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Powering New York

NYSEG · RG&E
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July 2025: *Material is representative of potential outcomes of Case Numbers: 25-E-0375; 25-G-0378; 25-E-0379 & 25-G-0380*


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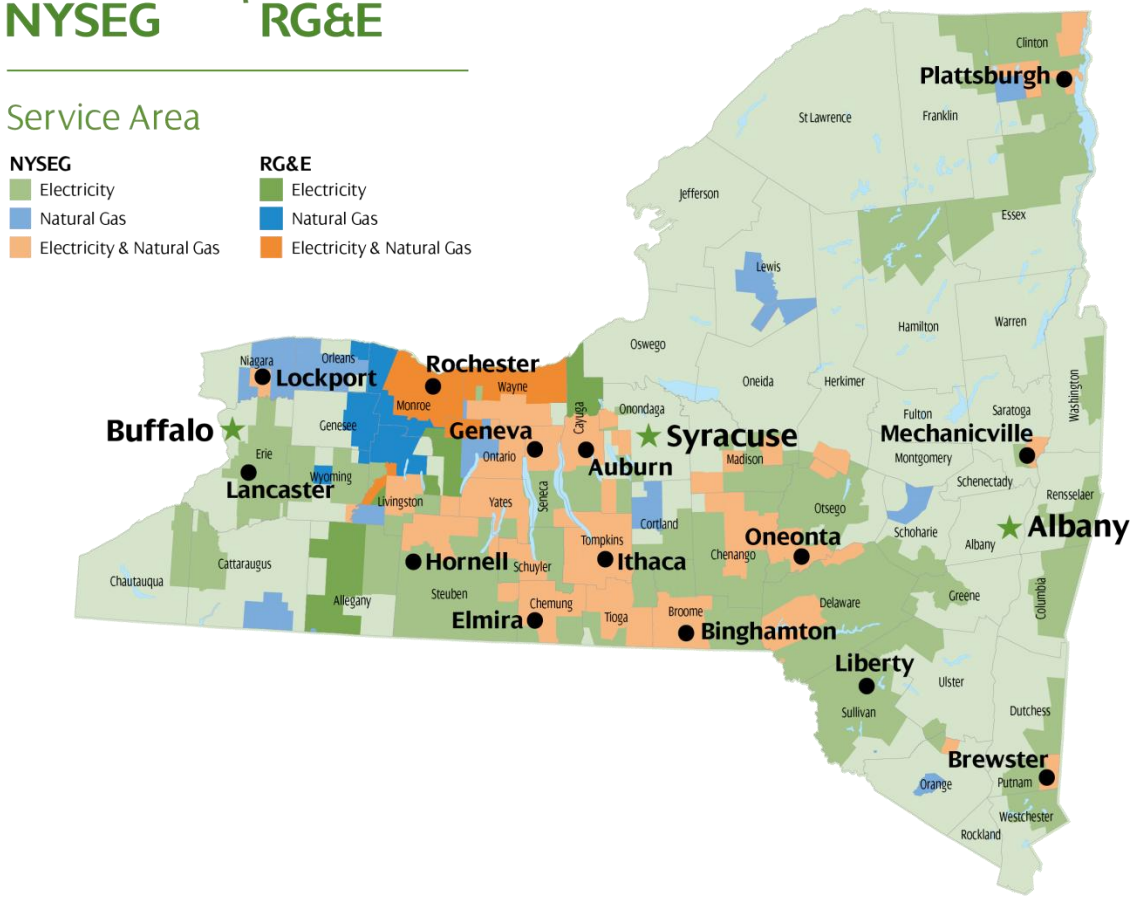
NYSAC

NYSEG & RG&E Service Territory

NYSEG RG&E



- NYSEG and RG&E provides electric and gas service to over 1.9 million customers in 44 Counties in upstate New York.
- Our infrastructure includes:
  - Over 61,000 miles of electric distribution and transmission lines
  - More than 17,000 miles of natural gas distribution and transmission pipelines

Today's Objectives

- Discuss the converging priorities NYSEG and RG&E is managing including challenges associated with an aging infrastructure, increased load requests & electrification.

- Provide an overview of NYSEG and RG&E's Planning Process and how we are Managing Capacity Constraints.

- Discuss NYSEG and RG&E's proposed solutions and how to secure resources needed to implement those solutions.

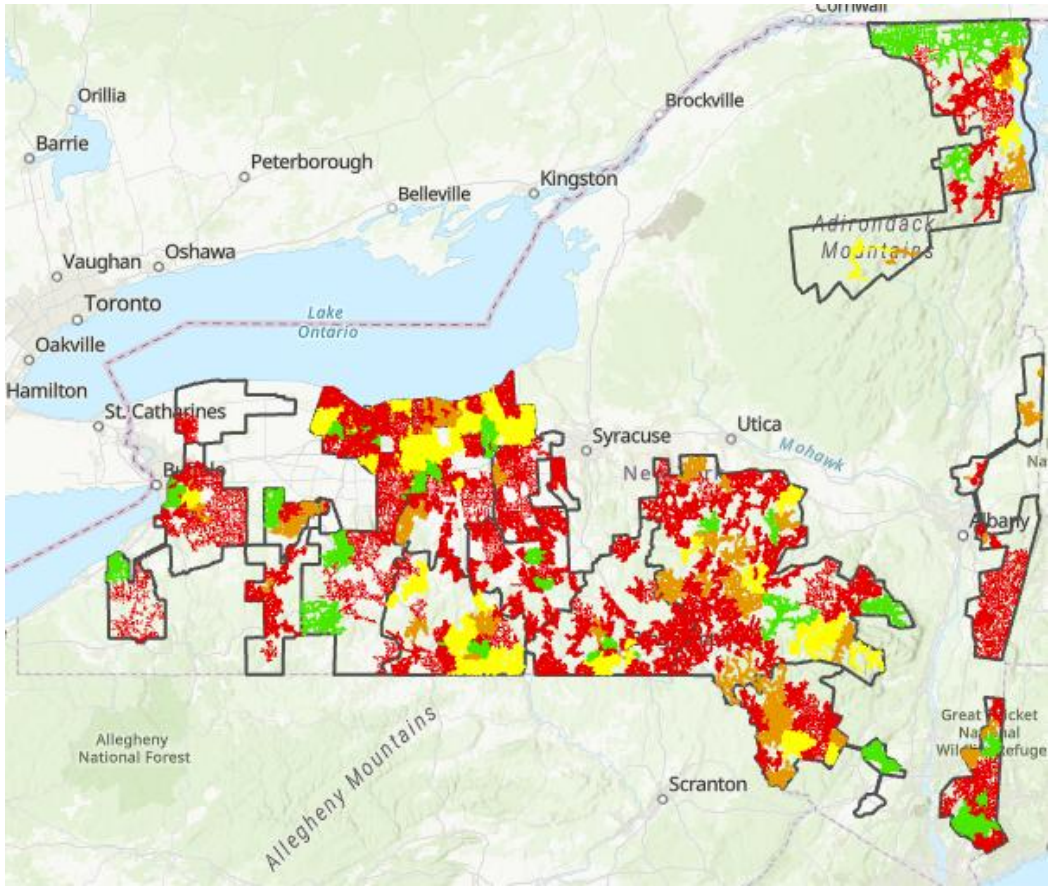
- Explore opportunities for collaboration and partnership.

A Convergence of Priorities

Environmental Goals (CLCPA) – Resulting in increased Electrification

Increased Load Growth *

Aging Infrastructure, Rate Cases focused on Resiliency, Reliability & CLCPA



By 2050, electrification at NYSEG and RG&E is expected to cause a peak-load shift from summer to winter (e.g. EVs, Heat Pumps, etc.)

* Per NYISO 2023 Gold Book, NYSEG/RG&E service territories expect to see a 90% load growth by 2050.

Aging Infrastructure

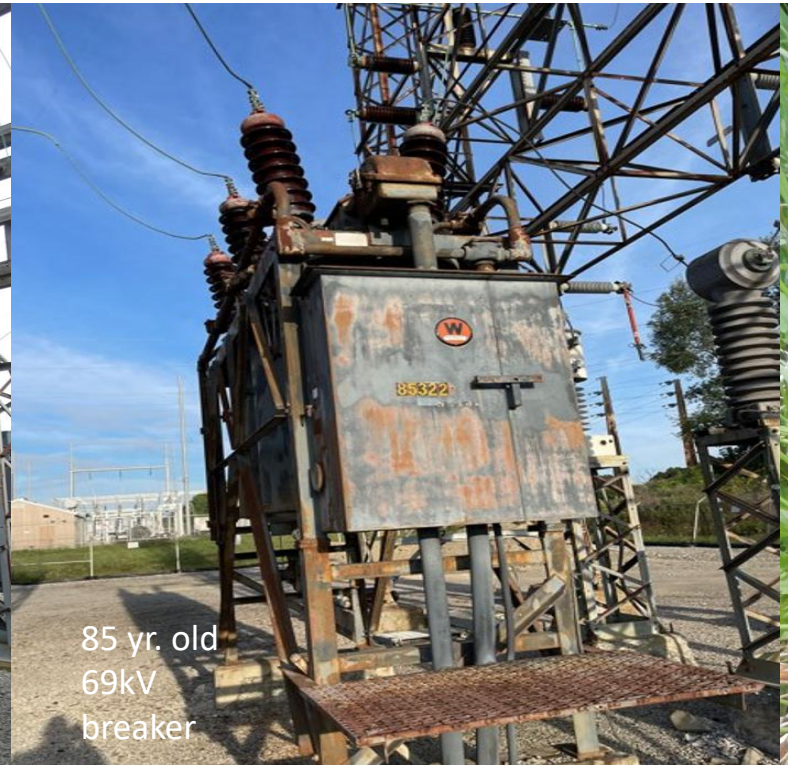
The Aging Infrastructure, Compromising Reliability Performance and Customer Quality

Outages related to aging infrastructure **impacted 411K customers** in NYSEG and RG&E in 2024

~1,300 breakers in **poor/very poor condition** and require immediate replacement

More than **20,000 poles require replacement** in NY today, replacement currently prioritized based on severity/urgency

74yr. old 115kV transformer



85 yr. old 69kV breaker

77 year old pole when it was replaced

System Capacity Needs

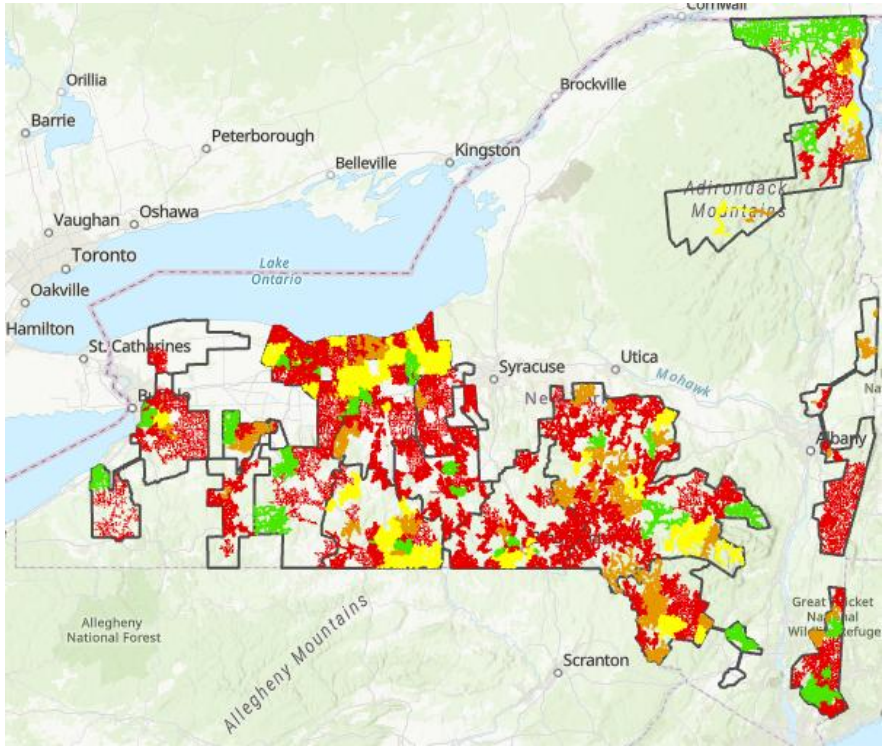
Significant increase in new load requests in the past few years, revealing system capacity limitations

Current Situation

- Portions of NYSEG and RG&E's service territories have seen **significant increase in load requests**
- Historically modest load growth and adoption of energy efficiency measures made it difficult to justify prioritization of capacity projects
- To manage the increase in requests, the companies developed a queue tracker to manage workload

System Capacity Findings

- 46% of NYSEG and 45% of RG&E substation transformers are constrained
- Lack of proactive capacity mitigation strategies will negatively affect resiliency (i.e., limited post-contingency back-up)
- A significant portion of constraints are on transmission facilities which are significantly more costly than distribution



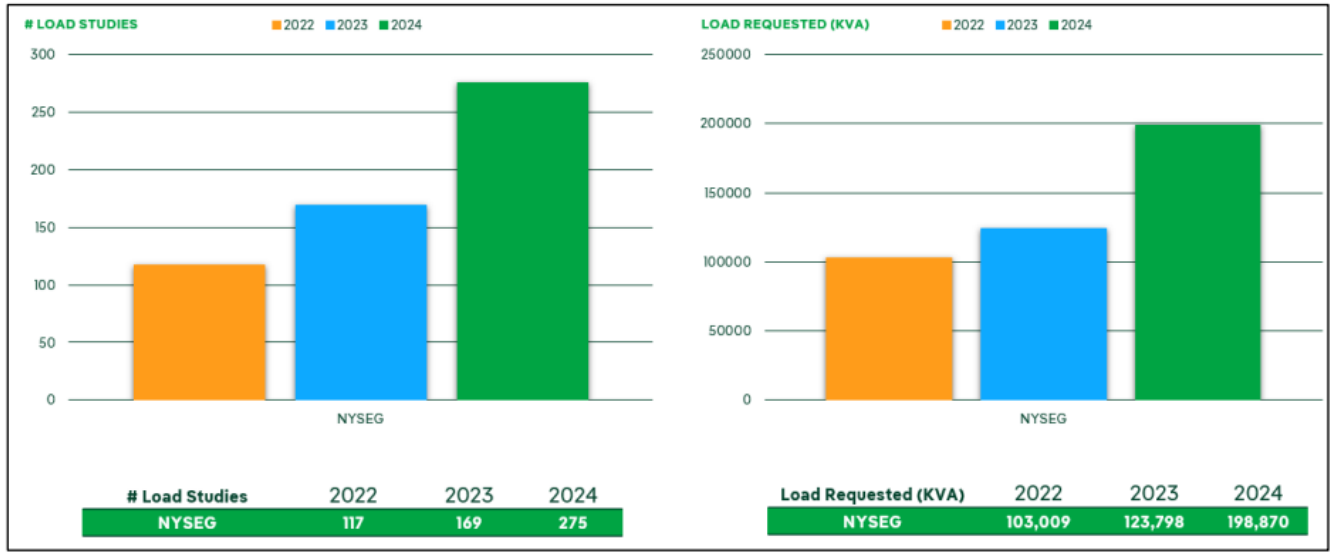
By 2050, electrification at NYSEG and RG&E is expected to cause a peak-load shift from summer to winter (e.g., EVs, Heat Pumps, etc.)

By 2050, the winter peak load increase is expected to be ≈97% higher, per the NYISO 2025 Gold Book, which will drive significant investment needs.

NYSEG and RG&E Load Request Overview

- NYSEG and RGE have seen significant increases in the number of load requests received:
  - NYSEG has seen a **235% increase** from 2022–2024.
  - RGE has seen a **183% increase** from 2022–2024.
- In addition, the cumulative size of requests has increased:
  - NYSEG has experienced a **193% increase** in requested MVA from 2022–2024.
  - RGE has experienced a **179% increase** in requested MVA from 2022–2024.
- Frequency and magnitude of interconnection increases is challenging to accommodate in the near-term; and reduces available capacity for future electrification.
  - Currently, the average load request at NYSEG is approximately 800 kVA, while at RG&E it is around 1 MVA.

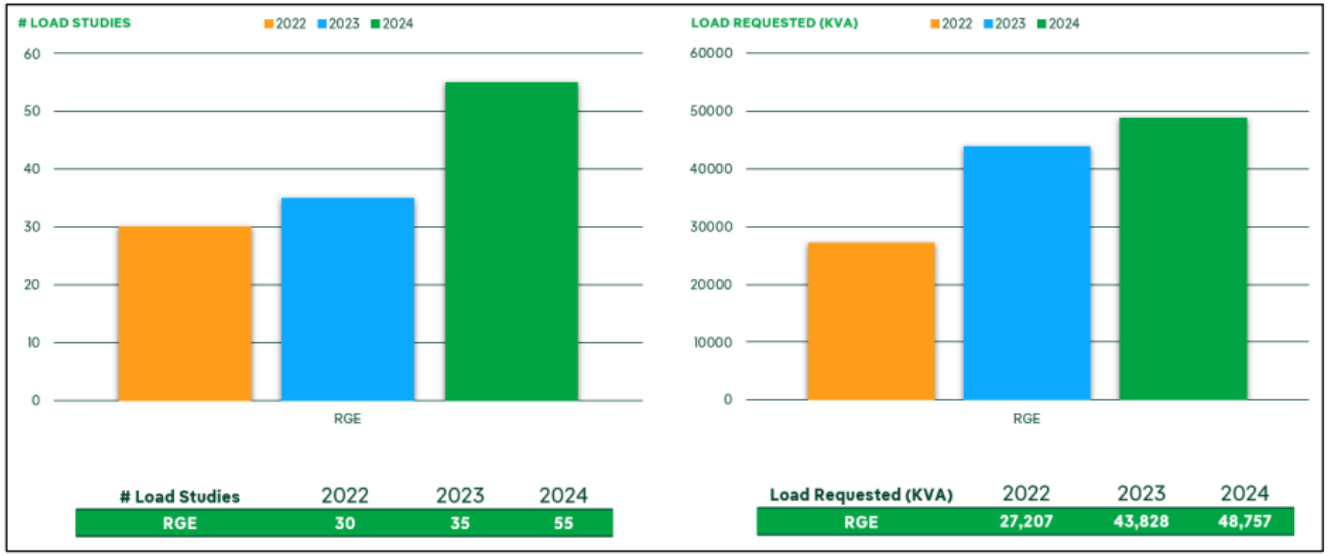
NYSEG



# Load Studies	2022	2023	2024
NYSEG	117	169	275

Load Requested (KVA)	2022	2023	2024
NYSEG	103,009	123,798	198,870

RG&E

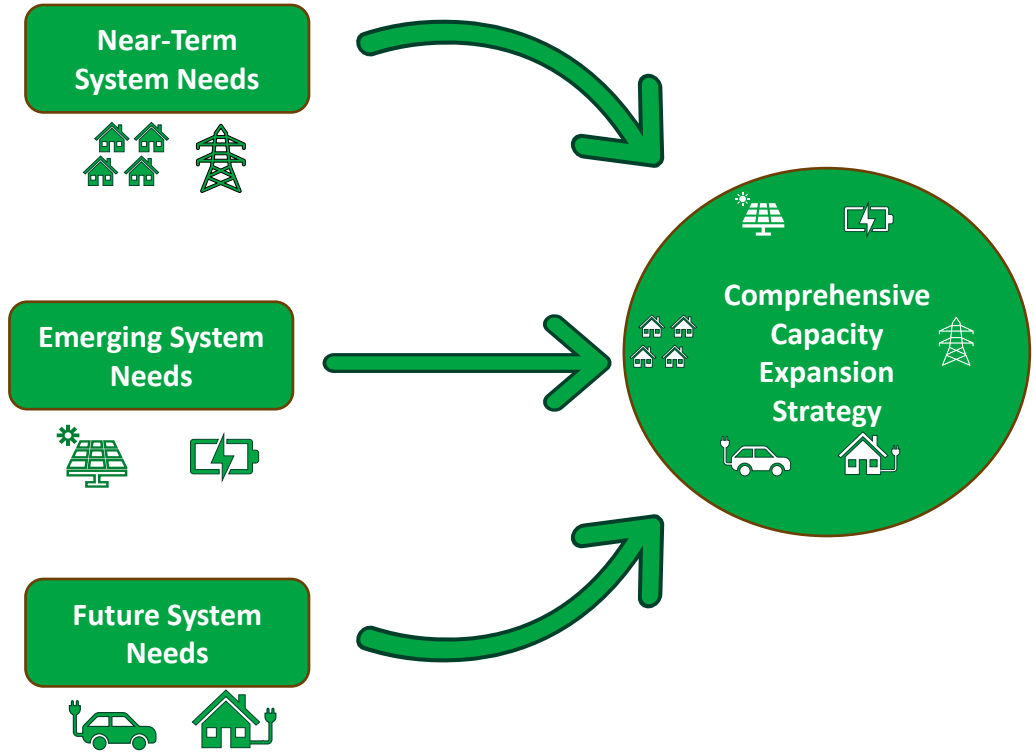


# Load Studies	2022	2023	2024
RGE	30	35	55

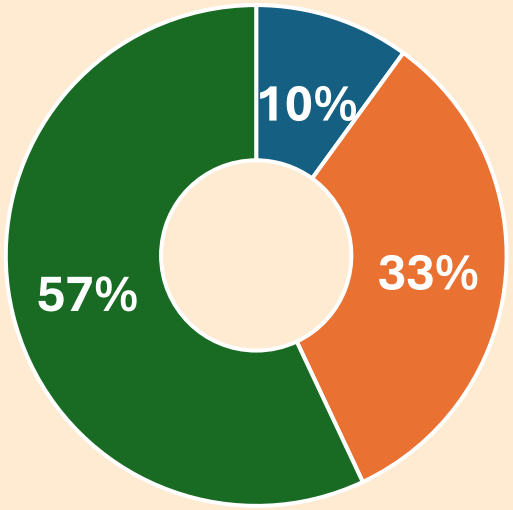
Load Requested (KVA)	2022	2023	2024
RGE	27,207	43,828	48,757

"Three-Pronged" Approach to Resolve System Capacity Needs

- Continue to advance existing program to address immediate capacity needs (Near-Term Needs)
  - NYSEG and RG&E Distribution Load Relief Program
- Establish new program to allow the Companies to respond to emergent capacity needs initiated by customer interconnection requests (Emergent Needs)
  - NYSEG and RG&E CCAP
- Continue to advance 21st century transformational solutions to address current and future capacity needs while also considering additional area needs such as asset condition, reliability, and resiliency
  - NYSEG and RG&E Comprehensive Area Studies Program
  - NYSEG and RG&E Transmission Reinforcement Program



Multi-year Investment Plan



- **Multi-year Investment Plan**
  - Five-year rate plan
  - Supports cost stabilization for customers
  - Better addresses legacy concerns
  - More comprehensive view of long-term investments

Industry-specific Supply Chain Challenges

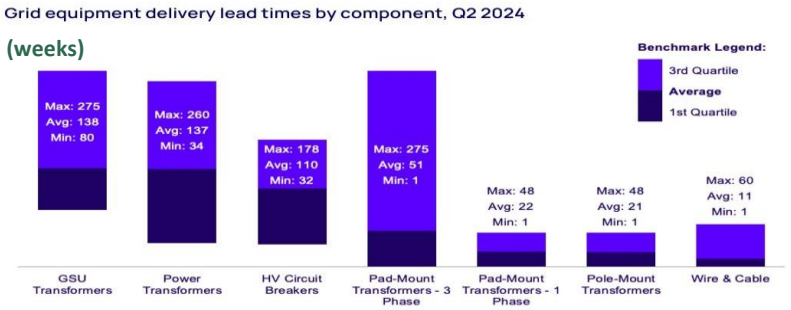
Predictability and certainty are critical to successfully navigate supply chain challenges.

Current US market trends

Extended Lead Times: Multi-year lead times for essential equipment

Large Transformers: years

HV Breakers: 3+years

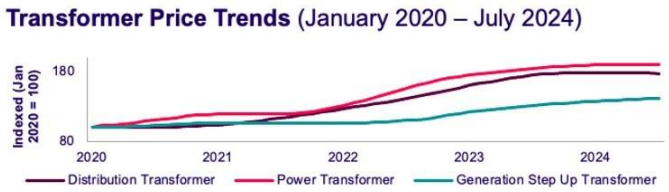


Source: Wood Mackenzie

Escalating Costs: Prices have doubled from pre-pandemic levels

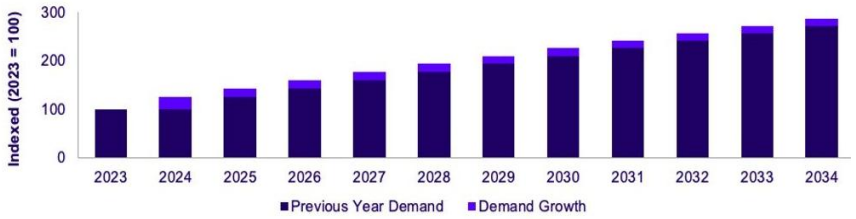
Large Transformers: Up to 100%

HV Breakers: Up to 150%



Insufficient Domestic and Global Supply: only about 20% of U.S. transformer demand is met domestically.

Global Transformer demand has increased by 50% since 2023 and it is expected to more than double by 2034.



High voltage circuit breakers and transformers have emerged as a significant **bottleneck** to utility supply chains, due to increase in prices and delivery times.

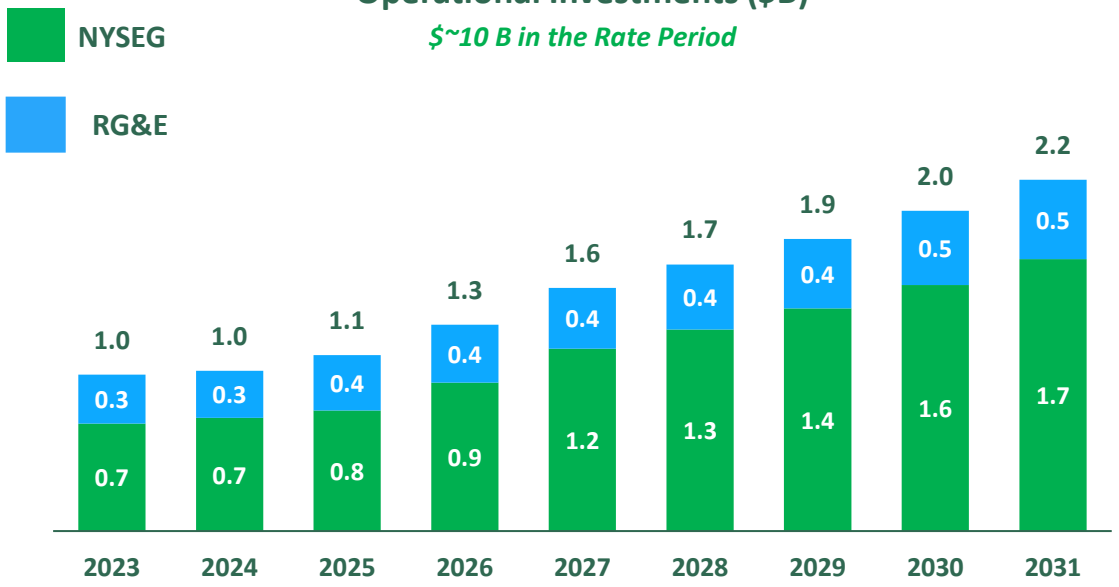
The **rapid expansion of energy-intensive infrastructure** is expected to continue fueling load growth over the coming years.

Electric Capital

$16 Billion investments in the Electric Grid

Operational Investments ($B)

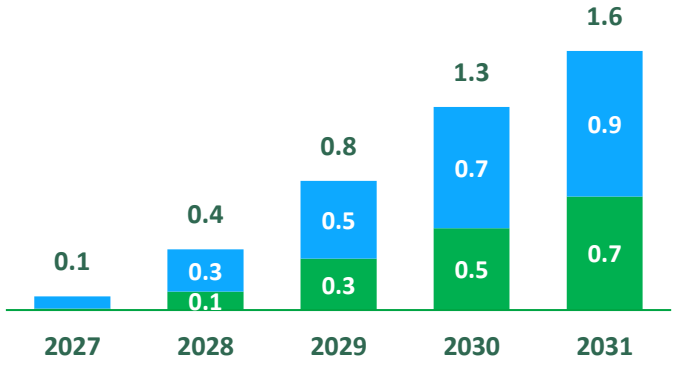
$~10 B in the Rate Period



- Focus on reliability investments representing 60-65% of total projected investments
- Customer driven investments are estimated to be 20% of the total with compliance 15%

Grid of Future Investments ($B)

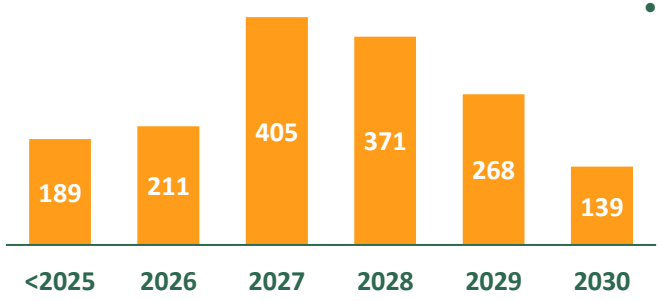
$~4 B in the Rate Period



- Grid Modernization Investment
- Ramp up throughout the period

CLCPA 1 ($M)

$1.5-1.6 B total Project Cost



- Updated projection based on current supply chain conditions and permitting requirements

Investment Programs Highlights: Reliability

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Load Relief ($363 M)

NYSEG: $244 M / RG&E: $119 M

Currently, 85 transformers and 131 circuits loaded to over 90%.

Plan includes funding for approximately 30-40 projects.

- ● Asset Condition
- ● Capacity
- ● Reliability
- ○ Resiliency

Customer Cost Allocation Program ($325 M)

NYSEG: $265 M / RG&E: $60 M

Targets 20 urgent capacity projects annually with a structured, multi-year funding and execution approach, focused on enabling economic development.

- ○ Asset Condition
- ● Capacity
- ● Reliability
- ○ Resiliency

Comprehensive Area Studies ($3.8 B)

NYSEG: $1.5 B / RG&E: $2.3 B

Upgrades targeted regions within NYSEG & RG&E with projected future capacity constraints. Also address asset condition and resiliency.

- ● Asset Condition
- ● Capacity
- ● Reliability
- ● Resiliency

Transmission Reinforcement Program ($591 M)

NYSEG: $314 M / RG&E: $277 M

Upgrades 70+ mi. of transmission lines, 15+ transformers, multiple capacitor banks and substations across NY.

- ○ Asset Condition
- ● Capacity
- ● Reliability
- ○ Resiliency

Circuit Breaker Replacement Program ($323 M)

NYSEG: $236 M / RG&E: $87 M

Targets annual replacement of 75+ circuit breakers across multiple voltage classes to improve asset condition and reliability.

- ● Asset Condition
- ○ Capacity
- ● Reliability
- ○ Resiliency

Investment Programs Highlights: Asset Condition

Transmission Line Deficiency Program ($806 M)

NYSEG: $724 M / RG&E: $82 M

Remedy deficiencies and harden the transmission system, reducing the risk of outages due to asset condition issues by replacing deteriorated equipment.

● Asset Condition ● Reliability ○ Capacity ○ Resiliency

Distribution Line Deficiency Program ($151 M)

NYSEG: $136 M / RG&E: $15 M

Inspects the entire distribution system on a five-year cycle and replaces deficient equipment to reduce emergency repairs and reduce customer outages.

● Asset Condition ● Reliability ○ Capacity ○ Resiliency

Wood Pole Inspect and Treat ($227 M)

NYSEG: $184 M / RG&E: $43 M

Identify, and then replace or maintain degraded wooden poles through routine inspections to mitigate safety risks and improve reliability.

● Asset Condition ● Reliability ○ Capacity ○ Resiliency

Trans. & Subst. Asset Condition Program ($255 M)

NYSEG: $180 M / RG&E: $75 M

Focused on the strategic evaluation, replacement, upgrading, and rejuvenation

● Asset Condition ● Reliability ○ Capacity ○ Resiliency

Investment Programs Highlights : Resiliency

Distribution Circuit Automation ($112 M)

NYSEG: $54 M / RG&E: $58M

Improve grid reliability by deploying remote-controlled devices (reclosers.) Prioritizes stations and divisions for automation upgrades, enhances restoration speed, limits outage exposure (targeting 500-customer pockets), and supports centralized SCADA-based control across NYSEG and RG&E territories.

○ Asset Condition ● Reliability ○ Capacity ● Resiliency

Distribution Circuit Resiliency Program ($292 M)

NYSEG: $216 M / RG&E: $76 M

Targets circuits with high outage rates using historical SAIFI and storm data.
Implements comprehensive upgrades - topology changes, pole and wire hardening, and automation - to enhance reliability.

○ Asset Condition ● Reliability ○ Capacity ● Resiliency

Climate Change Resiliency ($368 M)

21st Century Grid (Lancaster area) - $289 M – Re-envision the modern grid, enhance reliability/resiliency through novel back-up solutions and prepare Lancaster area for future load growth.

● Asset Condition ● Reliability ● Capacity ● Resiliency

Targeted Undergrounding Program - NYSEG $41 M / RG&E $38 M– Proactively identify locations to deploy undergrounding to enhance reliability/resiliency to future weather events.

○ Asset Condition ● Reliability ○ Capacity ● Resiliency

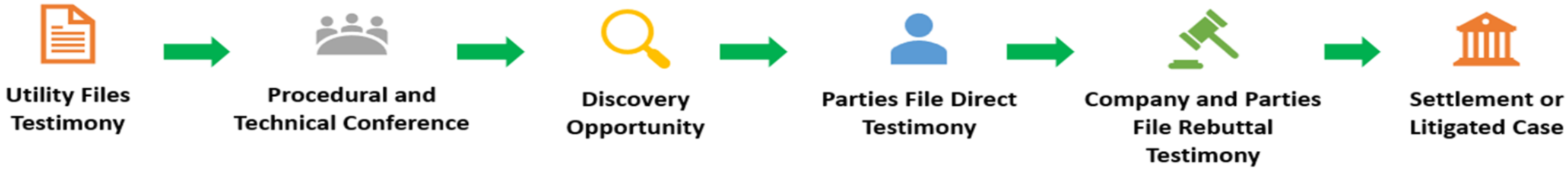
Investment Programs: CLCPA

CLCPA Phase 1
CLCPA Phase 1 accelerates existing projects that were designed to resolve asset condition and transmission system reliability needs, as well as provide additional headroom to meet NYS clean energy goals. • Cost: NYSEG - $1.48 B • Benefits: Asset Condition, Reliability, Generation Headroom • Projected ISD: 2030

Division	High-Level Scope	Est. Headroom Unlocked
Lockport	• Full station Rebuild • 3 miles of new 115 kV lines / Rebuilds	240 MW
Lancaster	• Partial substation Rebuild / Expansion	580 MW
Binghamton	• 3 Station Rebuilds / Expansions • 54 miles of 115 kV Line Rebuilds	875 MW
Ithaca	• 2 Substation Rebuilds • 1 Station Expansion • 25 miles of 115 kV Line Rebuilds	380 MW
Oneonta	• Full Substation Rebuild • 45 miles of 115 kV Line Rebuild	175 MW

● Asset Condition ● Reliability ● Capacity ● Resiliency

Rate Case Process Overview



- Pursuant to Public Service Law section 66, NYSEG and RG&E are filing a 1-year rate plan.
- ***The Companies will be submitting data to support a five-year rate plan to stabilize customer bill impacts.***
- The application and Tariff filing initiates a robust **11-month process** – Rates did not change upon filing.
- An Administrative Law Judge is assigned to oversee the proceeding.
- A Multi-disciplinary "Trial" Staff from DPS will review the utility case and file testimony.
- Extensive discovery process.
- Other parties include stakeholders such as customer advocates, businesses, environmental groups and labor will also file testimony and/or participate in settlement discussions.

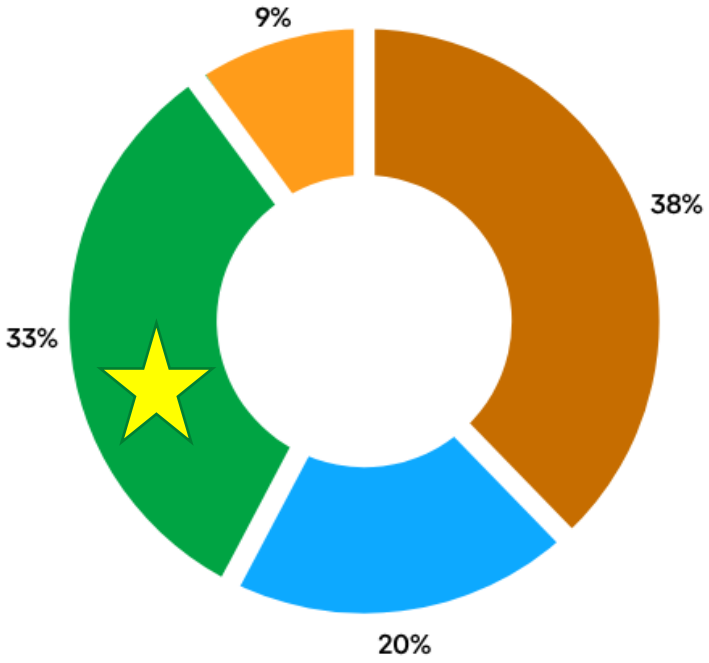
Parties must balance the impact to customer bills vs. the cost to serve load growth and to provide safe and reliable service.

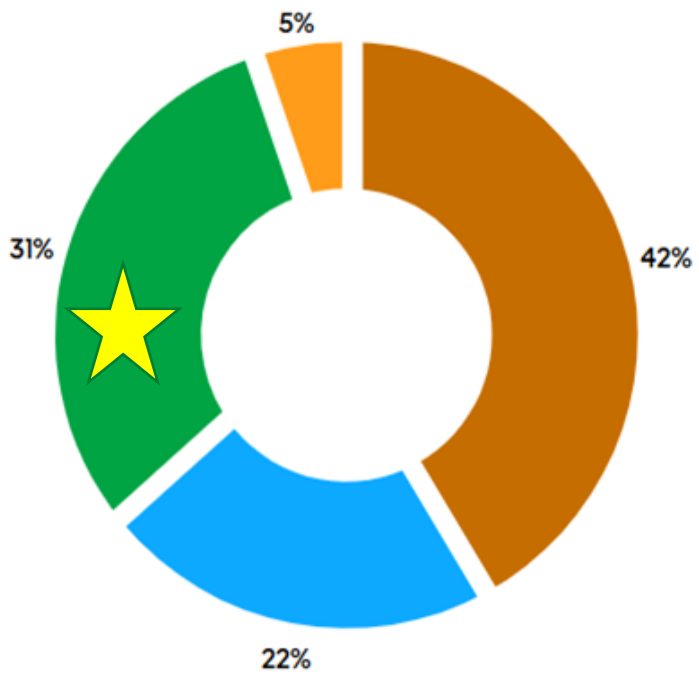
Customer Bill Overview

NYSEG
An Avangrid company

RG&E
An Avangrid company

Understanding your bill charges*





Supply Charge

A pass-through cost from which the utility does not profit. For customers with NYSEG and RG&E as their supplier, energy is sold at the same price at which it is purchased.

Government Charges

Charges that go toward government requirements and taxes.

NYSEG and RG&E Charges

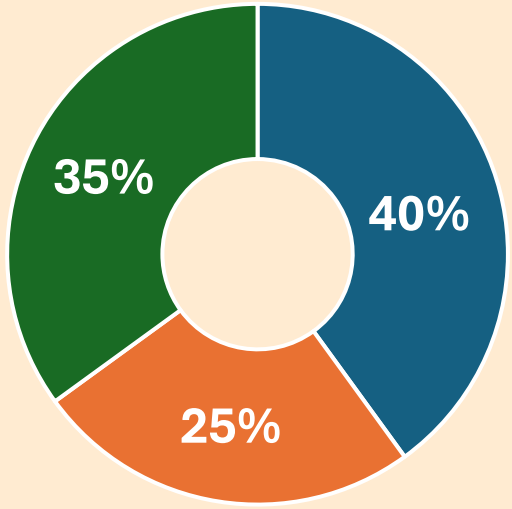
Charges that go toward operations, maintenance, customer service, administrative costs, and continued investments in the grid.

Authorized Recovery Mechanisms

Charges or credits established as recovery mechanisms.

*This is based off an approximate residential 716 kWh and 715 kWh bill from March- April 2025. Charges and fees do change and can vary every month and for each individual customer.

One-year Rate Filing



Correct Legacy Issues
State Policy
Base Activity Needs

- **One-year Rate Filing:** $850.4M
  - NYSEG Electric - $464.4M
  - NYSEG Gas - $93M
  - RG&E Electric - $220.2M
  - RG&E Gas - $72.9M

State Policy, Legacy & Investments

ONE-YEAR RATE FILING

RATE CASE PROGRAM DRIVERS

State Policy - $234M

- CLCPA Phase 1 (NYSEG) & Electrification
- Make Ready to support Broadband Expansion
- Call Center Law
- Roadway Excavation Act
- Customer support programs
- Other state mandates and taxes

Correct Legacy Issues - $380M

Increase in Storm Recovery Costs, including requirement for restoration in <72 hours

- Arrears Recovery following the pandemic including collections restrictions
- More timely recovery of Reclamation & Danger Tree expense
- CAPEX to correct legacy underinvestment e.g., Make Ready costs

Base Activity Needs - $334M

- Vegetation Management – Continue to progress NYSEG to 6-year trimming cycle and routine maintenance of Transmission line clearances
- Capital spending to address aging infrastructure to support reliability and system capacity
- Upgrade Customer Care System & Digital Enhancements for customers
- Natural gas - focus on reliability, asset condition & regulatory mandates investments

Powering New York Summary

1-year Filing

Rate Year 1 Totals	**NYSEG Electric -** $464.4M **NYSEG Gas -** $93M **RG&E Electric -** $220.2M **RG&E Gas -** $72.9M
Rate increase drivers	**State Policy:** 25% **Legacy:** 40% **Base Activity:** 35%

5-year Proposal

CAPEX/OPEX	**~ $17.3 B CAPEX for the 5-year rate period** - $5.7 B State Policy (CLCPA 1, Capacity Expansion, Grid Modernization) - $1.7 B Correcting legacy system investments - $9.9 B Base activity needs for standard operational levels **~ $1.7 B OPEX for the 5 – year rate period** – Customer Service, Electric & Gas Operations
FTEs	**~Addition of 1,100 Jobs in New York**

Thank You