Comments of Department of Public Service Staff on the Independent Consultant Study to Establish New York ICAP Demand Curve Parameters for the 2025/2026 through 2028/2029 Capability Years – Draft Report

June 28, 2024

INTRODUCTION

Staff of the New York State Department of Public Service (DPS) hereby submit these informal comments on the Draft Study to Establish New York ICAP Demand Curve Parameters (Draft Report), issued on June 17, 2024 by Analysis Group, Inc. and 1898 & Co. (collectively, the Consultants).

DPS Staff is generally supportive of the recommendations and findings provided by the Consultants in the Draft Report; specifically, the selection of a two-hour battery energy storage system (BESS) as the proxy unit that represents the highest variable cost, lowest fixed cost peaking plant that is also economically viable. That notwithstanding, as discussed further in these comments, DPS Staff advocates for two modifications to the Consultants' recommendations or, in the alternative, for the New York Independent System Operator, Inc. (NYISO) to consider in its recommendations. First, in DPS Staff's view, revenues and incentives received outside of the wholesale market should be taken into account in the calculation of net cost of new entry (Net CONE). Second, DPS Staff recommends consideration of implementing a collaring mechanism on annual changes to reference prices, in order to mitigate potential volatility associated with changes to the newly established Capacity Accreditation Factors (CAFs).

DISCUSSION

I. Use of a Two-Hour Li-Ion BESS for the Proxy Peaking Plant Technology is Generally Appropriate

After considering the relevant market and technologies, the Consultants recommend using a two-hour BESS as the peaking plant technology for all Load Zones. According to the Consultants, this unit represents the highest variable cost, lowest fixed cost peaking plant economically viable under the NYISO's Market Administration and Control Area Services Tariff (Services Tariff). According to the Consultants, a BESS would use lithium-ion (Li-ion) technology and a modular, purpose-built enclosure form factor to be economically viable and practically constructible. The Draft Report also assumes, among other things, a 15-year amortization period for the two-hour Li-ion BESS.

DPS Staff supports the Draft Report's recommendation to use the two-hour BESS as the proxy unit. Preliminarily, the development, installation, and operation of energy storage in New York is imperative to comply with the Climate Leadership and Community Protection Act (CLCPA), which, among other things, requires the New York State Public Service Commission (Commission) to establish programs to meet three goals: (1) 70 percent of New York's electricity generation to come from renewables by 2030; (2) 100 percent of New York's electric demand system to be emissions free by 2040; and (3) three gigawatts (GW) of statewide energy storage capacity in place by 2030.[1] Additionally, in 2022, New York announced a new goal of 6 GW of energy storage statewide by 2030, which has been formally adopted by the Commission.[2] The

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1 See New York Public Service Law §66-p(2), (5).

2 See Case 18-E-0130, Energy Storage Deployment Program, Order Establishing Updated Energy Storage Goal and Deployment Policy (issued June 20, 2024) (2024 Energy Storage Order).

Draft Report correctly identifies these statutory and policy directives and goals as critical to the Consultants' analysis of the appropriate proxy unit for the 2025-2029 Demand Curve Reset (DCR) process.[3]

Importantly, selection of the two-hour, Li-ion BESS as the proxy unit is also consistent with Section 5.14.1.2 of the Services Tariff, which specifies that the proxy peaking unit be a technology with the "lowest fixed costs and highest variable costs among all other units' technology that are economically viable…."[4] DPS Staff further notes that the Services Tariff neither specifies any particular runtime requirement as part of this analysis, nor requires the proxy unit to fulfill a specific projected reliability need. In other words, nothing in the Services Tariff bars the Consultants' selection of a BESS as the appropriate technology for the proxy unit for purposes of establishing the installed capacity (ICAP) Demand Curve parameters.

II. Clean Energy Revenues Should be Taken into Account in the Calculation of Net CONE

As part of their evaluation of different peaking plant technologies to develop ICAP Demand Curves, the Consultants subtract estimated annual energy and ancillary services revenues from the total costs associated with plant construction and operations in order to produce the Net CONE value. Notably, however, this net CONE calculation does not account for revenues outside of the wholesale market that a peaking unit may nonetheless receive. Currently, wholesale markets do not adequately compensate clean resources for their clean energy attributes needed to help the State meet its CLCPA goals. Instead, these resources are compensated for those attributes through the various clean energy markets and programs administered by New York State. The Federal Energy Regulatory Commission (FERC) has long held that the valuation of environmental and

[3] See, e.g., Draft Report, p. 20.

[4] See Draft Report, p. 7.

clean energy attributes is state jurisdictional.[5] Failing to account for these additional revenues would result in a Net CONE calculation that is too high, and would lead to an overstatement of the revenues required from the capacity market to support such resources. In other words, selecting a clean energy resource as the proxy unit without accounting for non-wholesale-market clean energy attribute revenues would result in capacity prices that are set too high.

In all other aspects of calculating a resource's Net CONE, the Consultants take a contextual approach to estimating the likely revenues that a typical new entrant might receive from various sources. Notably, the values of these resources are not the same between different resource types and technologies. For example, for different resources, the Consultants may consider, among other things, different tax rates, debt costs, Payments in Lieu of Taxes, gas contracts to calculate the revenues received by (and commensurately, the Net CONE of) that specific technology. For purposes of determining Net CONE, there is nothing distinguishable regarding these costs and revenues from non-wholesale-market payments for clean energy attributes from a State-administered policy program.

As noted above, the Commission recently issued the 2024 Energy Storage Order, which, among other things, established an Indexed Storage Credit (ISC) incentive program to accelerate bulk BESS development in New York State and affirmed that the State's investor owned utilities should continue the bulk storage dispatch rights solicitation process established in the Commission's 2018 Energy Storage Order.[6] In DPS Staff's view, it is improbable that future

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[5] WSPP Inc., 139 FERC ¶ 61,061 (2012) at P 18; see also FERC v. Elec. Power Supply Ass'n, 577 U.S. 260, 289 (2016) (acknowledging that FERC's and states' spheres of jurisdiction are "'complementary' and 'comprehensive'" (quoting Fed. Power Comm'n v. La. Power & Light Co., 406 U.S. 621, 631 (1972))).

[6] See Case 18-E-0130, supra, Order Establishing Energy Storage Goal and Deployment Policy (issued December 13, 2018) (2018 Energy Storage Order).

merchant energy storage resources would enter the New York markets without accessing these policy programs and their potential incentive payments. Given their likelihood, non-wholesale-market financial support from the ISC incentive program and incremental revenues from any utility bulk storage dispatch rights contracts should be considered in the Consultants' analysis of the costs of a BESS. Conversely, failure to consider such non-wholesale-market support would result in a BESS' Net CONE being calculated based on wholesale market revenues alone, which does not reflect the current reality of BESS development in New York State.

III. A Collaring Mechanism Should Be Considered to Limit Potential Impacts Related to Capacity Accreditation Factors

The Draft Report acknowledges that CAFs present a market risk because "[g]oing forward, CAFs will vary each year depending on the mix of resources in the system, load profiles and other factors" and changes in CAFs "create uncertainty for future revenue streams as a lower CAF would reduce revenues and a larger CAF would increase revenues."[7] The Draft Report further notes that "future CAF values are uncertain given uncertainty in the expansion of … battery storage technology and intermittent renewables in New York, which could tend to have countervailing impacts on battery storage CAFs depending on the timing, magnitude, and types of future resource additions."[8]

DPS Staff shares the concerns of the Draft Report regarding CAF fluctuations, and both their potential impacts on consumers and potential volatility for supply resources. Capacity accreditation was only recently implemented, and there is insufficient information available to clearly understand the exact factors that affect CAFs, and how CAFs may change in the future based on resource mix (including increased development of battery storage in New York). For

[7] Draft Report, p. 59.

[8] Id.

example, changes made as part of the New York State Reliability Council's Installed Capacity Subcommittee process (e.g., changes to load shapes, load scaling, load forecast uncertainty modeling, etc.) could have large impacts on the Capacity accreditation factors. In light of these unknowns, it is critical that the state protect both consumers and suppliers from potential major shifts in CAFs until additional information becomes available to better understand factors that may or may not impact CAFs.

Based on the foregoing, at this time DPS Staff recommends implementing a collaring mechanism on annual changes to reference prices in order to mitigate against the potential impact of substantial CAF-related changes. Historical precedent exists for implementing such a collar. Specifically, in 2016, the DCR process was modified to, among other things, increase the period between DCRs from three years to four years. As part of that transition, and in response to concerns raised by stakeholders about the potential for volatility, the NYISO proposed, and FERC accepted, a transitional collaring mechanism whereby the allowable annual change in the reference point values for each ICAP Demand Curve, as calculated for the first three annual updates, was limited to a maximum increase of 12 percent or a maximum decrease of 8 percent compared to the prior year's applicable reference point value.[9] A similar collaring mechanism should be implemented here to protect against unanticipated, significant volatility related to changes to CAFs, until such time that stakeholders have developed a better understanding of the factors impacting CAFs, and the resulting impacts on capacity prices.

[9] N.Y. Indep. Sys. Operator, Inc., 156 FERC ¶ 61,039 (2016) at P 28.

CONCLUSION

DPS Staff appreciates this opportunity to provide substantive comments on the Draft Report. For the reasons set forth herein, DPS Staff generally supports the recommendations in the Draft Report, subject to the modifications identified in these comments.