

Solar wins big in project selection to advance Maine's clean energy goals

The Maine Public Utilities Commission approved contracts Tuesday for 17 renewable power projects as part of the state's effort to reduce fossil fuel consumption and advance climate goals.

By [Tux Turkel](#) Staff Writer

Maine's ambitious clean-energy and climate-fighting goals reached an important milestone Tuesday when the state Public Utilities Commission approved contracts for 17 renewable power projects – largely solar, but also wind, biomass and hydroelectric.

Taken together, the projects have a generating capacity of 492 megawatts. That represents the largest procurement of clean-energy initiated by the state at least since the 1980s and 1990s, when laws designed to reduce dependence on imported oil spawned a fleet of wood-fired, hydroelectric and waste-to-energy projects.

The process also highlighted how large-scale solar power has emerged as a cost-competitive alternative to fossil fuel generation. The average contract rate for the winning bidders was 3.5 cents per kilowatt hour. That's near the historic market price for energy on New England's grid, a rate typically set by natural gas-fired power plants.

"The first-year prices for energy from the new projects receiving an award are very competitive, ranging between 2.9 (cents) and 4.2 cents per KWh," Commission Chairman Philip L. Bartlett II said. "Additionally, these projects are expected to provide substantial benefits to the Maine economy by creating jobs and making significant local investments."

The winners include the Swift Current Three Rivers 100-megawatt solar project in Hancock County, two 20-MW

PUC-approved projects

Solar

- BNRG-Dirigo, Church Hill, Augusta, 20 MW
- BNRG Dirigo, Eddington, 20 MW
- Swift Current-Three Rivers Solar, Township 16, Hancock County, 100 MW
- Glenvale Solar-Emery Meadow, Buxton, 16.3 MW
- Glenvale Solar-Topsham Meadow, Topsham, 18 MW
- Freeport Solar- Alfred, 50 MW
- Glenvale Solar-West Baldwin, 6.2 MW
- Walden Renewables-Walden Solar Maine III, Sweden, 35 MW
- Walden Renewables-Walden Solar Maine V, Leeds, 20 MW
- Walden Renewables-Walden Solar Maine VII, Madison, 20 MW
- Walden Renewables-Fairly Solar, Fryeburg, 17 MW
- Walden Renewables- Mousam River, Sanford, 20 MW
- Granite Apollo, Roxbury, 55 MW
- Granite Apollo, Canton, 65 MW

Wind

- SWEB Development-Silver Maple Wind, Clifton, 20 MW

Hydroelectric

- Brookfield, Androscoggin Three, Lewiston, 4.5 MW

Biomass

- ReEnergy LLC, Livermore Falls, 39 MW

solar projects by BNRG-Dirigo in Augusta and Eddington, and 65-MW and 55-MW solar projects in Canton and Roxbury, respectively, by Granite Apollo LLC.

A five-turbine wind farm rated at 20 MW in Clifton, by Silver Maple Wind by SWEB Development, was the sole wind power winner.

Also chosen were existing hydroelectric power resources on the Androscoggin River and ReEnergy's Livermore Falls biomass plant.

Taken together, the projects are expected to create 450 jobs during construction and 30 jobs during each year of operation.

The projects also will spur an estimated \$145 million in spending, including roughly \$11 million in wood harvesting payments.

The number of homes powered by a MW of solar can vary significantly from state to state with the amount of sunshine, consumption and temperature and wind, according to the Solar Energy Industries Association. In Maine, roughly 130 homes would be powered by 1 MW, the SEIA website estimates, meaning the approved projects would be able to power roughly 64,000 homes.

More than 70 renewable energy developers presented proposals to the PUC, which analyzed them and drew up a short list.

The process provided further evidence of market interest in Maine, with projects representing hundreds of millions of dollars in private investment. Several developers had in recent months [signaled their intent](#) to build large-scale solar farms in Maine in the run-up to the PUC decision.

BNRG Dirigo, a joint venture of Dublin-based BNRG Renewables and Portland-based Dirigo Solar, won two contracts with one starting at roughly 2.9 cents per KWh, the lowest price bid in the competition. Both are slated to come online early in 2023.

Coupled with the partnership's community solar and utility projects, the PUC decision will increase the companies' investment in Maine to roughly \$290 million, which BNRG-Dirigo called the single largest investment ever in Maine renewable power generation.

"The PUC's decision sends a resounding message that when it comes to fighting climate change and offering ratepayers cost effective, green energy, Maine is open for business," said Nick Mazuroski, Dirigo Solar's co-founder.

The PUC's selection represents the biggest energy news for Maine this year, according to Jeremy Payne, executive director of the Renewable Energy Association of Maine.

"This is what the clean energy transformation will start to look like," he said.

Noting new strategies to reduce climate change emissions by shifting home heating and transportation from petroleum to cleaner electricity, Payne said the projects approved by the PUC were essential to what advocates call the electrification of Maine's economy.

"This is the development that needs to take place for that to happen," he said.

That view was echoed by David Costello, climate and clean energy director at the Natural Resources Council of Maine.

"Maine's most secure, stable and affordable future is one in which Maine residents and businesses get electricity entirely from clean energy supported by innovations like batteries, a modern electric grid, and continued investment in energy efficiency," Costello said.

Tuesday's selection was the long-awaited climax in a bidding process set up to satisfy a 2019 law to expand the amount of clean energy utilities must have in their supply mix. Known as a renewable portfolio standard, the law upped the target level of green power to 80 percent of electricity sales by 2030 and 100 percent by 2050.

Following the selection, Gov. Janet Mills issued a statement lauding the PUC selection.

"Today's announcement is a historic step forward in Maine's effort to embrace renewable energy, create good paying green-collar jobs, diversify and expand our economy, and combat the threat of climate change," Mills said. "This progress, which is the direct result of bipartisan energy legislation I signed last year, further establishes Maine as a national clean energy leader."

Most of the power must come from a certain class of resources that primarily include recently built solar, wind, hydroelectric, biomass and geothermal projects.

The PUC scored each bidder through an evaluation process that put the greatest weight on customer benefits, notably competitive rates. They will be achieved through 20-year contracts with Central Maine Power and Versant Power. Advantages for the state's economy, such as job creation, capital investment and benefits to host communities, also were part of the scoring.

The competitive price of the power shows that renewable energy projects built in Maine can replace gas-fired generation, according to Tony Buxton, who represents mills and other large power users in the Industrial Energy Consumer Group.

"There is a lot more new renewable power available in Maine at similarly competitive prices," he said, "and Maine should seize the opportunity to obtain a lot more soon."

Buxton said the competition also presented a lesson for utility regulators, who recently had conducted a similar solicitation process for smaller solar projects, but rejected them all when prices came in too high.

"In solar," Buxton said, "size matters."

Tuesday's selection was the first of two rounds of procurement bids for resources equal to 14 percent of retail electric sales in 2018. The first round sought generation equal to 7 and 10 percent of that total. Bids for the second round are due in mid-January, and developers that weren't selected in the first round may enter that competition.