the amount of incentive, the bought-down financing is an extra bonus.
- <u>Not</u> On-Bill, Verdant will bill customers monthly (or automatically if ACH payments set up).
- Available for Custom or Prescriptive Projects
- Financing can be combined with other nonelectrification measures (buy-down only available for C&I Gas or Electrification measures)

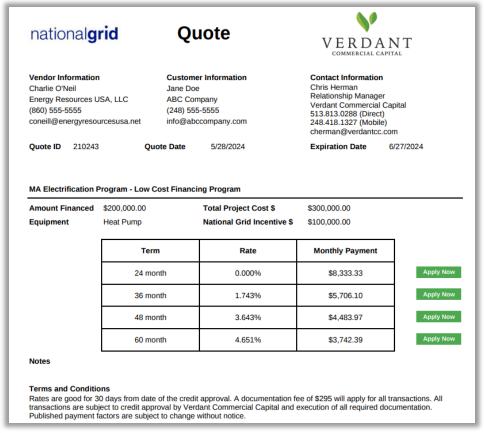
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## **Payment Quoting Tools**









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## **Qualifying Customers Payment Terms**



2 or 3 methods to determine the National Grid subsidy available to buy-down a customers payment terms:

Custom – the lessor of:

- 25% of the incentive
- \$8 per net lifetime MMBtu
- Cost to buy down to 0% for 5 years

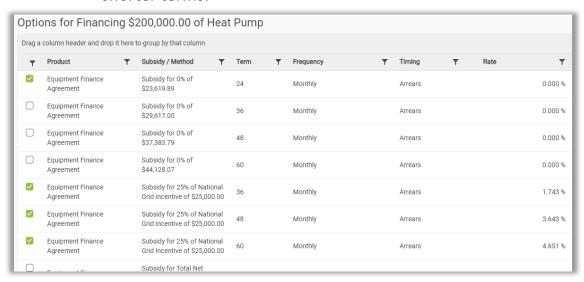
<u>Prescriptive</u> – the lessor of

- 25% of the incentive
- 0% for 5 years

**Before** you present the project proposal to your customer, enter in the project details:

- ➤ Total Project Cost
- ➤ National Grid Incentive
- ➤ Total Net Lifetime MMBtu's (if it's a Custom project)

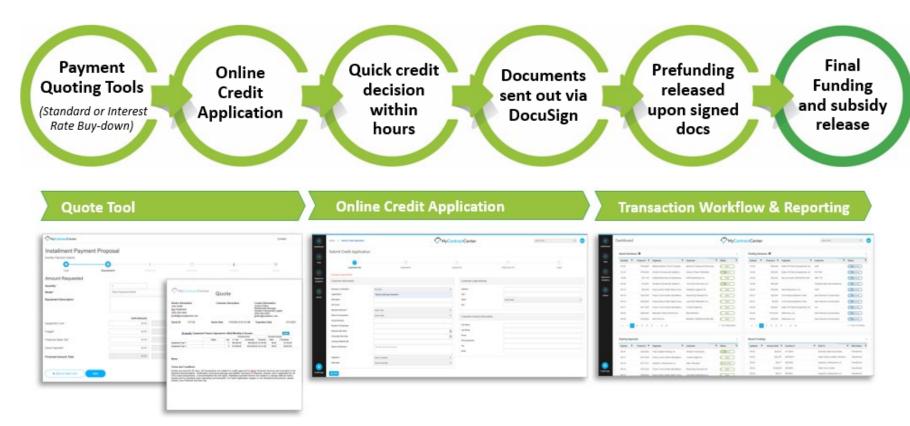
Then, check the Subsidy Amount column for the lowest cost method and choose payment options to show the customer. It may the cost to buy down to 0% for shorter terms.



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## Simple Financing Process





- Online tools to facilitate easier vendor sales
- **Solutions** throughout the transaction lifecycle
- Support for private label and co-branding
- Real-time information and deal transparency
- Robust reporting capability
- Secure environments with self administration

## Contact Information – Verdant Energy Team



Josh Patton 586.201.9699

jpatton@verdantcc.com

Jonathan Wickersham 248.860.0013

jwickersham@verdantcc.com

Chris Herman 248.418.1327

cherman@verdantcc.com



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# CY 2024 Performance Results and CY 2025 Update Mat McCarthy mathew.mccarthy@nationalgrid.com



## **CY 2024 Performance Results and CY 2025 Update**

CY 2024 PEX Progress (As of 3/16/25)						
<b>Key Performance Indicators</b>	Goal	Paid	(%G)			
Electric Savings (NLT MWH)	82,450	146,025	177%			
Gas Savings (NLT Therms)	1,674,970	2,953,879	176%			
Electric Electrification (NLT MMBTu)	49,510	12,361	25%			
Gas Electrification (NLT MMBTu)	64,490	45,390	70%			

CY 2025 PEX Progress (As of 3/16/25)					
<b>Key Performance Indicators</b>	Forecast	Paid			
Electric Savings (NLT MWH)	82,000	7,936			
Gas Savings (NLT Therms)	1,350,000	141,628			
Electric Electrification (NLT MMBTu)	45,000	2,167			

Gas Electrification (NLT MMBTu)

### **Key Takeaways:**

- Overall program
   performance was
   excellent in 2024 thank you all for your
   hard work and
   dedication!
  - Goals for 2025 are still pending but initial results and forecasts look solid.
  - CY 2024 ELX goals were ambitious; a reduction is still expected in 2025.

National Grid 25

80,000

4,865

# FEX Awards Mathew McCarthy mathew.mccarthy@nationalgrid.com



# Congratulations to the 2024 PEX Contest Winners!

- 1. Most new\* qualified lighting, VFD, transformer and compressor enhanced incentives applications completed\*\* by 12/31/24:
  - 1st place: Energy Source
  - 2nd place: Energy Conservation
- 2. Most electrification applications displacing delivered fuels (oil and propane):
  - 1st place: Energy Source
  - 2nd place: Guardian
- 3. Most net lifetime therm savings for gas energy efficiency projects logged in InDemand on 8/15/24 or after and completed by 12/31/24:
  - 1st place: B2Q
  - 2nd place: Energy Source



- \*New means applications had not been "Log Started" or advanced in InDemand prior to contest launch. Lighting, VFD, and Compressor applications log started before 7/29/2024 and Transformer applications log started before 8/8/2024 did not qualify.
- \*\*Completed means that the measures are confirmed as fully installed and functional, with the project status being "Installation Completed" or advanced in InDemand.

# Updated PEX Insurance Requirements Mathew McCarthy mathew.mccarthy@nationalgrid.com



## **Updated PEX Insurance Requirements**

### **Key Takeaways:**

- •CGL: Minimum \$1,000,000 limit for Bodily Injury, Personal Injury, and Property Damage per occurrence and aggregate.
- •Auto: Minimum \$1,000,000 limit for Bodily Injury and Property Damage per occurrence.
- •Umbrella: Minimum \$4,000,000 per occurrence, excess of primary coverages.

#### •Workers' Compensation:

- Statutory Workers' Compensation per Massachusetts law.
- Employers Liability Insurance: minimum \$1,000,000.
- •Endorsement: CGL, Auto, and Umbrella/Excess Insurance must name National Grid USA and affiliates as additional insureds.
- •Certificate Holder: National Grid, 170 Data Dr, Waltham, MA 02451 must be listed.
- •Cyber: Required if accessing InDemand, minimum \$1,000,000 per claim.
- •Will look to time this with NDA updates

  National Grid

#### Appendix A

#### PEX Insurance Requirements

Prior to performing any Services, the PEX at its own expense shall provide proof of insurance with reputable insurance carriers with an A.M. Best rating of A- or better as follows:

#### Workers' Compensation and Employers Liability

- a. Statutory Workers' Compensation (including occupational disease) in accordance with the laws of Massachusetts.
- b. Employers Liability Insurance with a limit of at least \$1,000,000.

<u>Commercial General Liability (CGL)</u> with a combined single limit for Bodily Injury, Personal Injury and Property Damage of a least \$1,000,000 per occurrence and aggregate. The limit may be provided through a combination of a primary and umbrella/excess liability policy.

<u>Commercial Automobile (Auto) Liability</u> (including all owned, leased, hired and non-owned automobiles) with a combined single limit for Bodily Injury and Property Damage of at least \$1,000,000 per occurrence. The limit may be provided through a combination of primary and umbrella/excess liability policies.

<u>Umbrella/Excess Liability</u> at minimum limits of \$4,000,000 "per occurrence" excess of the primary CGL, Auto and Employers Liability coverages provided above.

Cyber Liability Insurance. (applicable if PEX has access to project tracking system), either purchased separately or endorsed to Professional Liability/Errors & Omissions, covering liability arising from or out of the Services that involve the use and access of data and/or the need for the PEX to use security measures and requirements under this Agreement at minimum limits of \$1,000,000 "per claim"

The CGL, Auto, and Umbrella/Excess Insurance, shall provide: Endorsement naming National Grid USA, its direct and indirect parents, its subsidiaries and affiliates as additional insureds on a primary and non-contributory basis (additional Insureds/entities). Waiver of Subrogation from all policies required above, in favor of the additional insureds/entities, for any loss or damage covered under those policies referenced in this insurance provision.

**Subcontractors.** In the event that the PEX uses subcontractor(s) in connection with providing any services as outlined under this Agreement, the PEX shall require all such subcontractor(s) to provide similar insurance coverages and protections as outlined within and as applicable to their portion of work or services. The PEX shall remain liable for the performance of each subcontractor, and such contract relationship shall not relieve the PEX of its obligations under this Agreement. In addition, each subcontractor shall be required to provide a waiver of subrogation and name the additional insureds/entities outlined within as Additional Insureds where required. If requested, the PEX shall provide National Grid with a certificate of insurance from its subcontractor evidencing such coverages.

The PEX represents that it has, at minimum, the full policy limits available as required herein and shall notify National Grid in writing should any such coverages have been reduced as a result of claim payments, expenses, or conditional change to policies.

Insurance policies must provide for 30 days written notice prior to cancellation, non-renewal or material modification in any policy.

#### Certificate Holder must read:

National Grid 170 Data Dr Waltham, MA 02451

## Quick Hits/Reminders/2025 Meeting Dates Mathew McCarthy Mathew.McCarthy@nationalgrid.com



## **Quick Hits/Reminders/2025 Meeting Dates**

### Upcoming Trainings/Events:

- Mass Save events and trainings can be found on the Mass Save website <u>here.</u> Now includes Additional Industry Trainings & Resources
  - April 9th and April 10th Intro to Lighting Controls hosted by MAEEP -
- New England Restaurant and Bar Show (March 30-31, 2025, at the Boston Convention & Exhibition Center)
  - Exhibit Application

#### Business Partner Event

• Date: Tuesday, April 1, 2025; Time: 9:00 a.m. – 2:15 p.m.; Location: Virtual/Online; Register: here

### PEX Landing Page:

- https://www.nationalgridus.com/MA-Project-Expediter-Program
- Update to Deal Team Summary Sheet

### 2025 Meeting Schedule

- Monday, April 28, 2025 In Person Only
- Wednesday, May 21, 2025 Virtual Invite forthcoming

**National Grid** 

## Thank You!

**Be Safe** 

