Large-Scale Renewables

2020 Renewable Energy Standard Solicitation





What is the Clean Energy Standard? What is the Renewable Energy Standard?

New York State is undertaking significant changes in how it generates and delivers energy. Governor Andrew M. Cuomo's nation-leading climate plan, as outlined in the Climate Leadership and Community Protection Act (Climate Act), is creating a next-generation energy system that is clean, resilient, and affordable for all New Yorkers. The Clean Energy Standard (CES), a critical component of the State's energy goals, requires that 70% of the State's electricity comes from renewable sources by 2030 in support of the State's commitment to 100% zero-emissions electricity by 2040.

The Renewable Energy Standard (RES) is one component of the CES. Through the RES, the State is working to grow the proportion of electricity that comes from renewable generation. The RES includes an obligation on retail electricity suppliers, such as energy service companies (ESCOs), to purchase increasing amounts of renewable energy to supply their customers and a requirement that the New York State Energy Research and Development Authority (NYSERDA) support the development of new large-scale renewable energy projects needed to meet the retail electricity supplier obligation.

What is NYSERDA's role in large-scale renewable projects?

NYSERDA was designated by the New York Public Service Commission as the central procurement entity for the RES. Through a competitive selection process which occurs at least annually, NYSERDA awards long-term contracts to developers of new renewable energy projects. The RES solicitations seek to procure renewable energy resources that are eligible under Tier 1 of the RES. The renewable technologies eligible to participate in a RES solicitation include Hydroelectric, Solar, Wind, Tidal/Wave/Ocean, Geothermal, and Fuel Cells which do not utilize fossil fuels to generate electricity. To be eligible, generation projects must have commenced operation on or after January 1, 2015. More information on RES Tier 1 eligibility can be found at nyserda.ny.gov/RES-tier-1.

How much funding has New York State awarded under the Clean Energy Standard?

Since the first RES procurement in 2017, NYSERDA has conducted four annual solicitations which have resulted in over \$4 billion awarded to 89 large-scale renewable energy projects. Among these awards, nine of the projects incorporate energy storage, providing flexibility to deliver energy when the grid needs it most.

Once operational, the projects are expected to generate more than 13 million megawatt-hours annually, which is enough clean, renewable energy to power more than 1.7 million homes each year and reduce carbon emissions by over 6.5 million tons, the equivalent to taking more than 1.4 million cars off the road annually.

How do these solicitations support renewable energy development?

Since the construction of a large-scale renewable generation facility involves a significant capital investment, a long-term contract providing reasonably certain terms is necessary to induce such an investment. NYSERDA's long-term contracts help to secure investment in new large-scale renewable projects, assuring New Yorkers access to increasing amounts of clean energy. The 2020 RES solicitation was the first to utilize an innovative contract structure whereby awarded contracts receive a floating payment for their renewable energy certificates. This payment moves inversely to an index comprised of market energy and capacity prices. This method is supported by the project development and finance community and provides greater revenue certainty while reducing cost impacts to ratepayers.

Projects awarded by NYSERDA must deliver energy generation for end use in New York State and will only receive payment from NYSERDA once the project fulfills all associated permitting and siting requirements, completes construction, and begins delivering electricity to the New York grid.

When will the projects be constructed/operational?

Large-scale renewable energy project development timelines vary depending upon the size and complexity of the project. These projects are large capital investment projects that take years to plan, permit, and build. Projects selected through the 2020 RES solicitation plan to enter operation between 2022 and 2025. Some projects may be completed sooner or later depending on the individual project specifications.

How will these projects benefit New York State? Will this bring jobs to my community?

Significant economic benefits of the large-scale renewable energy industry include payments to local landowners, short- and long-term job creation, payments to host communities including school districts, and spending on goods and services in supporting industries. Multiple awarded projects will also support disadvantaged communities throughout New York State via short- and long-term economic benefits over the 20-year contracts. NYSERDA and the Department of Public Service (DPS)

is also actively developing a Host Community Benefit Program as part of the <u>Accelerated Renewable Energy Growth and Community Benefit Act</u>, which will offer property owners and communities additional tangible benefits and incentives for hosting renewable energy facilities

The construction phase brings many short-term jobs; increases in hotel and restaurant use by non-local workers; purchase of materials, including cement and gravel; and services, such as equipment rental. Some long-term jobs may be created during the operation and maintenance of each facility, with routine spending on everything from equipment maintenance to plowing access roads in winter. The *New York Clean Energy Industry Report* found renewable electric power generation firms employ just over 22,000 clean energy workers across the State, with a projected 10.8% increase in 2019.

Who oversees siting and permitting of the project? What role does local government play in this process?

Major electric generating facilities that are equal to or larger than 25 megawatts in size were previously sited according to New York State's <u>Article 10 law</u>. While projects already undergoing the Article 10 permitting process may continue, future facilities larger than 25 megawatts will be permitted through the <u>Office of Renewable Energy Siting</u> (the Siting Office), also established by the <u>Accelerated Renewable Energy Growth and Community Benefit Act</u>. The first-of-its-kind Siting Office will ensure that siting decisions are predictable, responsible, and timely, while providing opportunities for local engagement throughout the review process.

Projects sized less than 25 megawatts are subject to local land-use regulations as well as the State Environmental Quality Review Act (SEQR) process. The lead agency authority under SEQR (the agency or board leading the SEQR review) is most often assumed by the local planning board. New projects sized between 20 and 25 megawatts will also be able to opt-in to the new Siting Office process.

How much renewable energy development should we expect in the State over the coming years?

Growth in renewable energy development is based on a number of factors, such as electricity prices, equipment costs, state and federal policies, and energy infrastructure development. Depending on its generation profile, New York will need thousands of megawatts of new renewable projects to meet its clean energy goals.

The Renewable Energy Standard will build on the State's strong foundation of renewable projects. Through the former Renewable Portfolio Standard and NY-Sun, New York has supported a total capacity of over 6,000 megawatts of new wind, solar, hydropower, and biomass energy projects. The new projects awarded through the RES will complement previous investments and help move New York closer to its clean energy goals.

In addition to issuing annual solicitations for large-scale renewables, new renewable capacity will be added through other initiatives, such as the continued progress of the NY-Sun program and the development of offshore wind resources and large-scale renewables that will interconnect directly into New York City. Increased application of energy efficiency will also offset some of the new renewable capacity needed to meet New York's goals.

How can communities engage in the process? How can NYSERDA help?

NYSERDA offers resources to help local governments manage responsible clean energy development in their communities. These resources include guidebooks with step-by-step instructions and tools to guide the implementation of clean energy, technical assistance to help implement the policies and practices, and workshops to help manage clean energy development responsibly.

Pertinent information can be found in NYSERDA's Wind Energy Guide found at nyserda.ny.gov/wind-energy-guide and the New York State Solar Guidebook found at nyserda.ny.gov/solar-guidebook. NYSERDA also offers free technical assistance to help municipalities implement the policies and practices for becoming solar-ready communities.

Please contact NYSERDA at <u>cleanenergyhelp@nyserda.ny.gov</u> for more information.

NYSERDA offers objective information and analysis, innovative programs, technical expertise, and support to help New Yorkers increase energy efficiency, save money, use renewable energy, and reduce reliance on fossil fuels. NYSERDA professionals work to protect the environment and create clean energy jobs. A public benefit corporation, NYSERDA has been advancing innovative energy solutions since 1975.

