

NATIONAL GRID VENTURES COMMENTS ON THE DRAFT SCOPING PLAN

June 29, 2022

Climate Action Council Draft Scoping Plan Comments NYSERDA 17 Columbia Circle Albany, NY 12203

RE: Draft Scoping Plan Comments

Submitted via Email to scopingplan@nyserda.ny.gov

Please accept the below comments of National Grid Ventures on the New York State Climate Action Council's Draft Scoping Plan dated December 30, 2021.

National Grid Ventures

National Grid Ventures develops and operates large-scale clean energy projects. Our portfolio includes subsea electricity interconnectors, wind and solar power, transmission modernization, generation, clean hydrogen solutions, and battery storage.

Our mission to accelerate and achieve the clean energy transition includes a mosaic of solutions, namely:

- Offshore Wind We are developing offshore wind infrastructure in the New York Bight through our joint venture with RWE Renewables called Community Offshore Wind. We have the potential to host 3 GW of capacity, enough to power over one million homes and businesses, grow the region's economy and bring clean energy jobs to the Northeast.
- Solar The Calverton Solar Energy Center, a Riverhead, NY, project developed in partnership with NextEra, will power over 4,000 homes on Long Island this summer. This 23MW project will reduce 20,000 tons of carbon emissions a year, the equivalent of removing 4,000 cars from the road.
- **Transmission** We are competing for large-scale electricity transmission projects across the US. NGV is a part-owner of New York Transco, which improves the resiliency of the

electricity grid in New York State. There are two transmission network modernization projects currently in development in New York that are expected to be in service by late 2023.

- **Battery** We developed battery energy storage systems in East Hampton and Montauk, partnering with NextEra. These systems are decreasing emissions and accommodating more demand during the busy summers on the southeast end of Long Island.
- **Generation** We're looking at how we can leverage National Grid's Long Island generation sites to deploy new and emerging technologies from energy storage to zero carbon generation like green hydrogen.
- **Developing a Hydrogen Hub** Hydrogen can help decarbonize multiple sectors, including heat, power generation, and transport. We are proud to be a part of the consortium announced by Governor Hochul to develop a regional clean energy hydrogen hub in the Northeast. Our vision for hydrogen is to blend hydrogen with RNG into the existing gas networks, establish 100% hydrogen-fueled neighborhoods, create hydrogen clusters anchored by large commercial and industrial customers in a distinct network of industrial users, and fuel our generation assets with hydrogen. With more research and development, plus seeking funding from the Infrastructure, Investment and Jobs Act, we can introduce hydrogen pilots that will bring these to life. NGV has the potential opportunity to spearhead a number of these efforts.

All of these projects are located in the state of New York, which will help New York reach its climate goals and continue to lead in the clean energy transition.

Draft Scoping Plan

New York State's Climate Leadership and Community Protection Act (CLCPA) is an ambitious climate law that requires a 40 percent reduction in greenhouse gas emissions by 2030, and an 85 percent reduction by 2050. NGV applauds the Climate Action Council (CAC or Council) for the work that went in to developing the draft Scoping Plan to identify pathways for achieving these targets. Climate change is one of the biggest threats we face today, and we strongly support the state's efforts to lower emissions to combat it.

Charting New York's energy trajectory is a massive undertaking fraught with complexity. NGV commends the Council's focus on stakeholder feedback and appreciates the opportunity to provide comments on the proposal. We are glad the Council acknowledges both the challenges and opportunities inherent in overhauling New York's energy system, as well as the crucial need to keep the focus firmly on providing reliable, affordable service for customers when taking steps to reduce emissions.

We agree with the CAC's suggested emissions reduction targets, and believe the best approach to achieve the reductions is one that:

- Recognizes the need for additional infrastructure to deliver NY's clean energy targets

- Utilizes a hybrid approach including green hydrogen and long duration storage
- Reuses existing power plants
- Transitions at least cost to customers
- Supports RD&D

There will be a need for additional infrastructure to deliver NY's clean energy targets

Significant infrastructure development will be needed to reach the renewable energy targets, and the process will be challenging for all parties to navigate in the identified timescale. In addition to siting, permitting, and constructing the renewable energy projects central to the draft scoping plan, there will also need to be accompanying upgrades to electric transmission infrastructure to support the interconnection of these resources. A key finding of the Draft Scoping Plan is that offshore wind is anticipated to provide 20 GW of electricity to New York by 2050. NGV agrees with the Draft Scoping Plan that New York should pursue transmission system upgrades on Long Island and in New York City to facilitate the initial target of 9,000 MW of offshore wind. Transmission upgrades such as those needed on Long Island will be critical to delivering clean energy from offshore wind and other renewables to homes and businesses.

We will need to utilize a hybrid approach including green hydrogen and long-duration storage

While the deployment of renewables continues to increase, this source alone will not be able to meet electricity demand under a full electrification scenario at the current rate of deployment, resulting in a supply shortfall. A hybrid approach that uses all the clean technologies available to us, including offshore wind and other renewable energy, as well as green hydrogen, will be needed to meet the state's climate goals while creating an affordable and just transition.

We support the CAC's emphasis on seeking out and embracing new technologies for generating clean energy, but we also need to take advantage of current technologies to support decarbonization. The New York Independent System Operator (NYISO), an independent and transparent public oversight organization, has published concerns about reliability declining as soon as 2023 under the current draft plan. Electrification is a key strategy that will help reduce emissions but, even when coupled with energy efficiency, it will drive a need for additional electric supply that cannot be met by renewables alone without impacts to reliability. In addition, electrification exacerbates system resiliency concerns that can be mitigated through diversification of energy resources. We applaud the CAC's open-minded and forward-thinking approach to incorporating green hydrogen, which is a proven fossil-free technology that we can use now to meet demand while achieving decarbonization. NGV recommends an approach that uses existing delivery systems that can be decarbonized to minimize the growth in total peak capacity of the electric system, and use of offshore wind, onshore renewables, green hydrogen, and other technologies to ensure a reliable, resilient, integrated energy system that meets New York's climate goals.

Because of the intermittent nature of renewable energy, development of long-duration storage will be needed to ensure system reliability. We support the CAC's key finding that "Firm, zero-emission resources, such as green hydrogen or long-duration storage, will be important to ensuring a reliable electricity system beyond 2040." NGV agrees that maintaining energy system reliability during the clean energy transition is crucial and National Grid is participating in NYSERDA's

northeast hydrogen hub consortium because we view green hydrogen as a key enabler of reliability. Development of a green hydrogen economy is needed to ensure adequate supply so that green hydrogen can be leveraged to decarbonize a variety of end use applications, including long-duration storage and as a dispatchable generation fuel to help ensure system reliability.

We should reuse existing power plants

NGV appreciates the Council's efforts to identify the issues and opportunities presented by reuse of power plant sites. Repurposing these sites with clean energy technologies can leverage the adjacent electric infrastructure and land already zoned for energy production while helping to mitigate local revenue impacts resulting from plant closures. Community engagement is central to any repurposing in order to ensure local needs are met as part of the transition, as is the state's continued support for host communities. We agree with the Council's acknowledgement that support for displaced workers is a critical element of a just transition in the state. NGV concurs that the energy transition presents opportunities to retrain workers to leverage their skills in support of clean energy technologies, and we look forward to being an engaged partner alongside the union workforce that will ultimately deliver the clean energy transition in New York.

The transition must be least cost to customers

While the energy transition will bring economic growth supported by the clean energy industry, policies that achieve emissions reductions at least cost to customers will help mitigate the potential drag on the overall economy in New York as a result of the cost of energy. Companies looking to grow and expand in New York need access to affordable, reliable energy for their operations. New York is constantly in competition with other states to attract and keep businesses and the jobs and economic development they provide. Therefore, additional modeling of the cost to consumers for different pathways is needed. Given the additional cost of the energy transition to consumers, it is necessary to find a path forward that achieves decarbonization while providing consumers with the flexibility needed to account for diversity in housing, financial, and other considerations. The more that existing infrastructure can be reused, the lower the overall cost to the consumer will be. An economywide approach that uses all the clean technologies available to us, including fossil-free RNG and green hydrogen, will meet the state's climate goals while creating an affordable and just transition.

The CAC must support additional RD&D

We agree that research, development, and demonstration (RD&D) is key to driving development and commercialization of additional technologies, and that innovation will be required in areas such as long-duration storage. There are gaps in existing research and significant potential for future innovation, so it would be ineffective to limit usage of any technology based on current constraints. We applaud the focus on additional research and development to further improve how we use green hydrogen and other clean energy technologies, but policies that help to develop supply and demand to ensure a sustainable market for these technologies are also necessary. NGV recommends a flexible approach to incorporating these technologies to reduce emissions: we need to use all the tools at our disposal, current and future, to meet New York's clean energy goals.

In closing, we agree with the Council that developing offshore wind, upgrading transmission, and utilizing green hydrogen are essential components of the state's decarbonization strategy and urge

the Council to ensure the Final Scoping Plan enables their deployment instead of hindering technologies that could deliver the outcomes intended by the CLCPA.

Sincerely,

Sheri Lauten Director of Government Relations National Grid Ventures Sheri.Lauten@nationalgrid.com