Via Electronic Delivery

August 6, 2018

Hon. Kathleen H. Burgess
Secretary
New York State Public Service Commission
Empire State Plaza
Agency Building 3
Albany, NY 12223-1350

Re: Case 15-E-0751 – In the Matter of the Value of Distributed Energy Resources
Matter 17-01276 – In the Matter of the Value of Distributed Energy Resources Working Group Regarding Value Stack

Dear Secretary Burgess:

Pursuant to New York State Public Service Commission’s (“Commission”) May 22, 2018 notice soliciting comments issued in the above-captioned docket, the Metropolitan Transportation Authority (“MTA”) hereby submits its comments on the Department of Public Service Staff’s (“Staff”) Proposal on Value Stack Eligibility Expansion (“Proposal”).1 Staff proposed several principles for identifying technologies that could be appropriately compensated under the Value of Distributed Energy Resources (“VDER”) value stack. In addition, Staff proposed that three categories of technologies immediately become eligible for VDER value stack compensation. One of those three technologies is regenerative braking, which Staff included within its proposed stand-alone storage category.

The MTA supports the inclusion of regenerative braking in the Proposal. During the normal course of operation, trains need to decelerate. Regenerative braking generates electricity by converting the braking’s kinetic energy into electricity during deceleration. The generated electricity can then be injected into the grid or used to charge a storage system.

Under Staff’s applicable proposed principles, regenerative braking is eligible for VDER value stack compensation. Regenerative braking meets Staff’s practicality criterion: no changes to the value stack elements are required.2 Regenerative braking merely harvests and converts an existing energy source into electricity, much like solar, wind, or hydro. The value stack is already

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2 Id. at 2.
applicable to those technologies— including when paired with storage—and therefore should be easily applicable to regenerative braking.

Similarly, because regenerative braking does not require unique value stack components, its inclusion satisfies Staff’s goal of technology neutrality. Any compensation earned by regenerative braking resources would be based on the applicable, existing value stack components, which are available to any other eligible technology.

In addition, the factual record for including regenerative braking is sufficient to render a decision. Table 1 of the Proposal, along with the brief explanation above and the MTA’s earlier comments, demonstrate that applying the value stack to regenerative braking can be accomplished without further inquiry.

Moreover, regenerative braking meets the proposed environmental impact principle. Staff proposes that expedited eligibility should only be available for technologies that are “(i) renewable technologies, based on Tier 1 REC eligibility rules; or (ii) non-renewable technologies that have potential environmental impacts that are better than or at least approximately ‘no worse’ than bulk system power.” Because it is not yet Tier 1 REC eligible, regenerative braking falls into the second category (even though it is a renewable technology). Regenerative braking generates electricity by converting existing, and otherwise wasted, kinetic energy into usable electricity. It does not burn fuel. Nor does it require trains to alter their operation, because the electricity is generated during routine train deceleration. This technology, therefore, has zero environmental impacts.

Staff proposes that energy storage systems charged with regenerative braking be eligible for value stack compensation. As a cautionary note, Staff expressed concerns regarding uneconomic arbitrage when including storage. Notably, storage charged solely with regenerative braking could not engage in uneconomic arbitrage since it is not charged from the grid at retail consumption rates.

Accordingly, the MTA supports the Proposal and respectfully requests that regenerative braking be included for VDER value stack eligibility whether paired with storage or not. In this

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4 Id. at 48.
5 Proposal at 3.
6 Id. at 2.
7 See id. at 4. Table 1 shows that several of the existing value stack components are applicable to regenerative braking.
9 Proposal at 2–3.
10 While recognizing that it is not yet Tier 1 REC eligible, the MTA disputes classifying regenerative braking as “non-renewable.” Several technologies that are Tier 1 REC eligible generate electricity using otherwise wasted energy, such as landfill gas, sewage gas, manure digestion, anaerobic digestion, and some biofuels. Regenerative braking is similar to those technologies: it recycles energy that is leftover after producing a non-generation result or product (i.e., braking). Further, the New York State Energy Plan defines “renewable energy” in part as “[e]nergy derived from sources that are capable of being continuously restored by natural or other means . . . .” New York State Energy Plan, N.Y. State Energy Planning Bd. (2015), at 122, https://energyplan.ny.gov/-/media/nysenergyplan/2015-state-energy-plan.pdf. The energy for the MTA’s regenerative braking systems would be derived from the New York City subway system, which is a source that is continuously restored and will be for the foreseeable future.
11 Proposal at 5, 6–7.
12 Id. at 7, 8–9.
regard, the Proposal should be revised to also include regenerative braking standing alone. As demonstrated above, regenerative braking also meets the proposed criteria for expedited eligibility without storage. Thank you for your consideration of this matter.

Respectfully submitted,

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By: /s/ ____________________________
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