Ecogy Energy
315 Flatbush Ave. #393
Brooklyn, NY 11217

July 1, 2022

VIA ELECTRONIC FILING

Draft Scoping Plan Comments
NYSERDA
17 Columbia Circle
Albany, NY 12203-6399

RE: Response to the Climate Action Council Draft Scoping Plan

Dear NYSERDA,

Ecogy Energy, based in Brooklyn, NY and founded in 2010, is an experienced developer, financier, and owner-operator of distributed generation projects across the U.S. and Caribbean. Ecogy appreciates the New York State Energy Research and Development Authority's ("NYSERDA") leadership in soliciting stakeholder feedback for the Climate Action Council ("the Council") Draft Scoping Plan. Ecogy's focus and niche is on the <1 MW arena, particularly on systems sited on rooftops, parking lots, and brownfields. Ecogy believes that with sound planning, proper development, and fair incentives for these types of projects, the State, its residents, and the clean energy industry will ultimately be more successful. **Ecogy firmly believes that by focusing on such projects constructed in and on the built environment, the development community can preserve precious and limited natural resources while directing the benefits of local solar to small businesses, property owners, nonprofits, low-income individuals and other organizations that need them most.**

Please find the attached comments of Ecogy Energy regarding the December 30, 2021 "New York State Climate Action Council Draft Scoping Plan," created by the Climate Action Council regarding the framework for how the State will reduce greenhouse gas emissions and achieve net-zero emissions, increase renewable energy usage, and ensure climate justice. Please contact me with any questions related to this filing.

Respectfully submitted,

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NYSERDA
17 Columbia Circle
Albany, NY 12203-6399

RE: Response to the Climate Action Council Draft Scoping Plan

Ecogy Energy supports the recommendations in the Climate Action Council Draft Scoping Plan to ensure 85% Reduction in GHG Emissions by 2050, 100% Zero-Emission Electricity by 2040, 70% Renewable Energy by 2030, 9,000 MW of Offshore Wind by 2035, 3,000 MW of Energy Storage by 2030, 6,000 MW of Solar by 2025, 185 trillion Btu of end-use energy savings and would like to make the following comments:

Chapter 2. The Time is Now to Decarbonize Our Economy

Comparison of Efforts in Downstate to Upstate

Ecogy strongly encourages NYSERDA and the Climate Action Council to consider and reevaluate the disproportionate deployment of solar energy between the Consolidated Edison ("ConEd") and Upstate regions. The ConEd region encompasses over ⅔ of New York State's ("NYS") total population and is characterized by high population density, high levels of poverty, disproportionate health effects, and incomparable energy demand. Despite its high population density, the ConEd region severely lags Upstate New York in terms of solar deployment. As of the end of 2021, the New York City Mayor's Office of Climate and Energy Justice projects NYC's local electric grid to be approximately 85% powered by fossil-fuels. This contrasts greatly from the upstate grid, where clean sources make up 88% of the electricity supply.[1]

As stated in New York's 10 GW Distributed Solar Roadmap: Policy Options for Continued Growth in Distributed Solar ("Roadmap"), Con Edison represents almost 40% of utility energy sales in New York, but only about 14% of the distributed solar completions to date have occurred there.[2] Facing a continued heavy reliance on fossil fuels, high energy costs, and the intensifying impacts of climate change, New York City ("NYC") needs to take bold action to achieve a just transition to a clean, affordable, and resilient energy system.

[1] https://www1.nyc.gov/site/sustainability/our-programs/energy.page Accessed 6/28/22
[2] New York's 10 GW Distributed Solar Roadmap: Policy Options for Continued Growth in Distributed Solar CASE 21-E-0629 In the Matter of the Advancement of Distributed Solar (Issued December 17, 2021)

Ecogy's community solar systems have made it possible for hundreds of New Yorkers to access clean, discounted, and reliable solar energy. Community Distributed Generation ("CDG") projects have increased new revenue for host sites, created local jobs, increased local tax revenue, and engaged the local community. Community solar has been particularly well-suited and beneficial for NYC, where two-thirds of residents are renters.[3] Our projects, as well as other developers in the area, have just scratched the surface of ConEd customers who could benefit from energy savings. ConEd serves 3.4 million[4] customers in total across NYC and Westchester County, estimating that about 9,000 of those customers[5] as of October 4, 2021, participate in all community solar systems in its territory, which is only 0.26% of their utility service area population. Even less community solar is dedicated to low-to-moderate-income ("LMI") individuals that face a disproportionately higher energy burden. This is disappointing, considering New York State ("NYS") prides itself on its progressiveness, its competitiveness, and its market leadership. For the above reasons, Ecogy strongly encourages NYSERDA and the Climate Action Council to support the deployment of distributed solar energy in the ConEd territory, where it is needed most to support the goals of the Climate Leadership and Community Protection Act ("Climate Act") signed into law in 2019. The time is now to decarbonize our economy downstate.

Chapter 6. Achieving Climate Justice

6.1 Climate Justice and the Climate Act

In transforming New York's energy economy and mitigating climate change, the Climate Act mandates an investment of certain benefits of State agencies, authorities, and entities to Disadvantaged Communities. Disadvantaged Communities must receive a minimum of 35%, with a goal of 40%, of benefits of spending on clean energy and energy efficiency programs, projects, or investments in the areas of housing, workforce development, pollution reduction, low-income energy assistance, energy, transportation, and economic development.

The Inclusive Community Solar Adder (ICSA) supports CDG solar projects serving low-to-moderate income (LMI) subscribers, affordable housing, and other facilities serving disadvantaged communities (DACs)

The previous NY-Sun ICSA adder at $0.10/Watt DC for a total of 100 MW was only 21% subscribed in 2021 through the beginning of 2022 before NY-Sun's 2020 – 2030 Operating

[3] City of New York. "Housing conditions data." Where we live NYC. https://wherewelive.cityofnewyork.us/explore-data/housing-conditions/
[4] ConEdison. "Electrical System Statistics." https://www.coned.com/en/about-us/corporate-facts
[5] The city. "Lights Out Feared for NYC New Community Solar Projects as State Credits Fade." https://www.thecity.nyc/environment/2021/10/4/22709913/nyc-solar-energy-projects-at-risk-as-state-credits-fade

Plan was filed on May 31, 2022.[6] The ICSA dashboard has since been removed due to undergoing revisions and will be reopened later in 2022. The ICSA adder was expected to be live June 7, 2022, with the rest of NY-Sun incentives but was postponed to make potential changes to program design, further increasing uncertainty for developers seeking to support Disadvantaged Communities (DACs). This is a true disappointment that speaks to the barriers for submitting to the ICSA adder and the ICSA adder being too low to be economically viable. Ecogy submitted two comments in 2021 to NYSERDA regarding paying upfront costs to the largest non-profit customer acquisition organization in Westchester County, high acquisition costs to subscribe both LMI and non-LMI residential customers, challenging subscriber eligibility definitions, and analyzing the 3-year payment schedule since no changes were made to that aspect of the program after the January comment round—despite developers expressing their concerns—and that small- to medium-scale projects should receive a higher ICSA value compared to large scale projects since large projects benefit from greater interest from financing entities, economies of scale, final program design, and a lower proportion of dedicated costs for subscribing customers compared to overall project costs.

With an ICSA adder amount submitted as of March 2nd, 2022, being ~21MW, if the average system size is 8 kW, then only roughly 0.08% of residents are benefiting, yet as stated above, the ConEd territory serves 3.4 million customers in total across NYC and Westchester County. This 21MW figure also was only for "Reserved" projects and not projects that have reached actual completion - which using ConEdison's history means that this needs to be discounted heavily.

The ICSA adder requirements to apply are too burdensome to be worth it at the current incentive level. This includes the requirement, for example, that subscribers must receive a 10% discount on their subscription. As project costs increase, especially in ConEdison territory, many projects are unable to offer a 10% discount including Ecogy's pipeline which has had to move some projects to a 5% discount. This means that of the available projects that have reserved the Community Credit - many need to change to a 5% discount to simply make the project economical, will be unavailable to apply to the ICSA.

Ecogy believes that NYSERDA should not be determining what discount should be offered through the ICSA but does believe there should be a guaranteed discount of some sort - just at a level above 0%. The ICSA should be focused on breaking down barriers to LMI adoption - not increasing them with burdensome application requirements and complex payment/reporting structures that over complicate the process. These barriers through regulatory requirements halt most small-scale developers from undertaking these efforts.

[6] NYSERDA. "Inclusive Community Solar Adder." https://www.nyserda.ny.gov/All-Programs/NY-Sun/Contractors/Dashboards-and-incentives/Inclusive-Community-Solar-Adder

Ecogy recommends that NYSERDA and the Council look to other neighboring/regional states with significantly higher incentives aimed at Low-Moderate Income folks, which is illustrated below.

State	**Incentive**	**Subscribership**	**Total Available**
New York - ConEdison ICSA	$0.10/Watt DC for any capacity afforded to LMI	21 MW applied	100MW
Massachusetts Low Income Property	$0.03/kWh for 20-years (equivalent to at least $0.35/Watt DC*)	8.592 MW**	1120 MW available
Massachusetts Low Income Community Shared Solar	$0.06/kWh for 20-years (~ equivalent to at least $0.55/Watt DC*)	142.37 MW** **(nearly 6X that of ConEdison ICSA)**	1120 MW Available
Washington DC Solar for All[7]	$1.25/Watt DC upfront for 15-year Term	N/A - no public data.	100,000 LMI accounts by 2032 or roughly 500MW
New Jersey SuSi Program - Community Solar LMI[8]	$20/SREC adder for 15-years (~ equivalent to at least $0.20/Watt DC)	N/A - new program.	150 MW per year

Table 1. The above table illustrates how far behind New York is in encouraging LMI folks to sign up for community solar and shows how New York is offering only a fraction of the incentives neighboring and much smaller states are offering.
*Includes a 10% discount offered or in other words not full adder value is realized by Ecogy.
**includes allocated and pending capacity submitted.

Solar Energy Equity Framework (SEEF)

NY Sun Solar Equity Framework: $200 million was directed to increase access to solar energy for low- to moderate-income (LMI) households, affordable housing, and environmental justice communities.

[7] Department of Energy & Environment. "Solar for All." https://doee.dc.gov/solarforall
[8] New Jersey Clean Energy. "Administratively Determined Incentive (ADI) Program." https://njcleanenergy.com/renewable-energy/programs/susi-program/adi-program

The State of New York Public Service Commission (the Commission) Order Expanding NY-Sun Program effective April 14, 2022 directs the SEEF budget be increased from the $206.7 million proposed in the Roadmap to a revised budget of $251.7 million.[9] The Climate Act targets a minimum of 35% with a goal of 40% of clean energy benefits in New York State go toward low to moderate-income residents, regulated affordable housing, disadvantaged communities, and environmental justice communities through an expanded Solar Energy Equity Framework that will not be met without an increased allocation of renewable energy projects and proper incentives in the ConEd territory.[10] DACs are disproportionately residents in the ConEd territory as stated above, and are therefore less likely to participate and benefit from the clean energy transition when the Upstate region is favored for solar development. The energy burden is downstate and Ecogy wants to ensure initiatives such as the Path to Achieving Justice40 are accomplishable. Ecogy asks that the Council and NYSERDA eliminate barriers to LMI solar deployment and agree with recommendations that incentives for distributed energy resources (DERs) and energy storage be targeted to Disadvantaged Communities, reducing GHG emissions from peaking power plants in those locations.

CDG Bill Crediting Concerns

Today, too many New Yorkers are struggling to pay their energy bills due to the high cost of electricity in NYC. The main sustainable energy option available to New Yorkers that can guarantee bill reductions is community solar. We appreciate the state's efforts to improve community solar by requiring New York's Investor-Owned Utilities to implement consolidated billing and ensuring that the utilities administer the community solar program properly in their territories. Community solar providers have received an increasing number of complaints from their community solar customers in the last 6-12 months because Con Edison and other utilities within the state have failed to issue solar energy credits on their electric bills for months at a time.

In many cases, Con Edison is more than six months behind on issuing solar energy credits, which means that community solar customers are not receiving their promised savings and our member companies are not receiving revenue from their solar energy systems. Con Edison is frequently more than six months late in issuing solar energy credits, which means that community solar customers are not receiving the promised savings and developers are not receiving revenue. This is becoming a bigger issue for Ecogy because the lack of revenue on our New York projects is preventing us from getting bank loans. When lenders go through the underwriting process, a part of that is cash flows for CDG crediting. Additionally, delinquent credit issuance by utilities undermines customer trust in community solar, increasing customer acquisition costs, customer churn/disenrollment, and financing costs. Ratepayers and other stakeholders must pay more to achieve clean energy goals when the utilities improperly manage

[9] https://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId={498EE5D6-6211-4721-BA98-AF40EF3F620C}
[10] https://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId={498EE5D6-6211-4721-BA98-AF40EF3F620C}

these initiatives. Ecogy recommends the state work to hold utilities accountable for CDG crediting challenges, resolve this issue, and develop a plan to ensure success for future billing needs to support the Climate Act and a just and equitable clean energy transition.

Opposition to Utility Ownership of DERs and Large-scale Renewables

In their existing capacity for supporting solar deployment, New York utilities are unable to fulfill their obligations as the sector matures such as a backlog of community solar bill credits discussed previously, long interconnection times, outdated regulatory requirements, and several other barriers that are preventing solar developers from pursuing community solar and behind the meter projects to meet New York's ambitious climate goals. In 2019, the Governor of New York City raised several concerns with utilities' failure to meet deadlines and adhere to designated responsibilities including extended power outages and slow cleanup after storms, lack of preparedness, frequent manhole explosions, and poor power line maintenance which ultimately reverted to ratepayers. These challenges are all fixable and Ecogy hopes to work alongside New York leaders to bring more solar to more residents. Despite utilities' failure to support solar, they continuously propose utility ownership of renewable generation instead of focusing on excelling at their current role.

Ecogy Energy strongly opposes the ownership and development of generation by the distribution utilities (DUs). Exposing ratepayers to project development risk is not in the public interest, especially given rising energy costs. The state should consider considering the increase in expenses to ratepayers in a utility ownership model which would result in bureaucratic mechanisms that slow development timelines and reduce economic benefits to the local community. Having utilities build renewables and charge the full cost to ratepayers will not help achieve the climate targets any faster or cheaper, as everyone needs to follow the same requirements for environmental review. Additionally, utility ownership of generation has anti-competitive consequences. The state should ensure that entities that have market power in one stage of the production process are not provided unchecked opportunity to leverage that power to gain an advantage in a different stage of the production process.

Therefore, it is our considered recommendation that developing renewable energy projects should be a task that is left entirely to private developers to meet the goals of the Climate Act. Vetting, scoring, and shortlisting projects approved to be built should be a task that is handled by the utilities. In doing this, the state should develop a rubric for scoring and approving projects that best fulfill the objectives of the Climate Act.

Chapter 7. Just Transition

7.6 Jobs Study

In the electricity sector, more mature subsectors like transmission, distribution, and solar will see strong growth between 2019 and 2040, while more nascent subsectors like offshore wind, storage, and hydrogen are expected to experience exponential growth. This finding indicates that parts of the growing electricity sector will be able to build upon their current established workforce, while other parts of this sector will almost need to start from the beginning because they have little if any existing workforce foundations.

NYSERDA's 2021 Clean Energy Industry report, focusing on data from the end of 2020, shows that New York lost approximately 6,000 clean energy jobs amidst the COVID-19 pandemic. This represents the first employment decline since this annual reporting series began in 2015.[11] Additionally, New York solar developers have had to adapt to uncertainty in the market and lack of future planning with the expiration of the community credit in ConEd as of October 2021 and recent Department of Commerce Auxin tariff investigation. A stagnation like this has driven developers such as Ecogy out of New York and into more competitive markets. The New York Public Service Commission ("PSC") and NYSERDA did not act before the community credit expiration in ConEd halted development in the state, leading to jobs being lost to neighboring solar markets like Rhode Island. Ecogy has grown from 2 employees in 2016 to a ~40 team operation in the last year as a result of an increased solar portfolio in states such as Rhode Island, Massachusetts, and New Jersey that are more attractive. If done right, Ecogy will support, invest in, and accelerate growth in our home territory, where we choose to prioritize community solar projects and behind the meter projects for underserved entities because of the benefits that are provided to community members through the development of community focused systems. Ecogy believes that by doing so, New York State will benefit in 2 key ways;

1. **Local Solar Creates Jobs**

The Small- to medium-scale commercial solar industry in New York is a key employer and producer of local jobs. Small- to medium-scale solar promises not only cleaner energy for the state of New York and the United States but also new and consistent employment opportunities for those within the industry and those potentially losing employment due to the clean energy transition.

There is no doubt that in the years to come, solar energy will be a key driver of employment growth. The latest statistics from the United States Energy & Employment Report 2021 (USEER) show that nationwide, solar electric jobs totaled 316,675 by Q4 2020 with the

[11]https://www.nyserda.ny.gov/-/media/Files/Publications/Clean-energy-industry/2021-CEI-GEN-report.ashx#:~:text=Between%20the%20end%20of%202019,State%20from%202019%20through%202020.

vast majority (123,375) being installation and construction jobs.[12] For comparison, oil and natural gas jobs totaled 705,180 jobs (495,210 for Petroleum, 209,970 for Natural Gas), a 21% decrease from 2019. Solar employers were reported to be on track to increase their employment by 11.7 percent in 2021, which provides much needed job opportunities amid the COVID-19 crisis that has profoundly and permanently impacted the employment landscape within the U.S. Of these solar jobs, 80.6% (USEER) are outside of the utility-scale, even though 67.8% of total solar generation (MW) is utility-scale.

This tells us that the jobs/MW for utility-scale is lower than that of the small and medium commercial scale. For this reason, Ecogy believes that if NYSERDA and the Council want to advance economic growth through solar development, they must adopt policies that will help small-to-medium-scale commercial solar developers rather than make it harder to develop projects in-state and at a local scale that benefits communities the most.

2. Local Solar Will Boast the Local Economy

Local commercial-scale solar projects serve small businesses, schools, government institutions, and public authorities, which helps to bolster the local economy. Investing in small, locally owned businesses and institutions leads to more prosperous and economically resilient communities.

Investing in small, locally owned businesses and institutions leads to more prosperous and economically resilient communities. On a national scale, small businesses account for 44% of all U.S economic activity, making them a significant driver of jobs, innovation and economic growth. Further, studies have shown that compared to large corporations, small businesses recirculate a larger share of every dollar within the local economy, since they create "locally owned supply chains" and invest in their employees. Research conducted in Salt Lake City, Utah, found that local retailers returned 52% of their revenue back into the local economy compared to just 14% by national chain retailers.

Additionally, small-scale businesses spend more money on local labor and locally produced services such as construction, electrical work, tree trimming, and roof repair. As a result, even modest increases in revenue can have a big impact on the local economy. Local solar, which is typically built on the roofs of small businesses, enhances these economic benefits since it provides small businesses with an additional revenue stream that they then circulate within their respective local economy.

[12] United States Energy & Employment Report 2021 (USEER)

The COVID-19 pandemic has had a devastating impact on small businesses which are the backbone of America. Small, local scale solar presents an opportunity to provide revenue for local businesses during this economic crisis while moving the country towards a cleaner economy. Additionally, building local solar projects in communities that have been hit hard by the pandemic, will circulate more money within the local community compared to utility-scale solar and will provide much needed local jobs. As a result, it is critical that NYSERDA and the Council consider the impacts of this draft scoping plan on the smaller commercial-scale solar industry in New York.

Chapter 12. Buildings

Local Law 97

Distributed Energy Resources (DERs) are one of the most impactful ways for buildings to reduce their carbon emissions and comply with the City of New York's Local Law 97 of 2019. Ecogy strongly supports LL97 and believes that LL97 can help accelerate the deployment of clean DERs in New York City which have benefits ranging from improved public health, economic development, support for the grid, and lower energy costs for ratepayers. Ecogy encourages NYSERDA to hold webinars, information sessions, and engage with the clean energy industry to understand compliance and ensure building owners have a plan in place by 2023 which developers can help aid in carbon reduction.

Developers face numerous barriers due to how difficult it is to build solar in NYC such as rising real estate prices where property owners are finding it is not worth it to lock up their rooftops for 25 years due to the likelihood of demolishing the building for newer building developments such as luxury skyscrapers. Additionally, the permitting process can be cumbersome, expensive, and time-consuming for solar developers, resulting in significant red tape and obstacles. Asbestos containing material may be located in several work locations where solar installations may occur and there is an extreme risk of asbestos contamination in NYC's aging buildings.

Developers must engage in expedited permitting services to assist with frequently duplicative and varying requirements from agencies such as New York Fire Department (FDNY), New York City Department of Buildings (NYC DOB), Landmarks Preservation Commission (LPC) and other Authorities Having Jurisdiction (AHJs) which are not always in agreement on processes. There are also network distribution feeders in NYC that have a low likelihood of getting interconnection approval due to lack of upgrades, structural integrity, and capacity, despite being considered reliable as they are consistent sources of backup power in case of failures on the grid. It is Ecogy's recommendation to standardize and streamline the permitting process for distributed energy resources, regarding the discussed requirements for solar development across the ConEd territory, improve hosting capacity, and align agencies that are critical to ensuring the safety of New Yorkers.

B3. Require Energy Benchmarking and Disclosure

Adequate technical and financial assistance for LMI homeowners and building owners will be needed in Disadvantaged Communities to scope and finance energy upgrades.

Developers with the technical capabilities to assist LMI communities in energy consumption monitoring lack access to real-time usage data, enabled by the AMI equipment that all customers have paid for through their rates, forcing DER customers in New York to install expensive and duplicative meters in order to access real-time usage information. The costs to install additional meters in buildings can cost several thousand dollars or more. Such costs are a significant barrier to residential customers and smaller commercial customers that develop local solar in partnership with communities that need it most such as small businesses, property owners, nonprofits, low-income individuals and other organizations that need them most. Today, the lack of access to real-time usage data is resulting in significant missed opportunities for managing utility costs, and the broader benefits of deployment of customer sited DERs at scale with LMI communities. It is important that DER developers and the utility work together collaboratively to meet technical needs. To meet the goals outlined in the draft scoping plan, Ecogy recommends NYSERDA investigate options for new radio technologies and opportunities to leverage broadband network hardwiring in new construction for customers to access and use their real-time usage data.

Chapter 13. Electricity

E2. Accelerate Growth of Large-Scale Renewable Energy Generation

Land-Use Implications of Large-Scale Solar

Since large Utility-Scale solar projects above 5 MW AC require massive amounts of cleared land, they are often limited to rural areas and cannot be constructed in urban environments which inherently have higher population density and higher electricity demand. This has many implications, the first one being that Large-Scale solar projects may limit LMI individual access to solar energy since the majority of LMI individuals live in urban centers.[13] Secondly, since rural areas do not have a lot of electricity demand, the circuit hosting capacity fills up much quicker which raises interconnection costs for larger rural-located solar projects which can hinder and slow development. Thirdly, energy demand is increasing the most in urban areas, where the ability to install Large-Scale solar is limited.[14] Fourthly, solar projects built in rural areas can cause efficiency losses for the electrical grid, since the solar energy they produce needs to be transported from the rural area into the high demand urban areas sometimes through

[13] https://dash.harvard.edu/bitstream/handle/1/2958224/why%20do%20the%20poor%20live%20in%20cities.pdf
[14] Avtar, R.; Sahu, N.; Aggarwal, A.K.; Chakraborty, S.; Kharrazi, A.; Yunus, A.P.; Dou, J.; Kurniawan, T.A. Exploring Renewable Energy Resources Using Remote Sensing and GIS—A Review. Resources 2019, 8, 149.

substations which require SCADA monitoring or upgrades. Lastly, as stated in the draft scoping plan, if New York is to meet the 70% Renewable Energy by 2030 goal, more DG solar will have to be installed. Given the increase in DG solar installation in the coming years, if New York only prioritizes Large-Scale projects that consume massive amounts of land, then the state will find itself dedicating more and more land to solar as opposed to using it for recreational, conservation or agricultural purposes. Due to these reasons, Ecogy believes that Medium-Scale solar projects (200 - 1000 kWdc), built on top of rooftops, parking lots and brownfields, will better serve the 70% Renewable Energy by 2030 goal as they will be more land-use efficient, more valuable to the grid, and achieve greater community support.

As of July 1, 2022, NY-Sun block incentives in the ConEd region for projects above 1 MW have had zero applications, showing how difficult it is to make these projects work downstate.[15] Those incentives should be shifted to the small- to medium-scale solar categories that are seeing higher success in interconnection and permitting, and that provide greater benefits to the local community.[16]

E3. Facilitate Distributed Generation / Distributed Energy Resources

It also flagged the point that when designing incentives, use of grants over tax credits is preferred as tax credits may not be beneficial for LMI consumers.

Use of State Grants Over State Tax Credits

To accelerate market adoption, assist LMI consumers, expand workforce development, and advance equity, public funding must be used strategically. Ecogy holds that direct cash payments in lieu of state tax credits would be instrumental in ensuring that any organization in the small commercial space is able to take advantage of the state credits to incentivize solar PV projects and other distributed energy resources. Ecogy believes that this revenue neutral policy will ensure that the state tax credits are equally beneficial to all developers and owner-operators of distributed generation (DG) solar resources without requiring additional taxpayer dollars. Direct payments will allow for smaller non-utility scale projects to develop on an accelerated timeline, thereby significantly increasing the capacity of DG solar installed in a shorter time frame. Direct payments will allow for greater diversity in solar system sizes, locations and system types (i.e., rooftop, canopies). Further, direct payments will make renewable energy development and the clean energy sector as a whole more inclusive and accessible by increasing financing opportunities for those typically underserved by the current solar landscape such as non-profits and affordable housing.

International Building Code

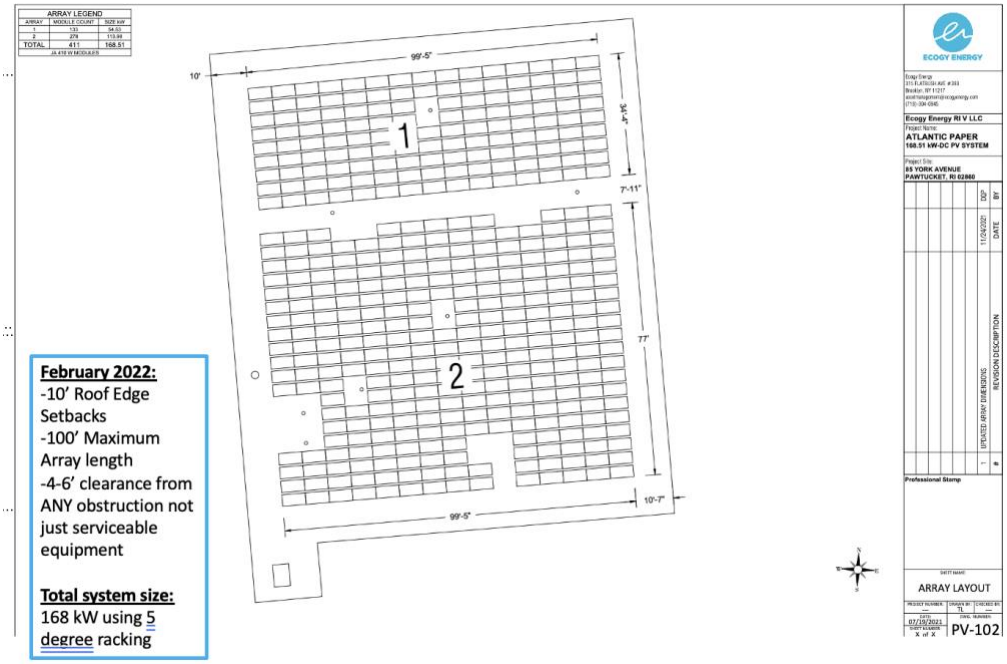
[15] https://www.nyserda.ny.gov/ConEdison-dashboard
[16] Con Edison Dashboard Accessed July 1, 2022.

New York has adopted the 2021 International Building Code which requires 10 ft setbacks from the building edge with a parapet wall less than 42" in height. The new building code requires 10 ft setbacks—nearly double what was required in the previous code. With this in mind, it is likely that rooftop projects will begin to trend to smaller sizes in the same square footage, meaning the total incentive received will decrease (due to a smaller system size), or site lease payments will have to increase and thus, total project cost will increase on a per kW basis.

Furthermore, fixed costs affect smaller projects to a much greater degree since there are no savings as a result of economies of scale. For this reason, any required change in size of a project will affect smaller projects much more severely. For example, based on NYSERDA's application data from 2019-2021 in the Con Edison territory showing average turnkey prices, the difference in the costs of projects <200 kW was at $3.45/W compared to a 1 MW project at $2.39/W showing a ~44% increase due to economies of scale.

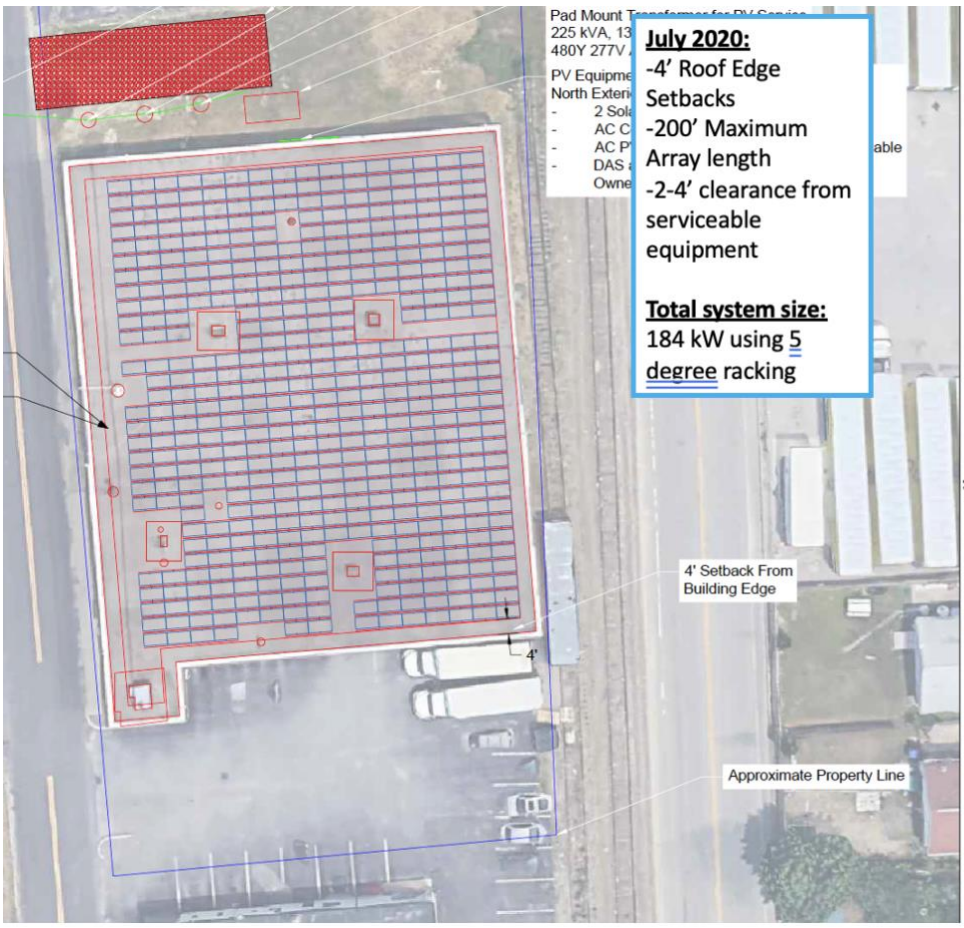
Ecogy's Project for Atlantic Paper was originally designed to be 184 kW (See Figure 2); however, as a result of the 2018 International Building Code and subsequent 2021 revisions and adoption by Rhode Island, the system size has now decreased to 168 kW even with the highest wattage panels Ecogy could find (410 W) and by removing a gas line and one obstruction from the roof. This change in capacity has drastically affected our economies of scale as well as our ability to maintain the same lease payments afforded to the project originally. Ecogy is experiencing the same challenges in New York.

What is more important to recognize for stakeholders is that the same amount of space on a commercial roof in previous program years will yield a smaller amount of solar capacity even with higher wattage panels and creative solutions to try and yield the maximum capacity. It is for these reasons that we strongly encourage future programs and goals to focus and support smaller size categories as most roofs that can support these types of installations are small businesses, affordable housing, nonprofits, and places of worship—the backbone and the communities most in need in New York.



February 2022:
-10' Roof Edge Setbacks
-100' Maximum Array length
-4-6' clearance from ANY obstruction not just serviceable equipment

Total system size:
168 kW using 5 degree racking



July 2020:
-4' Roof Edge Setbacks
-200' Maximum Array length
-2-4' clearance from serviceable equipment

Total system size:
184 kW using 5 degree racking

Account Number: TBD
New Service Case #:

Project Description:
- 451 Talesun TD6G72M 410W Modules (or similar)
- 2 SolarEdge SE 100K US-US Inverters
- 226 SE P860 SolarEdge Optimizers

184.91kWp DC, 200.00 AC kW 200.00 kvA AC
Ballasted Flat Roof Mounted PV on flat roof. Inverters located on North exterior wall of building. New Primary Service as shown. New Primary service north of building as shown. New customer owned pad mounted transformer for new PV service to be located north of existing building.

THIS DRAWING IS FOR INFORMATION PURPOSES ONLY. CERTIFICATION OR VALIDATION IS TO BE DONE BY A PROFESSIONAL WITH EXPERTISE IN THE REQUIRED FIELD AND A LICENSE IN THE STATE THAT THE INSTALLATION WILL RESIDE. CERTIFICATION OR VALIDATION TO BE INCLUDED AS PART OF THE SUBMITTALS FOR PERMITTING OF THE OVERALL PROJECT.

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ELECTRICAL

Codes & Standards: 08/19/2020
- SBC-5 RI State Electrical Code (NEC 2017 with RI Amendments)
- SBC-1 RI State Building Code (IBC 2015 with RI Amendments)
- National Grid ESB 750 & ESB 756
- Local AHJ City of Pawtucket
- Installing contractor and all personnel onsite shall follow appropriate LOTO procedures before servicing equipment and shall be equipped with the appropriate PPE
- Contractors shall notify Dig Safe prior to construction

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Date	Drafter	Revision
7/21/2020	SCG	A
8/17/2020	SCG	B

Figure 1. As can be seen in the attached stamped plan sets, the system size has changed dramatically (nearly 10% lower) due to new requirements from the adoption of new building codes.

Permitting

Ecogy Energy prides itself on investing in optimal land use projects such as rooftop, canopy and brownfield ground mount installations. We believe that the clean energy goals of the state can be met with such developments while also supporting local businesses, property owners and organizations throughout the Empire State.

Figure 2. Ecogy's community solar 301 kW DC system rooftop of the Village of Croton-on-Hudson on the Department of Public Works building.

As seen in our Village of Croton-on-Hudson project serving the Village with lease payments for using their rooftop space and the residents with community solar subscriptions which was built within one year of project signing during COVID-19 and our Maryknoll project that serves a missionary society with the largest solar canopy in Westchester County which was built on-time but over-budget - rooftop and canopy projects are welcome by local jurisdictions as a great use of space in Towns vs. the destruction of precious environmental land and resources.

While large scale projects may increase the added capacity of newly installed projects on a per project basis, they typically take significantly longer to receive all approvals and permits - especially as most ground-mount developers try to build at the very last minute; stalling and betting that panel pricing will decrease as they try to build in their 3rd or 4th year of development. Small scale projects on the other hand - receive approval quicker and thus with

appropriate market incentivization and scale, can have the same impact as slow-moving large-scale projects. Despite Ecogy's efforts, there are still significant barriers to permitting projects in the Con Edison territory compared to Upstate.

Figure 3. Ecogy's 873.6 kW DC system consists of 12 parking lot canopies hosted by the Maryknoll Fathers and Brothers of Ossining.

As seen in our Maryknoll project, the Town of Ossining had an approved solar code, solar PILOT law that both encouraged proper land-use systems including favoring canopy projects the most. Even still, our Maryknoll project had to go through numerous approvals including County Planning Board, FAA review, Town Board review, Planning Board Review, Westchester DPW Road Permitting review, etc. which ended up taking nearly 12 months to complete and officially receive Board approval. In addition, our permitting fee was assessed on a per square foot basis ultimately costing us over $27,000 or roughly $0.03/Watt DC.

For our St. Theresa project in Briarcliff Manor, a 160-kW rooftop project that should be permitted by right - Ecogy had to help the Town complete a fair and comprehensive solar code which ended up delaying the project by 11 months and increased project costs significantly.

These examples allude to how difficult it is to permit any type of solar system in

ConEdison utility territory - even proper land-use projects such as rooftop and canopy projects. The permitting stage can delay solar installations due to complicated and constantly changing requirements. This only adds higher project costs and greater uncertainty to project developers which inhibits development in this utility territory. Ecogy agrees with the draft scoping plan's recommendation that the State should provide model zoning laws to municipalities for residential/commercial properties to require new construction be designed as "solar-ready." It is important that buildings within the state of New York can handle the structural load for future solar energy deployment.

Additionally, Ecogy believes the state should provide siting support for local governments, streamlining a unified solar permit that incorporates new business models such as carports and third-party ownership across cities and townships. It may be beneficial to decarbonization efforts to assign designated staff on the matter of streamlined permitting that can consult local solar code officials. Having a well-developed solar code written for local officials to opt into would accelerate the deployment of clean energy substantially. Well-developed code that incentivizes properly sited projects should be accompanied by an implementation plan. In Ecogy's experience, when cities or towns start a new code, there are challenges on how to implement it which can result in local officials continuously seeking new requirements midway through a project which extends the development timeline and adds costs. All project milestones should be clearly stated and understood. A digitized process with an online portal instead of paper mail or emails in each jurisdiction where local officials and developers can submit documents, review requirements with associated support materials, and track progress will play a large role in organization and clarity, reduced build times, and clean energy adoption.

High Rates in Con Edison / Lack of True/Accurate Value of Distributed Energy Resources

> *Compensation: The State should consider improvements to the value of DER stack to more accurately reflect value provided by DERs such as a more granular (time and location) environmental value and avoided transmission costs.*

Developers seeking to build projects in Con Edison have additional project barriers due to higher rate tariffs while the value stack undervalues solar downstate. The most recent 2022 rate hike of electric bills by 11.2%, while gas would cost a whopping 18.2%[17] more starting in 2023 shocked residents in NYC and Westchester County in which numerous complaints from customers and their representatives in the New York City Council, State Legislature, and Congress have asked the Department to conduct an investigation of the recent bill increases.[18]

[17] https://nypost.com/2022/02/02/coned-wants-to-hike-electricity-bills-by-11/
[18] https://www.governor.ny.gov/sites/default/files/2022-02/Timothy_Cawley_Letter.pdf

Whereas developers like Ecogy see value stack calculations between 10 and 11 cents per kWh, the same electrons flowing to the grid are charged to electric customers by ConEdison at or above $0.26/kWh simply for supply and delivery - not including other basic service charges and fees.

How can the Value of Distributed Energy Resources be accurate? In fact, based on the Value Stack calculator revisions from 2.3 to 2.5 - Ecogy saw a drop in the Value Stack calculation values from these further iterations - while ConEdison has increased their rates multiple times in that same time period.

Ultimately, small- to moderate-scale solar developers need long term energy-based incentives with higher kWh charges like the Value of Distributed Energy Resources (VDER) or the Value Stack community credit which expired in the ConEd territory in October 2021. Ecogy encourages the state to develop a plan to grow the New York solar energy market after the Expanded NY Sun Program sunsets. The current value stack tariff does not value DERs sufficiently and must be paired with incentives to make projects economics work. Future tariffs, in ConEd and the rest of the state, must be improved to partially (or entirely) to replace incentives and encourage the long-term growth of distributed resources in NY.

Additionally, the current VDER environmental value (E-Value) of $0.03103 per kWh should be re-evaluated. Over the long-term, improvements can be made in the E-value to more accurately quantify the value of avoided carbon emissions. The downstate ConEd utility territory should receive a higher E-Value than the upstate region considering energy demand, especially during the brutal summer months and high percentage of fossil fuel dependency. The state should further explore improvements to solar and solar + storage with an E-Value that tracks marginal emissions rates over time or could develop a marginal cost analysis to be advanced in the case.

E6. Deploy Existing Storage Technologies

Unlocking Energy Storage Deployment in New York City

Energy storage has the potential to save lives by offering continuous backup power in a disaster, enabling locals to refrigerate food and medications, as well as charge mobile devices for communication. Customers have the opportunity to boost energy resiliency when they switch to greener energy sources such as solar systems which are increasingly paired across the nation with an energy storage component. Battery storage system installation in New York City remains elusive despite this encouraging trend in neighboring markets.

E8. Improve Reliability Planning and Markets

Hosting Capacity: The State should make proactive and timely investments in local transmission and distribution infrastructure, and associated cost-sharing/allocation

associated with the utilities in these upgrades. The State should also accelerate adoption of innovative technologies and programs that increase hosting capacity such as flexible interconnection, hybrid systems and coupling with energy storage or controlled load, smart inverters, and solutions that enable maximum back feeding at the substation level from distribution to transmission as part of the local transmission and distribution planning process.

Latent distribution system flexibility offers bulk power system opportunities

Ecogy believes improvements should be made to the ability to identify and use flexibility in the existing systems in ways that improve bulk power system reliability and economic efficiency, including transmission constraint relaxation practices, ramp management, and improving resources' responsiveness to dispatch instructions. Additionally, the state can utilize distribution system flexibility to support the transmission system. Ecogy recommends the state develop long-term planning and rules that match with the high-level policy goals regarding distribution system flexibility, accessing potentially different rules for different parts of the grid based on engineering and planning advice. There is a huge opportunity for distributed energy resources to unblock hosting capacity constraints, releasing private capital to deliver projects that provide flexibility for both distribution and transmission systems. For example, Hawaii has developed schemes that are part of a wider flexible interconnection framework that have been working for a decade.

E9. Advance Demand Side Solutions

Ecogy agrees with the states statement that responsive demand presents an opportunity to optimize for the lowest system cost and most expeditious deployment of both clean supply and demand solutions by reducing the need for electricity, especially during peak hours. Ecogy encourages the state to assess the true value of distributed energy resources on the grid for demand reduction. There is a growing need for consumer education on demand reduction opportunities in the state which includes improving aggregator resources to reduce soft costs of deployments and increase participation in demand reduction programs.

Ecogy applauds the Climate Action Council and NYSERDA's commitment to supporting climate justice and just transition. To us, clear goals demonstrate a genuine interest in refocusing how New Yorkers work together to meet statutory emission limits to those that have been typically left out of the clean energy transition and could benefit from discounted electricity the most.

We thank you for careful consideration of these comments and appreciate your support of the clean energy industry in New York State to achieve the goals set out by the Climate Act.

Warmest regards,

/s/

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