

CHP TAPs Engagement Role in Facilitating New Grid Markets for CHP Services

By Tom Bourgeois Director U.S. Department of Energy's New York New Jersey Combined Heat and Power Technical Assistance Partnership (NY/NJ CHP TAP) Joseph O'Brien Applegate NY/NJ CHP TAP. March 6, 2022

As states move towards a decarbonized future significant changes to the grid will be necessary to accommodate foundational shifts in the generation supply mix.

New York State law, and similar legislation in other states, are the tools used by grid operators

At a recent webinar Mike Swider, Senior Market Design Specialist at the New York Independent System Operator (NYISO) delivered an informative and illuminating presentation describing several NYISO Market Initiatives with potential implications for CHP

3

The grid of the future will be dominated by variable energy resources. CLCPA requires New York Public Service Commission (NY PSC) to establish a program by June 30, 2021 to get the State to 70% renewable electricity consumption 2030 and 100% "clean energy" (including nuclear) electricity by 2040.⁴ There are certain functions, important to reliability needs that cannot be performed by variable energy resources. As a consequence of the significant and rapid deployment of variable grid resources the NYISO is looking at comprehensive changes to how they pay for Resource Adequacy

With the anticipated asset mix in New York Mr. Swider of the NYISO states that electricity will be relatively cheap. On the other hand, the demand for and the prices paid to a variety of reserves will be

¹ Contact Tom Bourgeois Tbourgeois@law.pace.edu, (914) 391-1804 or (914) 422-0113

² New York State law mandates 100% zero-carbon electricity by 2040

³ Grid in Transition: DEFRs and Dispatchable Mike Swider Senior Market Specialist, NYISO. Prepared for Northeast CHP Initiative (NECHPI) Webinar CHP's Role in Decarbonization. January 27, 2022 https://www.dropbox.com/s/pkxkk6e9mgwoj57NYISO_GIT_DEFR_CHP_Final.pdf?dl=0

⁴ New York State approves first expedited power transmission project, supports renewable <https://cleanenergynews.ihsmarkit.com/research-analysis/new-york-state-approves-first-expedited-power-project.html>

quite high as the services they provide become ever more critical. This will represent a revenue opportunity and one that will be developing in the near future.

Swider noted that within the class of dispatchable resources, the most reliable resources are those that are already online, for example a generator that is connected to a load and able to inject power into the grid taking a signal sent to the generator by the grid operator. Market participants who provide grid services will be paid.