Phillips Lytle LLP

Memorandum

To: Mark Masse, GCEDC President

From: Dennis W. Elsenbeck

Date: February 28, 2025

Re: STAMP Data Center-Energy Matters

We understand that in connection with recent developer proposals to construct and operate a data center at the STAMP site, that GCEDC has received public comments expressing concern regarding data center energy demand, including comments that the existing power grid does not have sufficient capacity to support a 250MW data center at the STAMP site, that a data center project is generally inconsistent with the objectives of the Climate Leadership and Community Protection Act ("CLCPA"), and further that a STAMP sited data center would result in electric rate increases for other energy consumers in the area. I write to provide background information and analysis as relevant to GCEDC's consideration of the data center proposals and those public comments.

The STAMP Site's Energy Capacity is Sufficient to Support a 250MW Data Center

The STAMP site's energy capacity was initially evaluated in the Generic Environmental Impact Statement prepared for the overall site, which indicated that there was sufficient electrical power available for the STAMP site to accommodate *at least* 185 MW of annual demand. Following subsequent planning and environmental analysis, the STAMP site has been cleared by the New York Independent System Operator ("NYISO") for an increase of electrical demand at the site to a total of 600 MW

of power. The NYISO is a non-governmental, non-profit entity, accountable to both Federal and State regulators. The NYISO is responsible for managing the State's power grid and wholesale energy markets to ensure sufficient capacity and predictable rates for electricity consumers state-wide. In 2018, the NYISO analyzed capacity and approved the STAMP site to utilize up to 300 MW of capacity annually, and, after further analysis, in 2024 the NYISO authorized the STAMP site for an additional 300 MW of capacity annually. In light of these NYISO authorizations for a total capacity of 600MW annually, the STAMP site offers sufficient capacity for existing projects at the site, plus the addition of a 250MW data center.

Consistency with CLCPA Goals and Prospective Data Center Contributions to Fixed Costs Required for Ordinary Grid Maintenance and to Meet CLCPA Objectives

The CLCPA is codified in New York State law and it requires New York to reduce economy-wide greenhouse gas emissions by 40% by 2030, and no less than 85% by 2050 from 1990 levels. The STAMP site's substation will draw power from the existing NYPA 345 KV transmission line that originates at the Robert Moses Plant, and the vast majority of generation planned to be installed in western NY tends to be renewable in nature. Locally, the Initial Report on the New York Power Grid Study prepared by the New York Department of Public Service Staff and the New York State Energy Research and Development Authority Staff confirms that the Genesee region is anticipated to bring online anywhere from 630 to 900 MW of new renewable power within the next five years. As a result, a data center at the STAMP site would be powered primarily by clean energy, consistent with the goals of the CLCPA.

In addition, given that New York's electric grid is aged, there will be significant fixed costs required to update the grid for reliability and sustainability in the future, both as a general matter, and even more specifically to meet the CLCPA objectives. Though the total amount of the fixed costs associated with achieving the CLCPA's objectives has not yet been defined by policy-makers or industry-stakeholders, it is a

general assumption that those costs will be passed through to energy-consumers as line-item subsidies on electric bills (*e.g.* System Benefit Charge, Clean Energy Standard, and Value of Distributed Energy Resources, amongst others). Even independently from CLCPA related costs, the fixed costs of basic maintenance and required upgrades to the State's electric system as a general matter are already spread out amongst all ratepayers through ordinary line-item charges (*e.g.* Demand Charge), which are especially likely to be assessed against multi-shift manufacturing users.

Accordingly, the potential prospective contributions of data centers to the fixed costs associated with electric infrastructure investment generally, and to achieve the CLPCA objectives specifically, could be substantial and beneficial to area rate payers. This is because the comparatively high electric loads used by the data center industry mean that those users will be obligated to pay a correspondingly higher amount in line-item charges. A data center's contributions to the fixed climate-related costs of achieving the CLCPA objectives could actually help relieve the financial burden on all electric ratepayers because those costs can be recovered through the line-item subsidies on a data center's relatively high electric bill totals. For example, at full build out a 250 MW data center at the STAMP site could be estimated to contribute approximately $26 million annually via CLCPA-related line-item subsidies collected from the data center user.

In addition to specifically climate-related costs to meet the CLCPA's objectives, there are ordinary fixed costs associated with the overall maintenance of the State's electric infrastructure and those costs are already assessed against users on their electricity bills via ordinary line-item charges. In the case of a Stamp sited 250 MW data center, the estimated contributions to ordinary fixed costs to maintain and invest in the State's electric infrastructure can be estimated at approximately $9 million annually. Moreover, because data center users are typically responsible to fund and construct their own interconnections to the utility transmission network and their own substations, the utility line-item charges assessed to data center users are funds that will

typically be available for utility infrastructure investment and maintenance throughout the entirety of the grid, and not focused solely on investments that serve the data center site itself.

County/ State Sales Tax Revenues Associated with Data Center Energy Consumption

Additionally, a STAMP sited data center could have beneficial implications for sales tax revenues. The observations below are based on certain assumptions and estimations of a data center's prospective electricity bills and associated sales tax revenues. The discussion below assumes an estimated electric commodity price of $0.04/kWh growing at $0.005/kWh/Year, utility rates and subsidies as of February 13, 2025, and a 90% Load Factor (*i.e.* near 24/7 operation), no New York Power Authority allocation, and no applicable tax subsidies or exemptions.

A data center user typically demands electricity use on a continuous, 24/7 basis, which drives relatively high monthly electric bills to be paid by the data center user. The County and State impose a sales tax on a user's total electric bill. Therefore, a 250 MW data center would be estimated to contribute approximately $6 million in County sales tax revenue, and approximately $6 million in State sales tax revenue, on an annual basis, based on an estimated annual electricity bill of $151 million at full build-out of a 250 MW data center.

Conclusion

There is sufficient capacity at the STAMP site to support the construction and operation of a 250MW data center. A STAMP sited data center would be powered by renewable energy, consistent with the goals of the CLCPA, and would help fund the costs to achieve CLCPA objectives. A STAMP sited data center would not have a tendency to result in electric rate increases for other consumers in the area, but rather, could be beneficial to other electricity rate payers due to the prospective data center's comparatively substantial electricity bills that drive higher than average fund

contributions to the fixed costs of operating the State's power grid and meeting the CLCPA's objectives. In addition, a STAMP sited data center could drive substantial County/State sales tax revenues.

I am available at your convenience to discuss, and please do not hesitate to reach out if I can provide any further information to aid GCEDC's review and consideration of a proposed data center's impact to the electrical grid and associated rates/costs to area tax payers and rate payers.

DWE

Doc #12480651.5

STAMP Data Center Estimated Electric Cost, Sales Tax and Climate Change Contribution

Version 1 - as of 02/13/2025

	Phase 1		Phase 2		Phase 3		Phase 4	
Monthly Demand (kW)	50,000		100,000		150,000		200,000	
Monthly Consumption (kWh)	32,400,000		64,800,000		97,200,000		129,600,000	
Electric Bill Line Item	Charge	Total	Charge	Total	Charge	Total	Charge	Total
Customer Charge (per Month) as of 1/28/25	$ 7,500	$ 7,500	$ 7,500	$ 7,500	$ 7,500	$ 7,500	$ 7,500	$ 7,500
Demand Charges (per kW) as of 1/28/25	$ 4.28	$ 214,000.00	$ 4.28	$ 428,000.00	$ 4.28	$ 642,000.00	$ 4.28	$ 856,000.00
RKVA Charges as of 1/28/25	$ 1.02	$ -	$ 1.02	$ -	$ 1.02	$ -	$ 1.02	$ -
Merchant Function Charge as of 7/1/24	$ 0.00010	$ -	$ 0.00010	$ -	$ 0.00010	$ -	$ 0.00010	$ -
System Benefit Charge (per kWh) as of 1/1/25	$ 0.00724	$ 234,414.00	$ 0.00724	$ 468,828.00	$ 0.00724	$ 703,242.00	$ 0.00724	$ 937,656.00
Earning Adjustment Charges (per kW) as of 5/1/24	$ 0.18	$ 9,000.00	$ 0.18	$ 18,000.00	$ 0.18	$ 27,000.00	$ 0.18	$ 36,000.00
Energy Charge (Supply) (Estimate per kWh)	$ 0.04	$ 1,296,000.00	$ 0.045	$ 2,916,000.00	$ 0.050	$ 4,860,000.00	$ 0.055	$ 7,128,000.00
Legacy Transition Charge (per kWh) - N/A	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Electric Supply Reconciliation (per kWh) - N/A	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Transmission Revenue Adjustment (per kWh) as of 12/31/24	$ (0.00358)	$ (115,992.00)	$ (0.00358)	$ (231,984.00)	$ (0.00358)	$ (347,976.00)	$ (0.00358)	$ (463,968.00)
Value of Distributed Energy Resources (per kW) as of 12/31/24	$ 0.24	$ 12,000.00	$ 0.24	$ 24,000.00	$ 0.24	$ 36,000.00	$ 0.24	$ 48,000.00
Revenue Decoupling Mechanism (per kW) as of 6/28/24	$ 0.48	$ 24,000.00	$ 0.48	$ 48,000.00	$ 0.48	$ 72,000.00	$ 0.48	$ 96,000.00
Clean Energy Standard Supply (per kWh) as of 3/6/24	$ 0.0057	$ 184,680.00	$ 0.0057	$ 369,360.00	$ 0.0057	$ 554,040.00	$ 0.0057	$ 738,720.00
Clean Energy Standard Delivery (per kWh) - N/A	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -

	Phase 1		Phase 2		Phase 3		Phase 4	
Monthly Demand (kW)	50,000		100,000		150,000		200,000	
Monthly Consumption (kWh)	32,400,000		64,800,000		97,200,000		129,600,000	
Electric Bill Line Item	Charge	Total	Charge	Total	Charge	Total	Charge	Total
Late Payment and Other Waived Fees Surcharge (per kW)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Arrears Management Program (per kW)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Electric Vehicle Make Ready (per kW)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Energy Storage Surcharge (per kW)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Dynamic Load Management (per kW) as of 1/1/25	$ 0.14	$ 7,000.00	$ 0.14	$ 14,000.00	$ 0.14	$ 21,000.00	$ 0.14	$ 28,000.00
Total Estimated Monthly Electric Bill		**$ 1,872,602.00**		**$ 4,061,704.00**		**$ 6,574,806.00**		**$ 9,411,908.00**
Total Estimated Annual Electric Bill		**$ 22,471,224.00**		**$ 48,740,448.00**		**$ 78,897,672.00**		**$ 112,942,896.00**
Average $/kWh		**$ 0.694**		**$ 0.752**		**$ 0.812**		**$ 0.871**

NY State Sales Tax Revenue - Schedule B Non-Residential

Total Monthly Sales Tax at 4% (Supply, Delivery and Subsidies)		**$ 74,904.08**		**$ 162,468.16**		**$ 262,992.24**		**$ 376,476.32**
Total Annual Sales Tax at 4% (Supply, Delivery and Subsidies)		**$ 898,848.96**		**$ 1,949,617.92**		**$ 3,155,906.88**		**$ 4,517,715.84**

Genesee County Sales Tax Revenue - Schedule B Non-Residential

Monthly Sales Tax at 4% (Supply, Delivery and Subsidies)		**$ 74,904.08**		**$ 162,468.16**		**$ 262,992.24**		**$ 376,476.32**
Annual Sales Tax at 4% (Supply, Delivery and Susidies)		**$ 898,848.96**		**$ 1,949,617.92**		**$ 3,155,906.88**		**$ 4,517,715.84**

Total State and County Sales Tax Revenue - Schedule B Non-Residential

	Phase 1		Phase 2		Phase 3		Phase 4	
Monthly Demand (kW)	50,000		100,000		150,000		200,000	
Monthly Consumption (kWh)	32,400,000		64,800,000		97,200,000		129,600,000	
Electric Bill Line Item	Charge	Total	Charge	Total	Charge	Total	Charge	Total
Monthly Sales Tax at 8% (Supply, Delivery and Subsidies)		**$ 149,808.16**		**$ 324,936.32**		**$ 525,984.48**		**$ 752,952.64**
Annual Sales Tax at 8% (Supply, Delivery and Subsidies)		**$ 1,797,697.92**		**$ 3,899,235.84**		**$ 6,311,813.76**		**$ 9,035,431.68**

Subsidy for State Agency Climate Change Programs and Incentives (Does not include Base Rate Imbedded Programs and Incentives)

Monthly Climate Change Contribution		$ 431,094.00		$ 862,188.00		$ 1,293,282.00		$ 1,724,376.00
Annual Climate Change Contribution		$ 5,173,128.00		$ 10,346,256.00		$ 15,519,384.00		$ 20,692,512.00

Contribution to Electric Transmission and Distribution Infrastructure Investment and Maintenance

Monthly T&D Contribution		$ 157,508.00		$ 307,516.00		$ 457,524.00		$ 607,532.00
Annual T&D Contribution		$ 1,890,096.00		$ 3,690,192.00		$ 5,490,288.00		$ 7,290,384.00

Assumptions:

90% Load Factor (24/7)

Electric Commodity Price (increases $.005/kWh over the period of full build out) $ 0.04

8% Total Sales Tax on Supply and Delivery for the State and County (4% for each)

Phase Demands Adjustable

No Tax Exemptions

No NYPA Allocations

Does not include Natural Gas Bill Impact

Climate Subsidies Constant

National Grid Line Items as of 02/13/25; Does not Include Impacts of Future Rate Filings

Loads based 250 MW in Final Phase Full Build-out

Phase 5 250,000 162,000,000	
Charge	Total
$ 7,500	$ 7,500
$ 4.28	$ 1,070,000.00
$ 1.02	$ -
$ 0.00010	$ -
$ 0.00724	$ 1,172,070.00
$ 0.18	$ 45,000.00
$ 0.060	$ 9,720,000.00
$ -	$ -
$ -	$ -
$ (0.00358)	$ (579,960.00)
$ 0.24	$ 60,000.00
$ 0.48	$ 120,000.00
$ 0.0057	$ 923,400.00
$ -	$ -

Phase 5	
250,000	
162,000,000	
Charge	Total
$ -	$ -
$ -	$ -
$ -	$ -
$ -	$ -
$ 0.14	$ 35,000.00
	$ 12,573,010.00
	$ 150,876,120.00
	$ 0.931

	$ 502,920.40
	$ 6,035,044.80

	$ 502,920.40
	$ 6,035,044.80

Phase 5	
250,000	
162,000,000	
Charge	Total
	$ 1,005,840.80
	$ 12,070,089.60
	$ 2,155,470.00
	$ 25,865,640.00
	$ 757,540.00
	$ 9,090,480.00