Project Candidate Template

Instructions: Stakeholders should contact Brian Hurysz at (518) 356-6126 or email bhurysz@nyiso.com (cc Leigh Bullock lbullock@nyiso.com on any email communications) to discuss any suggestions for new projects. A NYISO staff member will be assigned to work with the stakeholder on each new project request, provide assistance with completing this template as needed, and facilitate internal discussions for the NYISO scoring and costing. Please complete this template with as much information as possible to assist the NYISO in developing an accurate a business case.

1 Grid Services from Renewable Generators – Requested by NYSERDA

1.1 Problem / Opportunity

According to two recent studies by CAISO, NREL, GE, Avangrid Renewables, and First Solar, wind and solar resources equipped with inverter controls can provide grid services, including regulation, voltage control, frequency response, and ramping. The upgrades required to the renewable plants were minimal, if any, and resulted in provision of services at the same or better levels of performance as compared to traditional generators, while simultaneously easing the integration of additional renewables onto the grid.

1.2 Project Objective(s) & Anticipated Deliverable(s)

This project has two primary components. The first component would have the NYISO work with renewable generators to determine what upgrades, if any, are required to typical inverters and controls to allow renewable generators to provide grid services. The second component would evaluate the current NYISO market designs for grid service products to determine what barriers may exist that prevent renewable generators from providing the grid services of which they are capable. The project would then propose new market designs and accompanying tariff language, if necessary, to allow renewable generators to provide grid services.

1.3 Project Justification

Significant quantities of renewable generation will be required to meet the targets in the CLCPA. These renewable generators also have the ability to provide grid services, thereby decreasing the cost of renewable integration while decarbonizing the provision of many essential reliability services. Barriers that prevent renewables from providing these services will serve only to increase the costs of grid operation and overall emissions and should be removed as soon as practicable as the number of renewable generators continues to accelerate.