

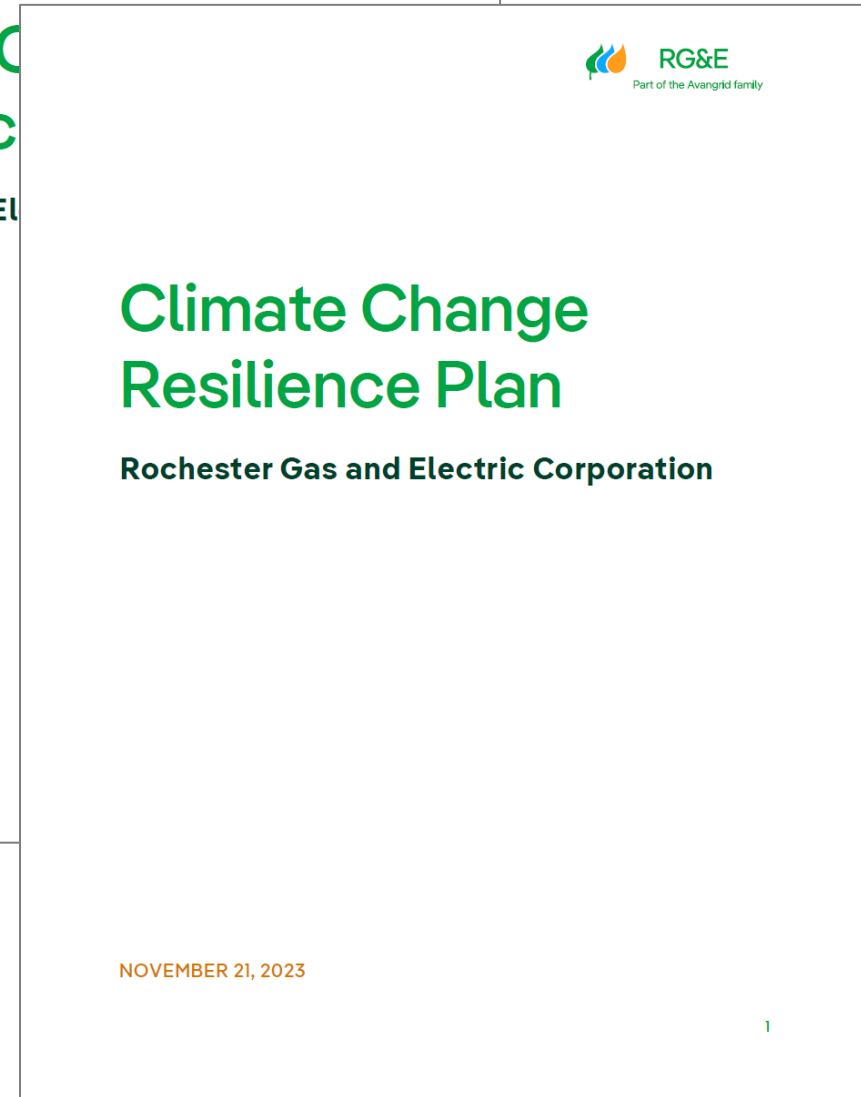
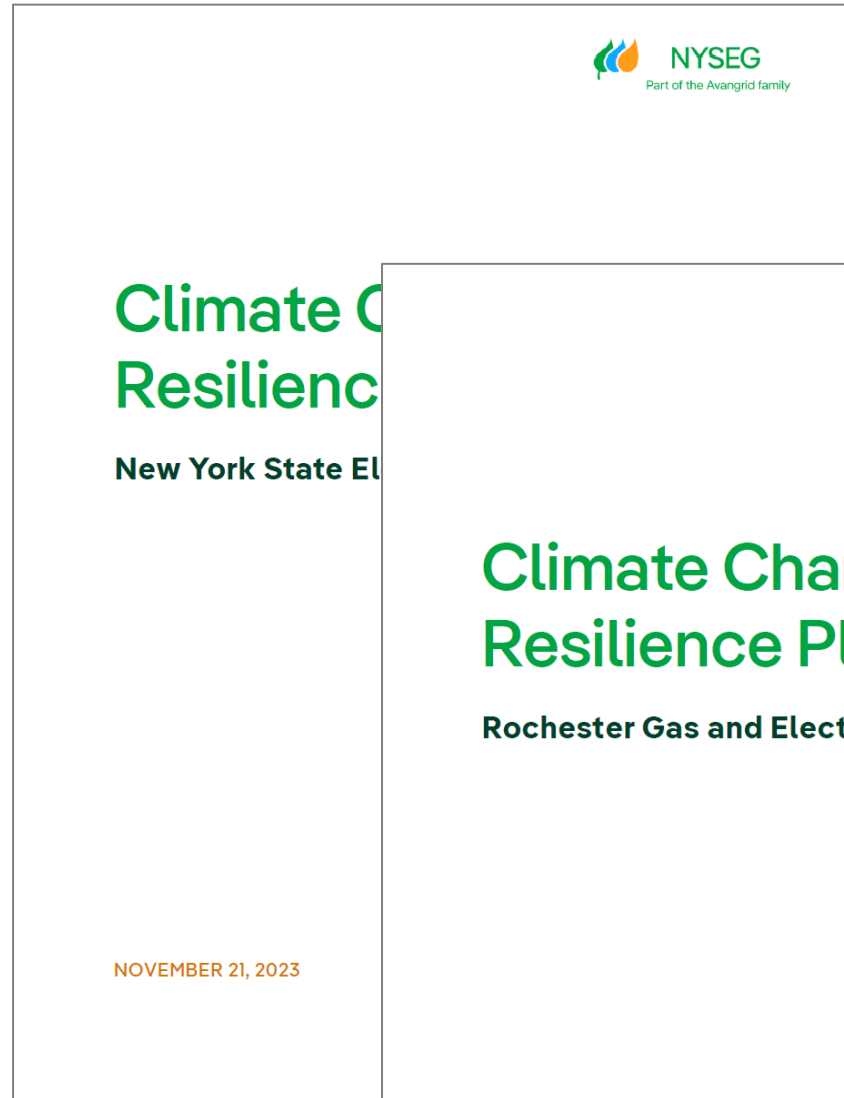


Climate Resilience Working Group Update

12/17/2024

Agenda

- 01 Background
- 02 Project Updates
- 03 Updates on Approval
- 04 Next Steps



Background - Refresher

- March 2022, PSC law became effective (Case 22-E-0222) to NY electric utilities
- Conduct a **Climate Change Vulnerability Study (Study)** and develop a **Climate Change Resilience Plan (Plan)**
- The Study must include an evaluation of the electric grid's vulnerability to climate-driven risks
- The Plan must address the findings of the Study for the next ten- and twenty-year periods
- Engage and collaborate with stakeholders
- The Study and Plan were filed in the fall of 2023, with updates at least every five years










Background - Summary of Key Findings

Priority vulnerabilities are those that represent the most significant risk to NYSEG and RG&E's electrical assets, and the ability to serve our customers reliably.

- **Substation – High:** Study Team determined that vulnerability to flooding and extreme heat was found to be high for circuit breakers, regulators and transformers. For example, extreme heat in excess of design parameters can increase rate that equipment ages.
- **Transmission & Distribution – High:** Vulnerability to wind, and combined wind and ice events was found to be high. Extreme winds can exceed design parameters and increase risk of failure.
- **Transmission & Distribution - Medium:** Vulnerability to extreme temperature for transmission & distribution power delivery components. Extreme heat in excess of design parameters can increase rate that equipment ages.

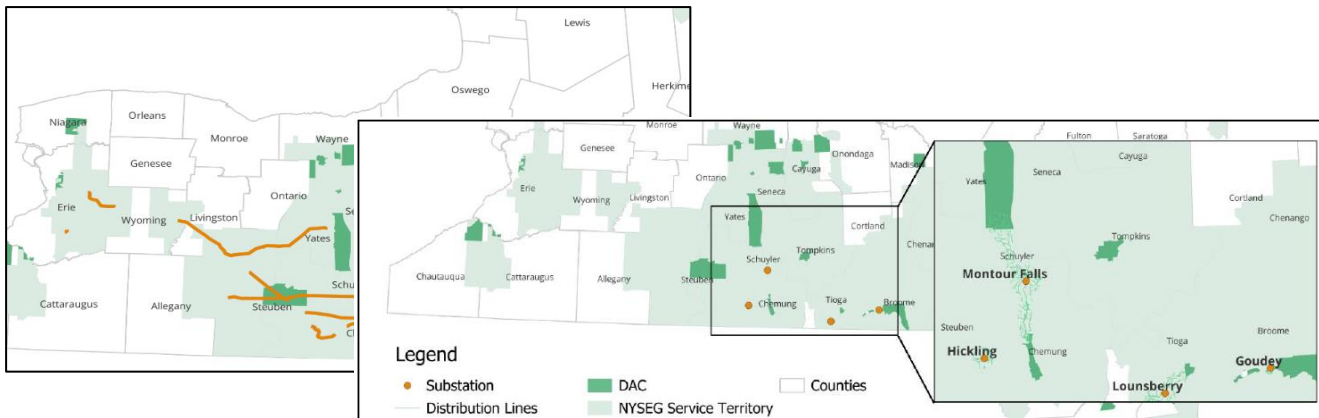
Priority Vulnerabilities

Substations			
Transmission			
Distribution			


Project Information

NYSEG and RG&E post information on projects to their website separated by county or on a dedicated program page.

- NYSEG Website: <https://www.nyseg.com/ourcompany/reliableservice/reliability-projects>
- RG&E Website: <https://www.rge.com/ourcompany/reliableservice/reliability-projects>
- CLCPA Website: <https://togetherforagreenerfuture.com/index.htm>



NYSEG: CLCPA



ROCHESTER GAS AND ELECTRIC




Van Etten 570 Resiliency

CONTACT
Project Information
Refer to: **RG&E**
Website: [rge.com](https://www.rge.com)

PROJECT OVERVIEW
As part of our commitment to all our customers, RG&E, in conjunction with AVANGRID, is updating service areas. These updates to our electric transmission system are investing in upgrading energy demand our neighbors to ensure they are safely and environmentally sound.

PROJECT PURPOSE AND SCOPE
To comply with more stringent requirements issued at the federal level.

RG&E NERC Alert Project
Electric Transmission
115kV



LEGEND
Water Distribution Transmission
Substation
Water Distribution Project Service Area

Project Need
The Van Etten 570 circuit serves the Village/Township and the surrounding area serving the Erin Township and surrounding area. This means that their only source of power is the Van Etten 570 circuit.

Additionally, the circuit serving the Township of Van Etten has controllable protection devices at the substation/source providing to centralize the circuit at the line.

Finally, there are significant assets along Langford Creek that need to be updated and hardened against weather-related outages.

Project Information Link
Refer to: **Van Etten Resiliency**
Email: outreach@nyseg.com
Website: [nyseg.com](https://www.nyseg.com) > Resiliency


The Climate Leadership and Community Protection Act (CLCPA): Phase 2 Projects Fact Sheet

CLCPA Overview
The Climate Leadership and Community Protection Act (CLCPA) was signed into law in 2019. It called for the **reduction of economy-wide greenhouse gas emissions 40% by 2030 and no less than 85% by 2050** in comparison to previous 1990 levels. Additionally, the CLCPA targets **70% renewable energy by 2030 and 100% emissions-free energy by 2040**.

As a result, in May 2020, the **New York State Public Service Commission (NYPSC) directed all major NYS electric utilities to identify system investments to support CLCPA goals**.

This milestone marks Avangrid's involvement with the CLCPA initiative. Avangrid is the parent company of New York State Electric & Gas Corporation (NYSEG). Divided into Phase 1 & **Phase 2 Projects**, the latter are new projects (as of November 2020) **whose primary purpose is to create capacity for renewable generation integration**.

Phase 2 Overview
The NYPSC approved the concept of Phase 2 projects and additionally directed all major NYS electric utilities to develop projects within "Areas of Concern" where there are known constraints to renewable generation interconnections. The utilities filed a joint petition including a suite of projects proposed by NYSEG in March 2022. In February 2023, the NYPSC approved the vast majority of Avangrid's proposed Phase 2 projects. The approved projects amount to about \$2.3 billion in spending by 2030. The costs of these projects are allocated among the entire state and recovered through the New York Independent System Operator, Inc. (NYISO) rates. As a result, the rate impact to NYSEG customers is lower than if funded solely by our customers. All utility rates are approved by the NYPSC. In total, Avangrid has committed to executing approximately \$3.5B on CLCPA projects (*combined Phase 1 & 2) by 2030 in support of NYS climate goals.



CLCPA Phase 2 Projects that are currently planned.

Jennison Transmission Solution Update

Rebuild of Jennison substation and associated transmission work identified as part of CLCPA to aid in meeting NYS' clean energy goals:

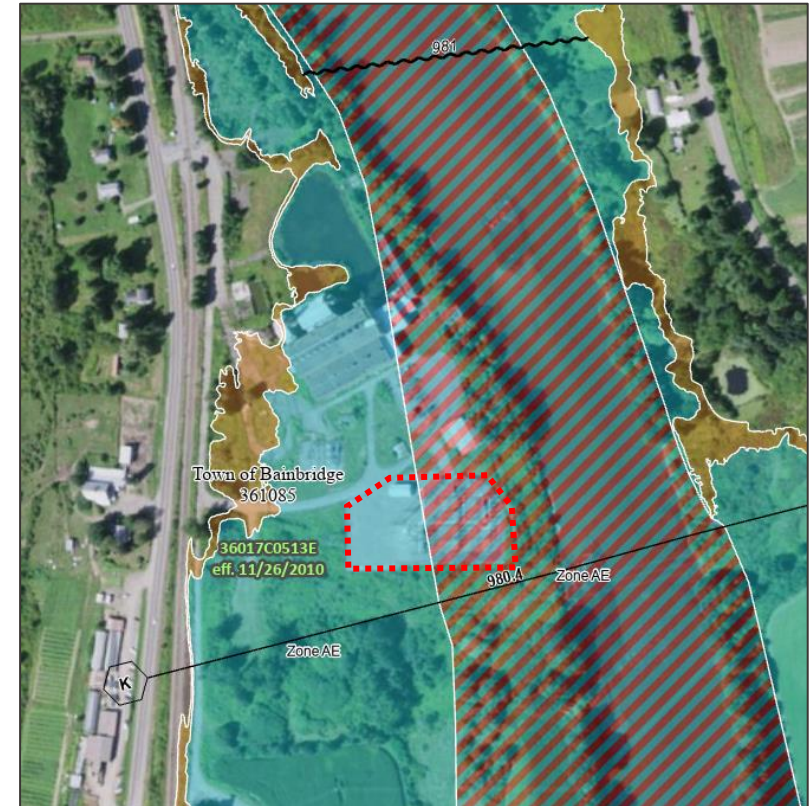
<https://jennisontransmissionsolution.com/>

Project Info:

- Article VII filing made 12/4/2024
- ~49 miles of rebuild transmission lines in Chenango and Delaware Counties
 - ✓ Enhance resilience to wind/wind-and-ice, extreme heat.
- Rebuild substation out of FEMA Special Flood Hazard Area (SFHA)
 - ✓ Station currently situated in a 1-in-100 year flood plain and regulatory floodway
 - ✓ Enhance resilience to wind/wind-and-ice, extreme heat, flooding.

Other Regional Benefits:

- Enable future renewable generation facilities to connect.
- Generate economic benefits to the community.
- The upgrades will improve the reliability and resiliency of the entire transmission system.

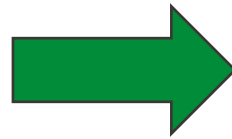


Excerpt from FEMA Floodmap showing existing Jennison Substation

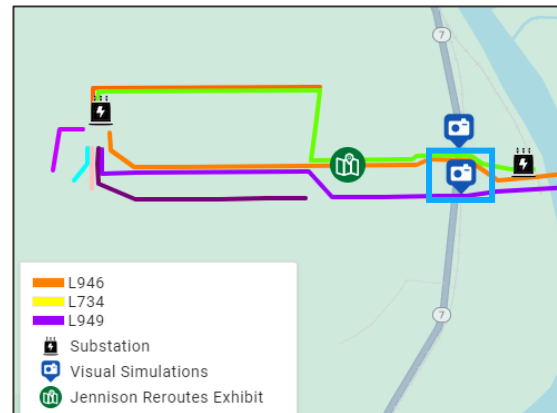
Jennison Transmission Solution – Example Rebuild (L949)



Existing



Proposed



Approval Update

PSC Ruling

- Joint Utilities have not yet received information from the PSC regarding the ruling on the filed Climate Change Resilience Plan.
- Discussion of the utilities climate vulnerability studies and plans is on the preliminary agenda for the PSC Session scheduled for 12/19/2024.
- We will schedule additional meetings with the CRWG in 2025 as information for sharing becomes available.

Next Steps

2025 CRWG Meetings

- Will continue to be held twice per calendar year.
- Next meeting to provide update on PSC discussion.
- Once approved or modified, NYSEG and RG&E will share the final approved plans with CRWG / county executives.

Questions



