

Response to New York Energy Highway RFI

May 30, 2012

EDP Renewables North America

Additional shunt stations
and substations from Marcy to New Scotland



renewables

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Respondent Information

EDP Renewables North America LLC (“EDPRNA” – formerly Horizon Wind Energy) and its subsidiaries develop, construct, own, and operate wind farms throughout North America. Based in Houston, Texas, with wind farms and offices across the United States and Canada, EDPR NA has developed more than 3,700 megawatts (MW) and operates over 3,500 MW. EDPRNA’s highly qualified team has a proven capacity to execute projects and achieve goals.

In New York, EDPRNA has had a regional development office in Albany, and has actively developed wind projects since 2001. We currently co-own and operate the 332 MW Maple Ridge wind farm in Lewis County, own and operate the 11 MW Madison Wind Farm in Madison County, and are currently constructing the 215 MW Marble River Wind Farm in Clinton County. Additionally, we have hundreds of mega-watts in the interconnection queue and look forward to constructing more renewable energy projects in New York in the years to come.

EDPRNA has 513 MWs of development projects currently going through the NYISO queue – including 215 MWs of the under-construction Marble River Wind Farm. Additionally, we have considerable possibility of project expansion in these regions. The areas that we are developing wind farms have the necessary land, wind, and community support to be economically competitive; transmission is the largest constraint. As such, EDPRNA’s response to this RFI will be highlighting the transmission solutions we believe that would allow the most amount of new wind generation to be built. EDPRNA has the following wind farms in development:

Project	County	MW
Arkwright Summit Wind Farm	Chautauqua	80
Alabama Ledge Wind Farm	Genessee	80
Rolling Upland Wind Farm	Madison	60
Machias I Wind Farm	Cattaraugus	80

While these are just the projects that are currently in queue, EDPRNA has had to drop 590 MWs of queue positions over the past years due to transmission constraints or due to questions in commercial viability. In total, with the right transmission solutions and commercial opportunities we believe we could develop and construct (including the wind farms above) the projects in the following zones in the near term.

Zone	MWs
A	120
D	200
E	60
F	50

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Project Description

In order to connect additional renewables to the grid, the Central-East Voltage Collapse Transfer Limits need to be increased. We propose adding additional shunt substation in the middle of Marcy to New Scotland 345KV line.

While New York's latest State Transmission Assessment and Reliability Study (STARS) analyzes the possibility of upgrading Marcy to Rotterdam section of the Marcy to New Scotland, adding more shunt substations in lieu of or in addition to this will increase the central east limit and allow the leveraging of existing rights-of-ways to derive maximal impact.

We could see this being located at the central section of the Marcy to New Scotland 345KV line.

Project Justification

This will benefit the State's objectives and goals in the following ways:

Current Operations: Reduces congestion from western New York closer to load (Zones A-E). This will allow less curtailment for operating projects, as well as reduce locational marginal pricing in the southern half of New York

New Generation: By decreasing congestion and curtailment, this will allow additional new generation to be built.

Relieves congestion: Increasing power flow and decreasing LMP prices, while increasing the interface limits, will allow more flexibility in NYISO's operations.

Adhere to Renewable Portfolio Standard goals: If the new generation that comes online is renewable, then this could help adhere to New York's stated RPS goals.

EDPRNA believes that this upgrade could be among the lowest cost options for New York to consider.

Financial

As EDPRNA is a generator of power projects and not a transmission operator, we cannot provide detailed analysis of the financial aspects of this project. We would imagine that estimated costs could be provided by National Grid or the New York Power Authority.

Permit/Approval process

EDPRNA cannot provide detailed information on the permitting and approval process for these additional projects.

Other Considerations, if applicable

EDPRNA cannot comment on the main issues or challenges this proposal would face.

Additional Information

Property

EDPRNA suggests a project location of approximately mid-way between the Marcy and New Scotland substations. We would imagine this could be on the existing right of way, which could help minimize land costs.

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Projected In-Service Date and Project Schedule

EDPRNA does not have visibility into the in-service date or project schedule for this project, but we would expect for this project to be relatively quick to implement. – in the one to two year timeframe.

Interconnection

While EDPR cannot fully assess the optimum interconnection point, we believe that along the Marcy to New Scotland line is best as it will help to relieve the most congestion.

Technical

EDPRNA, as a generator of renewable energy, cannot comment on this section.

Construction

While EDPRNA cannot comment on the construction of the transmission lines, we can comment on the construction that is incented if this project becomes operational and benefits renewable energy.

EDPRNA is currently constructing the 215 MW Marble River Wind Farm in upstate New York. The NYSERDA bids that we won for the RECs associated with this project for the first ten years had an economic development component for the state of New York. As such, this has encouraged us to use many New York-based companies, who are involved in the entire construction process.

Operational

By increasing Central East Voltage stability limit and improving NYISO's system reliability, the project increases NYISO's operation flexibility.

Socio-Economic

While EDPRNA cannot comment on the socioeconomic benefits of this particular project from a micro level, we can discuss the socioeconomic benefits of our wind projects.

Per the existing NYSERDA bidding process, 70% of the weight assigned to a project is based on price, with the other 30% on the economic development a project can generate. Through rigorous tracking over the construction and first three years of operations, we track the millions (and sometimes tens or hundreds of millions) spent in New York. Our projects increase the tax base of the communities that we are in, and provide millions of revenues in royalties for New York landowners.

Financial

EDPRNA is not able to comment on the financial aspects of this project. We estimate this would be one of the more cost-effective transmission solutions.

Environmental

The enhancement of the energy grid will allow for the deployment of renewable energy will aid in the offset of carbon emissions generated by coal-producing sources. Wetlands, streams, forests and other natural areas can be avoided by properly identifying these natural resources during the design phase, avoiding the resources with proper siting, and utilizing existing disturbed areas to the maximum extent practicable. Certainly, areas will need to be cleared during construction; however, these areas can be restored to pre-existing vegetative states to ensure that minimal permanent disturbance will be realized. Given the minimal footprint of transmission infrastructure, operational impacts will be limited

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to corridors that will be required for transmission line upkeep. Mitigation measures to these impacts can be offset through acquisition of conservation easements, creation/restoration of wetlands, and mitigation banks.

Project Contract/Request for Proposal (RFP) Status

To our knowledge, this project has not been submitted to a New York state agency or authority in response to a Request for Proposal.

Public Outreach and Stakeholder Engagement

An organized public outreach campaign describing the nature of the proposed project and seeking public comment and input will allow for stakeholder engagement and buy-in. Similar to the process outlined in the Article X, a written public comment period up to 30 days should allow for the public to express concerns on the record. Issues can be addressed through a formal rebuttal to the comments. A public hearing would also allow for those concerned to publically submit comments as well.

CONCLUSION

EDPRNA appreciates being able to submit this response to the New York Energy Highway RFI, and is available for any follow-up questions on how to best get additional renewable generation online to meet New York's Renewable Portfolio Standard.

Respectfully submitted,
Bill Whitlock, Executive Vice President



EDP Renewables North America, LLC
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