

July 1, 2022

NYSEG and RG&E, and their parent Avangrid, fully embrace New York State's CLCPA goals and advancing clean energy solutions for our customers. We are an industry leader in the energy transition and look forward to using our expertise and resources to foster change. The Companies are steadfast supporters of the State's clean energy and climate change goals and have a fundamental role in that energy future that includes significant integration of renewable energy, energy efficiency, electrification of transportation and buildings, clean energy options for industrial processes and heating, as well as wholesale electric market reforms to advance that clean energy transition.

Examples of this commitment are our work with the City of Ithaca to implement its nation leading Green New Deal goal to decarbonize the City by 2030, our Peak Shaving Battery Storage System in Farmington, New York and our first of a kind Java Microgrid project that will test a microgrid solution using battery storage to provide backup capacity to a substation serving 1,700 customers. We have also proposed significant clean energy related proposals including:

- Infrastructure and incentives to support charging for medium & heavy-duty vehicles.
- Incentives to support electrical infrastructure cost for conversions to heat pumps.
- Low Income Solar PV Program: Utility owned solar with the revenue allocated directly to low-income customers.
- Battery Storage: Large scale batteries to help manage distributed generation and new electrical loads.
- Shared Loop District Geothermal Pilot
- Hydrogen Blending Pilot: Blending hydrogen with natural gas for a large industrial customer to lower their overall emissions.

Achieving the State's energy and climate goals and providing New Yorkers with the utility service they expect and deserve will require a collective approach. As part of this transition, we will need to use and upgrade our existing electric infrastructure to help ensure reliability and to transmit renewable generation. We will also need to explore potential future uses of our natural gas infrastructure in the delivery of low- and no-carbon renewable natural gas and hydrogen. To be successful all options need to be considered to develop a balanced, reliable and affordable approach.

As a member of the Utility Consultation Group (UCG) we have worked collaboratively with our partner utilities to thoroughly analyze the Climate Action Council's (CAC) draft scoping plan and stand fully behind the UCG's submittal. However, as the utility provider for nearly 1.9 million New Yorkers with a service territory that serves over 40 percent of upstate New York stretching from Buffalo to Westchester County and infrastructure that includes over 49,400 miles of electric distribution and transmission lines and more than 17,000 miles of

natural gas distribution and transmission pipelines we believe that is appropriate to provide analysis as to how NYSEG and RG&E's businesses may evolve in the decades ahead.

NYSEG and RG&E have evaluated potential issues and strategies related to reducing natural gas usage and increasing electricity usage as an alternative and the modernization and expansion of the electric grid needed to support the widespread deployment of renewables and beneficial electrification. The Companies have evaluated multiple scenarios for 2030, 2040, and 2050 in which gas use is substantially reduced, demand for electricity increases to accommodate alternatives to combustion (e.g., heat pumps, electric vehicles, electrification of industrial processes), and significant renewable electricity generation is deployed within the service territories of both Companies. These scenarios reflect what it would look like for NYS to meet its CLCPA goals and some of the measures the Companies' may take to enable the achievement of the shared goals. These aggressive programs (e.g. energy efficiency and transportation charging infrastructure) and initiatives have already begun in earnest with \$14 million provided annually in our clean heat pump program and \$114 million committed through 2025 to support the installation of 12,000 electric vehicle chargers. However, they will continue to need focused attention and require investments in expanding and modernizing the grid including addressing the implications on the workforce, processes and innovative industry technologies in order to accomplish our shared goals in NY.

The Companies believe that a broad portfolio of technologies will need to be deployed in order to achieve the desired result. These technologies include transportation electrification, renewable generation, low-carbon fuels, and energy-efficiency measures. Implementing energy storage at the transmission and distribution level will be necessary in all identified scenarios. The companies will continue to seek out emerging technologies that will blend well with the energy system mix the companies are trying to achieve.

Electric Industry Perspective:

The electric sector continues to grow as the energy backbone of the economy. Today, the electric sector faces new challenges. Climate change is increasing the frequency and severity of weather events at the global scale, potentially rendering the safe and reliable delivery of electricity more difficult. The increased deployment of distributed energy resources ("DERs"), including customer-sited solar photovoltaic systems ("PV"), electric storage, and electric vehicles, challenge the typical electric utility business model and the traditional planning and operation of the electric distribution system. These fundamental changes are transforming the distribution grid and need to be addressed to maintain customer reliability and affordability of electric service as well as enable clean energy goals. The requirements and expectations for the electric sector are also undergoing significant change. This change is occurring because of the recent availability and financial viability of clean energy resources that can generate and provide energy to the electric grid through non-fossil fuel resources such as solar, hydro, and wind. These new types of generation require a change in the electric grid structure from one of centralized

generation in which power is distributed throughout the electric grid to power businesses and homes from a limited number of generation points to one that is de-centralized and provides power to the grid from multiple clean energy interconnection points.

With our “Customer First” mantra, NYSEG and RG&E believe that as an overarching, foundational requirement, the reliability of the electric distribution system is paramount given the increased reliance on the system for advancement of New York’s economy, customers, businesses and vitality. Our efforts to modernize the grid are foundational to continue to fulfill the Company’s mandate to provide safe, reliable service. These modernization efforts include over \$1.2 billion in investments over the last three years and nearly \$1.9 billion in commitments over the next three years to bolster system capacity and reliability. These investments and commitments will continue to build on existing programs to enhance the operational performance of the system, increase efficiency, enhance situation awareness and grid visibility. In addition, we look to advance future planning of the system as we meet the challenges before us to accommodate higher levels of clean energy generation resources, prepare for electric vehicle deployment, integrating emerging technologies, such as energy storage, that can provide flexibility as the grid continues to evolve. Technology advancements are allowing for a more dynamic, efficient, digitalized grid that will support massive adoption of beneficial electrification and clean energy resources. Innovation is an important aspect to those modernization efforts and is a Company core value that is unlocked by investing in people, processes, and technology platforms. Ultimately, these efforts are focused on our common goal within the State to reduce impacts to our environment and decrease emissions for our customers.

Natural Gas Transition Perspective:

The Companies continue to proceed expeditiously on the clean energy transition road laid out by the CLCPA and we look forward to playing an active role in that transition. However, it is important to not lose sight of our obligation to provide safe, reliable, and affordable gas service to customers. Safety remains of utmost importance to our operations. As natural gas distribution companies operating in a cold climate where loss of gas service can have dire consequences, reliability is an essential component of safety. In this light, it is important to continue to maintain the natural gas distribution system, including replacing aging infrastructure, to increase the safety of the system, while also preparing for the increased use of clean fuels. It is also important to continue to forecast demand based on actual observed customer behavior and continue to procure sufficient natural gas supplies to serve forecasted needs as ordered by the Commission.

Given our keen focus on the diverse communities we serve, the Companies’ are aware of the economic challenges that the energy transition will bring to our customers who live in very different economies and environments across the state. The energy transition raises a range of customer affordability, subsidization, and cost shifting issues. As a result, it is imperative that the cost impacts of the transition are investigated, considered, and addressed. From the Companies’ perspective, customer choice of fuel type is foundational and should be respected and preserved, especially for our most vulnerable customers.

NYSEG and RG&E are committed to supporting customer education and supports well-designed and funded incentives to promote climate-beneficial customer decisions and address possible inequities.

The Companies recognize the important role of natural gas in the energy transition. However, it is too soon to definitively determine which scenario(s) represent the best approach. Therefore, it is important to embark on activities that will push the energy transition forward, while maintaining customer optionality and choice for the longer term to balance cost and risk.

As mentioned earlier, NYSEG and RG&E believe that the path to decarbonization should include a combination of the following set of strategies:

- ✓ Consumer Education to help customers make fully informed decisions. Substantial portions of New York emissions occur at end-use sites and significant customer education will be required to provide the necessary information so customers can make informed decisions about their energy choices. Education topics should include emissions generated, reliability, up front and lifetime costs, and incentives available to encourage transition associated with various fuels, heating system, and appliance choices.
- ✓ Monitor Customer Adoption: The exact timing and approach to decarbonization is uncertain. It will be necessary to gather information to understand how and at what rate our customers are choosing to implement decarbonization strategies so the Company can appropriately plan supply and capacity requirements and implement necessary rate modifications to address changing cost structures.
- ✓ Energy Efficiency: Aggressive focus on energy efficiency through building shell retrofits and energy efficient equipment will be required regardless of fuel being used.
- ✓ Electrification, including hybrid electrification, when appropriate, as a cost-effective method determined by customer decisions. Some level of cost-effective electrification, including hybrid electrification, will be necessary to achieve decarbonization goals.
- ✓ Green Hydrogen and RNG applications for Transportation and large commercial and industrial direct use, for potential use in providing reliable fuel for the electric sector, and/or for use in medium and heavy-duty equipment.
- ✓ Alternate fuels will be necessary in the short term to support interim (2030) climate goals. Hydrogen and other renewable natural gas (“RNG”) blended into the gas distribution system may be necessary in the long run for limited direct use in the buildings sector, for potential use in providing reliable fuel for the electric sector, and/or for use in medium and heavy-duty transportation.
- ✓ Renewable Electricity growth through an unprecedented installation of offshore and onshore wind is required with significant amounts of solar and new transmission to

deliver renewables to the State. This unprecedented growth will likely require the use of natural gas for balancing and support of the electric grid.

- ✓ Developing Technologies will be monitored and tested to keep an eye on potentially impactful technologies, including carbon capture at customer locations. It will be important to keep an eye on potentially impactful developing technologies. For example, carbon capture at the customer site has excellent promise and could be an outstanding option for emissions reductions using existing infrastructure.

These decarbonization strategies present an aggressive yet pragmatic approach to creating a future of energy that achieves our climate change goals as well as ensuring that consumers are not financially disadvantaged. The process of implementing any combination of these strategies will support regulatory and policy initiatives designed to spur customer investments, support the development of decarbonized energy supply, and mitigate affordability and equity concerns on the gas system. These decarbonization strategies must recognize and always address the fundamental importance of customer and public safety needs for reliable energy service under all conditions, especially operating in a climate where loss of energy service can have dire consequences. In this light it is critical to ensure the integrated sectors of the regional energy systems are jointly capable of handling current demands as well as increased demands from clean energy efforts in a reliable and timely manner by addressing feasibility, build out, timing, supply, and other highly complex issues.

The State must plan for the vital investments that will be needed to meet demand and renewable generation goals across its diverse regions. Determining affordable approaches that ensure safety and reliability for New Yorkers living in very different communities and climates is an important step in the transition.

As the State moves forward with its historic transformation NYSEG and RG&E stand ready to assist in achieving emissions reduction and renewable energy goals, helping to make a safe, reliable, and affordable clean energy future for all New Yorkers a reality.

Respectfully submitted,



Patricia H. Nilsen
President and Chief Executive Officer
NYSEG and RG&E