

STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

Proceeding on Motion of the Commission to)
Implement a Large-Scale Renewable Program) Case 15-E-0302
and a Clean Energy Standard.)
)
)

)

TERRAFORM POWER COMMENTS REGARDING THE
CLEAN ENERGY STANDARD COST STUDY

TerraForm Power (“TerraForm”) respectfully submits the following comments on the Department of Public Service Staff (“DPS Staff”) Staff Report Regarding the Retention of Existing Baseline Resources Under Tier 2 of the Renewable Energy Standard Program¹ (“Staff Report”).

TerraForm Power (“TerraForm”) is the owner and operator of three wind powered generators in New York State with a total capacity of 160 MW and which entered commercial operation in 2007, 2009 and 2012. These assets produce approximately 340,000 MWh of wind electricity annually and have been a meaningful contributor to New York State’s renewable goals. The three wind farms utilize turbines that are no longer supported as the manufacturer has discontinued both turbine production and support of the models used in the above three wind farms.

¹ Case 15-E-0302 – Staff Report Regarding the Retention of Existing Baseline Resources Under Tier 2 of the Renewable Energy Standard Program (October 19, 2017)

TerraForm is filing these comments to request the Commission to reconsider the original proposal by Staff regarding the “repowering” category and to allow 100% of the output from a repowering to qualify for Tier 1 in cases where there are exceptional issues, in particular:

- Existing projects use turbines that are no longer supported by the manufacturer; and
- The repowering has significant new capital investment; and
- The repowering is more environmentally friendly (maintains the same installed capacity and the same footprint).

Under Staff’s original proposal a repowered asset would qualify for Tier 1 eligibility if it met the following criteria:

1. The Prime Mover had operated for the length of its useful life; further specified for wind assets to be 20 years;
2. The Prime Mover had been completely replaced with a new one installed after January 1, 2015;
3. The replacement of the Prime Mover resulted in an increase of 15% or more in efficiency of production;
4. 80% of the tax basis from the completed repowered facility is derived from capital expenditures made after January 1, 2015.

We suggest the definition of useful life be modified to remove the 20-year standard and instead reflect the useful life of the specific asset, taking into account the impact to asset

life of manufacturers who have discontinued turbine production and provide only minimal on-going support which makes the useful life of the assets significantly lower.

Importantly, we believe the investment for repowering these projects are highly competitive versus building new generating facilities and will provide the ratepayers with lower cost renewable power. This benefit is further compounded by the current instability and uncertainty in tax equity markets after the recent changes in corporate tax legislation.

Additionally, since the installed MWs will remain the same, the repowering is expected to be completed without the need for additional market system impact studies and will fit within the existing interconnection arrangements. The repowerings will be more environmentally friendly than greenfield projects given it will be done in the existing footprint, utilizing the same towers and layout.

Without the long-term support of a Tier 1 contract it would be difficult to attract the financing required to proceed with the investment. There is instability in the current power market, with insufficient capacity revenues and with energy prices at historic low levels. Without an anchor long term Tier 1 contract, the need to export renewable energy to neighboring ISOs may become a necessary alternative.

NY presence of TerraForm Power and its controlling shareholder Brookfield

TerraForm is the owner and operator of 2,600 MW diversified portfolio of solar and wind assets, with a mission to invest in and optimize renewable energy assets primarily in North America and Western Europe. TerraForm is “sponsored” by Brookfield and is positioned to leverage Brookfield’s significant deal experience, access to capital and operational expertise in owning, operating and developing renewable assets.

Both TerraForm and Brookfield have significant presence in New York in terms of installed renewable generation, in-state jobs and community involvement. Brookfield Renewable is a leading provider of hydropower with 711 MW of installed capacity, which produces enough clean energy to power more than 428,000 homes. Its operations create 190 jobs and contribute \$25 million in property taxes annually.

TerraForm owns 160 MW of installed wind capacity in New York State with full time staff of up to 20 operators. TerraForm is in the process of relocating its head office to New York City and expects to create additional in-state jobs. We estimate the in-state benefit/spending (including property taxes, lease payments, salaries, community host payments, etc.) of the NY wind projects created during development, construction, and operations have amounted to \$95 million to date.

Unsupported technology issues and the need for repowering

- No OEM support:
 - limited refurbishing capabilities for gearboxes, no capacity exists for blades
 - Unique design and limited supply base creating high operating costs
 - Blades have manufacturing and design issues that reduce reliability
 - Extremely limited spare blades and no retrofit design available

Reinvestment with newer, better-supported technology is needed, to extend the useful life.

Benefits from the proposed repowering

- Significant capital Investment but lower than the cost of new wind generation resource;
- Meaningful increase in energy production
- Significant increase in asset life
- Job creation
- PTC eligibility
- Lower maintenance cost and improved reliability

Conclusion

TerraForm believes including 100% of the output from the repowerings, as described above, in Tier 1 eligibility is an efficient and cost-effective way to advance NY's renewable goals.

Thank you for your consideration and we look forward to our continued partnership in advancing the NY's renewable targets.