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Harnessing the Power of Nature

There are two very practical reasons a focus on shifting to renewable and distributed energy makes sense:

1. Average age of power generation facilities across the country is 29 years. New York's are 36 years. 80% of New York's transmission lines went into service before 1980. 40% of the circuit-miles of lines will require replacement within 30 years at an estimated cost of \$25 billion.
2. The existing hydropower resources and wind power, and nearly all the land-based wind power projects are located in the northern and western regions of the state. Downstate uses 66% of the state's electric energy. The downstate region power plants only generate 53% of the state's electric energy.

Without re-thinking our approach to energy supply we will be destined to pay for a supply that is harmful to the environment, will need a huge investment to assure reliability, and is located far from the actual demand. Given that significant loss occurs during transmission, this distance will not improve efficiency.

Reforming the Energy Vision (REV), Governor Andrew Cuomo's strategy for New York State's energy of the future, addresses both the energy supply (renewable) and delivery system (transmission) inefficiencies.

REV is more than just rhetoric. On Friday, March 9, 2018, 26 renewable energy projects received the official news they would be sharing \$1.4 billion in funding to construct 22 utility-scale solar farms, three wind farms, and the redevelopment of one hydroelectric facility to increase the renewable capacity. The projects are expected to be online by 2022 adding 1,380 MW capacity and generating more than 3,100,000 MWh annually. All are in support

of reaching the 50% goal for renewable energy supply by 2030. The projects are spread across the state.

In addition to the commitment to support these projects directly, the Governor announced a formal request for exclusion from the new five-year National Outer Continental Shelf Oil and Gas Leasing Program. Rather than spending money on trying to protect waters from another disastrous oil spill, his focus is on looking to a future with a clean energy economy.

New York has the number three ocean economy in the nation with 11.4 million people and 60% of the State's population living along 2,000 miles of tidal coastline. A major spill would be devastating to the national economy.

Instead, the investment in these projects and the clean energy initiatives are projected to create 40,000 new, good-paying jobs and will support 3,000 short and long-term construction, operations, and maintenance jobs.

Notably one of the wind farm projects includes energy storage. As a further indication of the Governors commitment to renewables, in January of 2018, Cuomo set a state-wide energy storage deployment target of 1,500MW by 2025. That is a bigger target than California.

In summary, there is opportunity for our manufacturers to leverage the needs for updates and new equipment to grow their top line. There is a huge opportunity for workforce employment. MACNY is working hard to re-energize the apprentice approach for skilled training needs. We are also working to connect our members to these top line growth opportunities. In the next few years, it is likely that we will see a tremendous shift in how we acquire and deliver energy.

Sources:

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