

MORE BUYING POWER

Alternative energy advocates argue that development will spur job growth

BY MARTIN DAKS



Asselta

Besides helping the environment, the move to green power will mean new jobs, according to some advocates. Wind and other renewable energy projects will likely create “Hundreds of construction jobs, followed by manufacturing jobs,” according to Jane Asselta, vice president of the Southern New Jersey Development Council.

“There’ll be all sorts of construction jobs for architects, engineers, transportation and others, in addition to a demand for skilled manufacturing and other positions. Then there’s the ancillary economic drivers like housing for workers and their families, and like retail and other businesses to service them all. The job creation impact could be like that of another

casino industry.”

As part of a bid submitted to the New Jersey Board of Public Utilities to develop a 183,353 acre lease area on the U.S. Outer Continental Shelf — located within the New Jersey Wind Energy Area — Atlantic Shores Offshore Wind, a 50-50 joint venture between EDF Renewables North America and Shell New Energies US LLC, announced a “first-of-its-kind” memorandum of understanding with six unions operating in New Jersey.

“With this agreement, Atlantic Shores is solidifying its place at the forefront of not only the state’s burgeoning offshore wind industry but also as a creator of new, union workforce opportunities for decades to come,” Atlantic Shores Offshore Wind noted. “Signed by Eastern Atlantic States Regional Council of Carpenters; Laborers’ International Union of North America; International Brotherhood of Electrical Workers Local 456, Local 400 and Local 351; International Union of Operating Engineers Local 825; Ironworkers International, and Eastern Millwright Regional Council, the labor agreement is the strongest commitment to date by a United States offshore wind developer to train local residents and tradespeople, and use union labor and employers wherever possible.”



Longo

“The economic future for New Jersey, and the country, will rest on our ability to deliver affordable, reliable energy,” said ELEC825 Director Mark Longo. Added Greg Lalavee, Business Manager for IUOE Local 825, “We are proud of the steps Local 825 has already taken to transform our training centers into institutions of higher learning to prepare our members for the jobs of the future.”

Utility and other companies also see opportunities to boost their hiring. “Like many businesses across the state, JCP&L is facing an aging workforce,” said Jim Fakult, president of Jersey Central Power and Light, a subsidiary of FirstEnergy Corp. “Identifying, attracting, training and retaining the

next generation of utility workers is a focus area for us. Our line workforce encompasses thousands of good-paying, union jobs throughout northern and central New Jersey.”

To help train the next generation of “top-quality, well-educated line workers and substation electricians for our industry, we have been teaming with local community colleges — including Brookdale Community College and Raritan Valley Community College — through our award-winning Power Systems Institute,” he added. “Successful graduates earn a two-year associates degree and typically are offered employment within the company.

PSE&G, a subsidiary of Public Service Enterprise Group Inc., also expects to create more jobs as part of its journey to greener operations. “We want to give people the opportunity to flourish,” said Karen Reif, PSE&G’s vice president for renewables and energy solutions.

The utility company currently has more than 7,000 employees in the Garden State, and announced that the New Jersey Board of Public Utility’s approval of billion-dollar energy efficiency initiative — the central component of PSE&G’s proposed Clean Energy Future program — is expected to generate 3,200 direct jobs and another 1,100 indirect jobs, while delivering \$1 billion in net customer savings.

“We’ll have to train more people to fill all those positions,” she added. “We’re partnering with community organizations, especially ones from underserved communities.”



Maione

Projects like the Port of Paulsboro Marine terminal will add “jobs in construction and manufacturing,” according to Vince Maione, director of New Jersey market affairs for Ørsted, a Denmark-based renewable energy company that worked with German manufacturer EEW on the Ocean Wind project to deliver a monopile manufacturing facility.

“That facility has the potential to create up to 500 jobs at full build-out. We anticipate hiring approximately 1,000 construction jobs per year over the three-year projected duration of the project. Other indirect jobs would come from the build out of a New Jersey supply chain that would help support not just Ocean Wind, but future projects up and down the east coast. We have

submitted a bid to the NJPBU for our Ocean Wind 2 project and look forward to releasing more details in the coming months.”

OPPORTUNITIES ABOUND

Consulting and other firms are also gearing up. “Two years ago, offshore wind wasn’t even in our portfolio of services,” said Haley & Aldrich Inc. Senior Vice President, Energy Market Sector Lead Dane G. Pehrman. “The segment now accounts for more than \$1 million a year.”

The firm “offers an understanding of how projects get developed, and then we deliver geotechnical investigation and engineering services to a variety of clients, including utility companies, and residential and commercial developers and subcontractors,” he added. Earlier in March, he gave a talk at a Southern New Jersey Development Council virtual meeting on how offshore wind projects



Pehrman

get developed and how local companies can connect to this growing market.

Besides participating in organizations like the SNJDC, the Business Network for Offshore Wind, and the American Clean Power Association, Haley & Aldrich Inc. also developed a partnership with the Norwegian Geotechnical Institute to provide local expertise and capacity in support of NGI’s U.S.-based offshore geotechnical service offerings. “Europe is a mature market for offshore wind, and now companies like NGI want to expand to the U.S.,” said Pehrman. “Haley & Aldrich already has a lot of data for mid-Atlantic and New England region, which we can provide to companies like NGI,

which saves them from reinventing the wheel.”

The move to renewables is also driving job growth at smaller firms. Right now, Flemington-based Advanced Solar Products has about 30 full-time employees and a varying number of mostly-union contract workers, “But the more solar we build, the more people we bring on board,” said Lyle K. Rawlings, president and CEO.

The company provides turnkey solar power services, including evaluation, design, permitting, procurement, installation, commissioning, operations and maintenance. “We’re seeing continuing growth in the adoption of solar. Part of the projected increase will likely be from the Biden administration’s policies, but states like New Jersey, New York and Massachusetts have been leaders for the last 20 years.”



Rawlings

Although the Garden State is the main market for Advanced Solar, its activities run from Virginia to Maine, Rawlings added.

One of the company’s current projects involves a now-closed portion of the Ocean County Landfill located in Manchester Township. “We’re constructing a 5-megawatt community solar array on about 33 acres that can power about 800 homes” said Rawlings. “Under the Community Solar model, at least 51%, and hopefully more, of our energy subscribers will be low- and moderate-income residents from Manchester Township and adjoining municipalities, who will qualify for discounted rates.” The project will start

delivering energy by October of this year, he added.

The job-creation benefits associated with renewable energy in general — and solar in particular — shouldn’t be measured simply by the number of installers and other direct employees, cautioned Ian Michel, a principal at Intersect Energy. The Wayne, Pa.-based company — which provides turnkey services including assessment, design, financing, installation and management — is focused on commercial and industrial solar energy development projects in New Jersey, New York, and Massachusetts.

“Our goal this year is to engage in solar projects that will total 10Mw to 30Mw of clean energy output,” he said. “These will generate up to \$12 million in wages for our own employees and others who will be doing the work at prevailing-wage rates and union jobs.”

Michel is excited about Gov. Murphy’s Energy Master Plan, which aims to have 100% of the state energy generated by “clean” sources, including developing offshore wind, community solar, a solar incentive program, solar thermal, and energy storage; and by promoting electric vehicles.

“New Jersey’s plans, as well as the federal government’s commitment to renewables, will be good for the environment, and good for solar companies like Intersect Energy,” he said. “It’ll mean a lot of opportunities for creative companies, while providing value for society through lower costs.”

Some obstacles on the path to green energy

For all their promise, renewable energy sources may face some obstacles. “All states are attractive to traditional and renewable energy projects, however that is not the question that needs to be asked,” according to Director of ELEC825 Mark Longo. “Too often green advocates skip the most important questions — how much will it cost and is it feasible?”

There’s another big obstacle in a densely populated state like New Jersey — a shortage of open land, warned Ian Michel, a principal at Intersect Energy, which provides turnkey services including assessment, design, financing, installation and management. It’s not insurmountable, but it could mean tradeoffs.

“Take a school, for example,” he said.”

Suburban schools typically have some open land, but will the institution sacrifice its sports fields for solar arrays?”

Fortunately, there are some workarounds, he added. “Rooftop installations, on buildings and canopy structures on top of parking lots may provide an answer,” said Michel.

“But preserved farmland? So far there are restrictions on placing solar generation facilities on certain farmland site. But as the state moves ahead with electric vehicle and other ‘green’ initiatives, we’ve got to address issues like increased power generation storage. After all, if New Jersey wants to place public EV charging stations on the turnpike and elsewhere, that’s going to require more power, and it has to come from somewhere.”