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 CHPaħ&B) seph O'Brien Applegate NY/NJ CHP TAP. March 6, 2022

As states move towards a decarbonized futsing ificant changes to grid will be necessary o accommodate oundational shifts in the generation supplymix.

New York Stateaw, and similar legislation or proclamations in other states thermandate or set targets for 100% zero carbon electrity by a date certain the next couple of decades.

As the proportion of assets supplying power to the grid shiftm baseload to variable eneration resources such as wind and solar the tools used by grid operators

At a recent webinar Mike Swider, Senior Market Design Specialist at the New Wepherholent System Operator (NYISO) delivered an informative and illuminating presentation presentations for CHP

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The grid of the futurewill be dominated by variable energy resources. CLCPA reliquireNew 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, importato reliability needsthat cannot be performed by variable energy resources as consequence of the gnificant and rapid deployment of variable grid resources the NYISOs looking at comprehensive changes to how they pay for ResourceAdequacy

With the anticipated asset mixin New York Mr. Swider of the NYISO states that electricity if twill be relatively cheapOn the other hand, the demandfor and the prices paid to a variety of reserves will be

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² New York State law mandate 90% zerecarbon electricity by 2040

³ Grid in Transition: DEFRs and Dispatchab Wife 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 renewables 22 November 2020 by Kevin Adler, Chief Edited MarkitSource https://cleanenergynews.ihsmarkit.com/researchanalysis/newyork-state-approvesfirst-expedited-power-project.html

quite high as the services they provible come ever more critical. This will represent a revenue opportunity and one that wilbe developing in the near future

Swider noted that within the class of dispatchable resources, the most reliable resources are those that are already onling or example agenerator 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 article particle pa