

Jessie Hall

From: Sarah Kreps <sarah.kreps@gmail.com>
Sent: Monday, November 10, 2025 2:04 PM
To: Clerk's Office
Subject: Re: Independent assessment for the records
Attachments: Independent Assessment of the Proposed Cayuga Data Campus .pdf

Follow Up Flag: Follow up
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Just wanted to follow up, as a Lansing resident, and ensure that this report is part of the public comment. I submitted it a week ago and have not seen it included in the public records that are available online. I'm sure you're busy but wanted to make sure it doesn't fall through the cracks. I am attaching it again for the record.

All the best,

Sarah Kreps

On Mon, Nov 3, 2025 at 4:50 PM Sarah Kreps <sarah.kreps@gmail.com> wrote:

Hello--Please find the attached assessment of the proposed Cayuga Data Campus for the public records.

Thank you and I'd appreciate if you confirm receipt/addition.

Sincerely,

Sarah Kreps

Independent Assessment of the Proposed Cayuga Data Campus Lansing, NY

November 3, 2025



Executive Summary

This independent assessment reviews the **economic, environmental, and community implications** of TeraWulf Inc.'s planned redevelopment of the former Cayuga coal-fired power plant site in Lansing, New York. Using engineering data, site renderings, public filings, and local input, the report presents an evidence-based overview to inform community discussion about the proposed transition from a retired coal-fired facility to a modern research data center. While the long-term plan contemplates a total build-out of 400 MW, this assessment is limited to **Phase 1 (138 MW)**—the segment scheduled for construction between **2026 and 2028**, for which design renderings, acoustic modeling, and other technical materials have been submitted.

The Cayuga data campus is designed as a multi-tenant infrastructure, meaning it provides power, cooling, and secure space for other organizations' computing equipment. The operator (TeraWulf in this case) manages the physical environment and connectivity, not the data itself. In other words, the data campus does not own, see, transfer, or collect personal data. Its obligations are physical and operational—reliable power, physical security, and environmental compliance—not privacy governance. Accordingly, the scope of this review focuses on those tangible economic, environmental, and community effects that arise from the site's physical redevelopment and operation. Broader questions about the social benefits or risks of artificial intelligence, data privacy, or digital ethics fall outside the scope of this analysis.

Within the scope of this report, we identify and analyze a series of physical and operational changes that define how the site would function once redeveloped. The proposed data campus would repurpose one of Cayuga Lake's major industrial sites into an all-electric data center connected to New York Power Grid Zone C, where roughly 80 percent of power generation consists of zero-emission sources (hydro and nuclear, with growth from wind and solar). The design includes a closed-loop cooling system that does not draw any water from the lake, replacing the former coal-fired plant's open-loop system that once withdrew up to 245 million gallons per day.

The new closed-loop cooling system would be filled at commissioning with about 300,000 gallons from the Bolton Point water supply and require small periodic top-offs. The developer has also identified about \$15 million in grid-upgrade investments required for the first phase of 138 MW, which New York State Electric and Gas (NYSEG) has indicated would be funded by the project. Because the facility will **not include any bitcoin mining operations**, the cooling demand and associated fan noise are expected to remain lower and more stable than at similar high-density computing sites. Noise modeling projects an estimated 51 decibels of operational noise at 1,500 feet—comparable to normal background noise inside a quiet commercial office building.

From an economic standpoint, redevelopment would return currently dormant industrial property to taxable use. Preliminary estimates suggest an assessed value of roughly \$400 million at full build-out, generating about \$9.6 million per year in combined property taxes. Because school districts in New York receive the largest share of local property taxes, most of this revenue would go

to the Lansing Central School District, with the remainder supporting town, county, and public service budgets. The project will generate up to 500 construction jobs during the 2026–2028 buildout phase and sustain about 75 full-time operational employees.

The plan also includes site and community measures intended to address visual and environmental concerns. The legacy smokestack is slated for removal, with demolition materials to be recycled. Landscaping and shoreline restoration would include native plantings and limited public access areas along the lakefront. Discussions are underway about partnerships with local schools, Cornell University, and workforce organizations to explore potential education and training programs associated with the redevelopment.

Taken together, the findings indicate that the proposed redevelopment offers a clear economic upside—through restoration of the tax base and local investment—with modest direct employment but meaningful secondary benefits for schools and community services. The environmental profile is neutral to favorable, as the project replaces a high-impact coal facility with an all-electric operation drawing from a largely zero-emission grid and using closed-loop cooling. Aesthetically, the removal of the smokestack and shoreline restoration are likely to improve the visual character of the site, while proposed partnerships and trail access plans would enhance community connection. On balance, the project appears to deliver economic and civic gains with minimal environmental cost, and in some respects, a net improvement to the landscape and local engagement.

Summary of Key Findings

- Overall, the assessment finds that the proposed redevelopment is expected to yield economic benefits with negligible environmental impacts relative to the former coal plant.
- Water use will fall by more than 99.6 percent compared to historic plant operations, with **no water drawn from Cayuga Lake for data center cooling**. Bolton Point will supply potable water limited to domestic and fire-safety needs.
- The Cayuga data campus could generate roughly **\$8.7 million in annual local property-tax revenue** and about 75 permanent jobs by 2028.
- TeraWulf is expected to invest about **\$15 million in regional grid upgrades** for the first phase (138 MW) that improve reliability for local users without adding costs to residents.
- The redevelopment includes removing the smokestack, adding lakefront land to the Wildlife Management Area, and supporting local trails, habitat restoration, and community programs.
- Because **the proposed data campus will not engage in any cryptocurrency (e.g., bitcoin) mining**, the associated **cooling system noise is expected to result in a 51 decibels of operational noise at 1,500 feet—comparable to normal background noise inside a quiet commercial office building**.

About the Independent Assessment Team

This evaluation was led by a two-member independent team with complementary expertise in civil engineering, environmental systems, and technology policy. The purpose of this assessment is to provide an objective, evidence-based analysis in response to questions raised by Lansing residents and officials regarding the proposed redevelopment of the former Cayuga Power Plant site.

Christopher J. Earls, Ph.D. is a Professor of Civil and Environmental Engineering at Cornell University. His expertise includes structural analysis, infrastructure systems, and applied mechanics, with particular focus on the design and performance of complex civil works. In this assessment, he reviewed issues related to site redevelopment, noise, stormwater management, water use, electrical use, and the conversion of legacy industrial properties for new use.

Sarah Kreps, Ph.D., M.S., holds degrees in environmental science and previously conducted environmental impact assessments while serving in the U.S. Air Force. She is now a professor of technology policy at Cornell University, specializing in the governance of digital infrastructure such as data centers, semiconductor supply chains, and advanced computing facilities. As a Lansing resident and parent with a long connection to Cayuga Lake and local community programs, she brings both technical expertise and a personal commitment to the lake's environmental and civic well-being.

The team's objective was to provide a clear, transparent accounting of the facts for the benefit of the community, offering neither advocacy nor opposition, but an independent evaluation grounded in evidence. The authors conducted this assessment independently and received no direction from TeraWulf regarding findings or recommendations.

I. Introduction

Over the past decade, the rise of artificial intelligence (AI) and cloud computing has reshaped how towns and regions support modern industry. The physical backbone of this transformation is the data center—a facility that houses the computing systems powering everything from local business operations to global research and communications.

AI is now central to the U.S. economy. Recent analysis suggests that as much as 92 percent of national economic growth is tied to AI-related investments.¹ Much of this growth depends on physical infrastructure—buildings, cooling systems, power lines, and fiber backbone—that must be built and managed locally.

While AI has become a national and geopolitical priority, especially amid competition with China, the infrastructure enabling it is determined by local decisions on land use, energy access, environmental regulation, and community well-being. Our community of Lansing, NY now finds itself at the intersection of these global technological shifts and local governance choices. As data centers become part of modern infrastructure, residents have been asking what the shift means for the local economy, environment, and overall quality of life.

TeraWulf Inc. is a U.S.-based digital infrastructure company focused on redeveloping former fossil-fuel sites into data centers powered largely by low-carbon energy. The firm's proposal for the Cayuga site follows a similar conversion at its Lake Mariner facility in Somerset, New York, reflecting a broader shift toward reusing industrial land for high-performance computing.

Data centers are starting to draw considerable media attention, much of it negative. Yet broad generalizations can be misleading, since local context matters greatly. A facility built on farmland in Indiana, the dense corridor of Loudoun County, Virginia or the massive Memphis complex bears little resemblance to a redevelopment like Cayuga. Technologies, scale, permitting, and state regulations all differ, but those distinctions are often lost in public debate. For that reason, **assessments must be site-specific, focusing on actual design and environmental conditions rather than some assumed, monolithic set of industry patterns.**

This independent review responds to questions raised by Lansing residents and town officials about the proposed redevelopment of the former Cayuga Power Plant site. It examines three main areas of concern:

- **Economic impact:** local tax revenue, job creation, and broader fiscal effects.
- **Environmental impact:** water use, energy systems, and noise generation.
- **Community impact:** visual change, shoreline character, and quality of life.

Each section uses available data and documented evidence to address these questions. The goal is to ground public discussion in verifiable facts and to support informed, transparent decisions about the site's future.

This assessment focuses on the Cayuga data campus proposal submitted to the Town of Lansing for site plan review in September 2025.

II. Economic Impact Assessment

This section examines the potential economic effects of redeveloping the former Cayuga power plant site as a data campus, drawing on available public data, comparable projects elsewhere in New York, and local assessment and tax records to build an evidence-based view of impact.

The assessment considers three main areas:

- **Local tax revenue**, analyzing how redevelopment could change the tax base and funding for schools, emergency services, and infrastructure, compared with conditions if the site remains inactive.
- **Employment effects**, estimating temporary employment, contracting, and local spending during site development, as well as permanent employment associated with the full capacity data center.
- **Impact on Household Energy Bills**, examining energy bill structure and trends, and evaluating how the Cayuga data campus could affect household rates within the context of New York regulations, with lessons from other states.

The goal of this section is not to predict exact dollar amounts, but to provide a structured framework for understanding how redevelopment of the site affects Lansing's fiscal stability, employment, and infrastructure over time.

Economic Outlook

The Town of Lansing is in an economic transition. Changes in local industrial and manufacturing firms have decreased the number of jobs available in the community. BorgWarner, a global automotive parts manufacturer and supplier in the Lansing area, is in the process of closing its valvetrain production facility by 2026.² This has led to a reduction of about 500 employees since 2023.³ Cargill is another large employer of Lansing residents with an uncertain future. Cargill laid off workers in late 2024 and is evaluating its long-term position at the Cayuga Salt Mine (permit renewed in 2025, but future ownership remains unclear).⁴ Amid "acute fiscal pressures," Cornell University—Tompkins County's largest employer—has cut staff and extended the June 2025 hiring

freeze indefinitely, allowing only “rare exceptions.” The University President also warned Cornell’s 11,000-plus employees to expect layoffs.^{5,6}

The impact of Lansing’s changing economic landscape extends past increased layoffs. The potential closure of the Cargill-Cayuga Salt Mine or the BorgWarner valvetrain production plant decreases tax revenues to schools, the county, and the town. Community services have already started to feel the impact of reduced industrial tax revenues. In the Lansing Central School District’s 2025–26 budget, for example, proposed budget cuts include (1) an 8:1:1 middle-school classroom (a special-education setting with up to eight students, one teacher, and one aide), (2) a 5th-grade teacher, (3) one school monitor, (4) one groundskeeper, and (5) an Multi-Tiered System of Support teaching assistant, while also reducing curriculum writing, materials/equipment, conferences, and field trips.^{7,8}

Redevelopment of the Cayuga site offers a partial offset to these industrial closures through new employment and long-term tax revenue stability.

At the town and county level, higher 2026 preliminary budget levels reflect increasing cost pressures for road construction, wages, and fire services, for example, rather than service eliminations. At its October 15, 2025 meeting, members considered a range of potential budget reductions affecting the clerk’s office, trail construction, as well as whether to defer replacing the town’s aging sound system used to record and broadcast meetings for public transparency.⁹ Together, these discussions reflected broader fiscal pressure and the need to “tighten the belt.”

Tax increases are one way for the local community to increase its revenue. The Town of Lansing proposed a 20.83% increase in the town’s tax rate for 2026, while Tompkins County officials recommended the property tax rate should increase by 2.97%.^{10,11} The Lansing Central School District (LCSD) increased its tax levy by 5.1 percent.¹²

Employees and residents of the Town of Lansing and greater Tompkins County experience the brunt of a changing industrial landscape. Although the average unemployment rate is relatively low in Tompkins County at 3.3 percent in 2025 compared to the national average of 4.3 percent, the percentage of households in poverty is more representative of the nation.^{13,14} In 2023, the incomes of 10.5 percent of Lansing residents were below the federal poverty line, compared to 11.1 percent of households in the United States.^{15,16} These statistics suggest that while Lansing residents are often employed at higher rates than the national average, there are fewer opportunities to be employed in high-paying jobs.

For current residents, the rise in assessed home values and property tax rates means higher annual property tax bills on the same homes, even if their income hasn’t changed. For prospective residents or younger households, higher home prices mean greater barriers to buying into Lansing, since both purchase costs and ongoing taxes are rising. Together, these trends signal a tightening cost of living, where stable housing becomes harder to maintain or access.

Lansing’s overall economic footing is mixed: private-sector contraction, a school district absorbing real reductions even with a higher levy, and town/county budgets that raise rates to maintain core services and fund capital.

Property Tax Impacts

The largest economic impact TeraWulf’s proposed data campus may have on the Lansing community is its contribution to local tax revenue. In general, there are two ways a company can contribute to local taxes. First, the company could pay taxes to the Town of Lansing, Tompkins County, and Lansing Central School District on the assessed value of its property. The estimated future value of the proposed TeraWulf data campus is about \$362 million for the first phase of ~138 MW, according to market-based evaluations of similar data centers.¹ Its annual tax payment at this assessed value, given 2024-2025 tax rates, would be around \$8.7 million. Of this total, about 70 percent (\$6.1 million) goes to Lansing Central School District, 20 percent (\$1.7 million) to Tompkins County, 8 percent (\$.7 million) to the Town of Lansing.

However, TeraWulf’s proposed data campus is not expected to reach 138 MW capacity until 2028, assuming the project proceeds on its planned timeline. Between 2025-2028, the tax assessed value of the Cayuga property will gradually increase from \$2 million (at its current condition today) to an estimated \$362 million.

TeraWulf’s proposed data campus can benefit the Town of Lansing economically in two ways: by reducing local taxes or offering payments to the town in lieu of taxes (PILOT). First, redevelopment often increases the tax base, which will lower tax rates for town residents. Consider the Town of Lansing’s tax formula to calculate the base property tax rate. This formula is generic across the United States.

$$\text{Tax Rate} = \frac{\text{Total Liability}}{\text{Tax Base}}$$

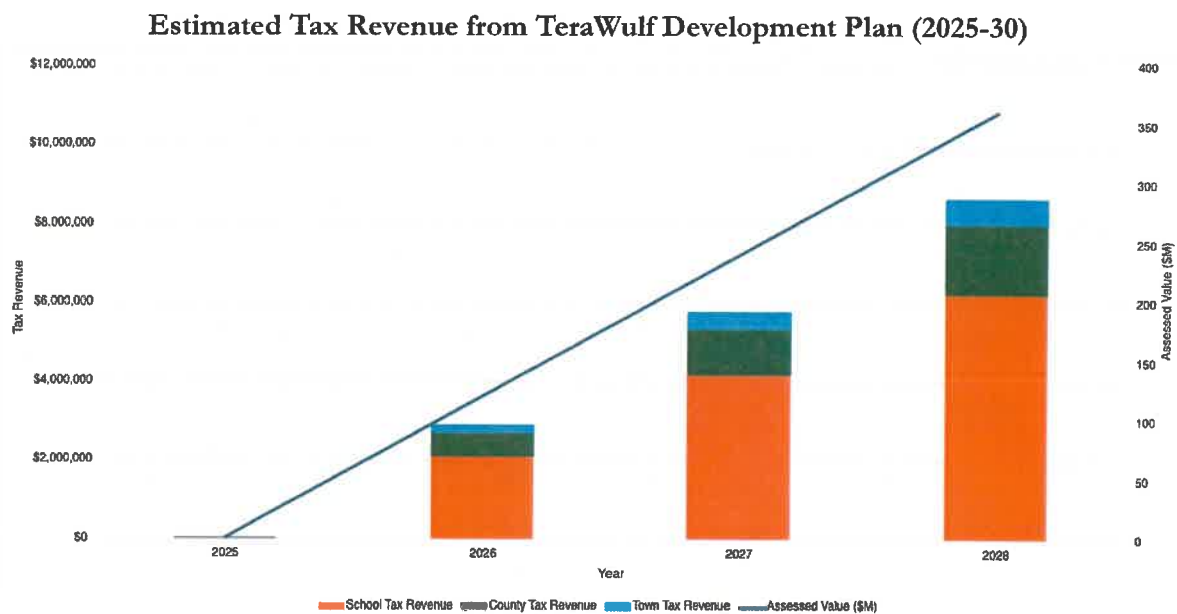
A tax rate is composed of three parts. The first, total liability, is the sum of expenses a town (or school district, fire district, or county) has committed to for the coming year. Liabilities often include snow plowing services, teacher salaries, road paving projects, and fire services. In 2025, the Town of

¹ Phase 1 taxable assessed value is estimated at approximately \$362 million for ~138 MW of capacity. This working proxy is anchored by three reference points: (1) a local historical floor—the same industrial parcels (11.-1-3.212; 11.-1-3.211) reached about \$267 million in the late 1990s; (2) comparable high-performance computing campuses in Prince William County, VA, where county reports value turnkey data-center real property at roughly \$7.6–\$9.2 million per MW (equipment excluded); and (3) a cost-to-value approach that excludes non-taxable personal property such as IT servers. The \$98 million, 80-year ground lease reflects land-use rights only; it is not a purchase price, appraisal, or market value, does not include capital improvements, and covers ~183 of 400+ acres. Under New York practice, assessments reflect real property at its “highest and best use reasonably probable in the near term” and are set annually as improvements are placed in service. Accordingly, \$362 million should be read as a conservative, phased, order-of-magnitude estimate—not an initial-year assessment.¹⁷

Lansing's liabilities were \$3.9 million. The tax base refers to the total property value of homes, land, and businesses in the Town of Lansing. Currently, the Town of Lansing's tax base is estimated at \$2.02 billion.¹¹ The tax rate is the ratio of a municipality's total liabilities to total property value.

TeraWulf's planned data campus at the Cayuga power plant site will gradually increase its property value, providing additional property-tax revenues to the town, county, and school district. The figure below shows model tax revenues from the expected assessed value of the proposed data campus, using 2024–25 tax rates. We estimate the first phase of incremental build-out of the data campus to take place from 2026 to 2028. The tax assessed value incrementally increases as the site is developed. In 2026, the site is expected to be at 50 MW, rising to 100 MW in 2027, and 150 MW in 2028.

The figure shows an increase in tax revenues from the proposed data campus. In 2026, the estimated revenue is roughly \$2.9 million. It gradually increases to \$5.8 million in 2027 and \$8.7 million in 2028. A majority of tax revenue will go to the LCSD since it taxes property value at the highest rate.

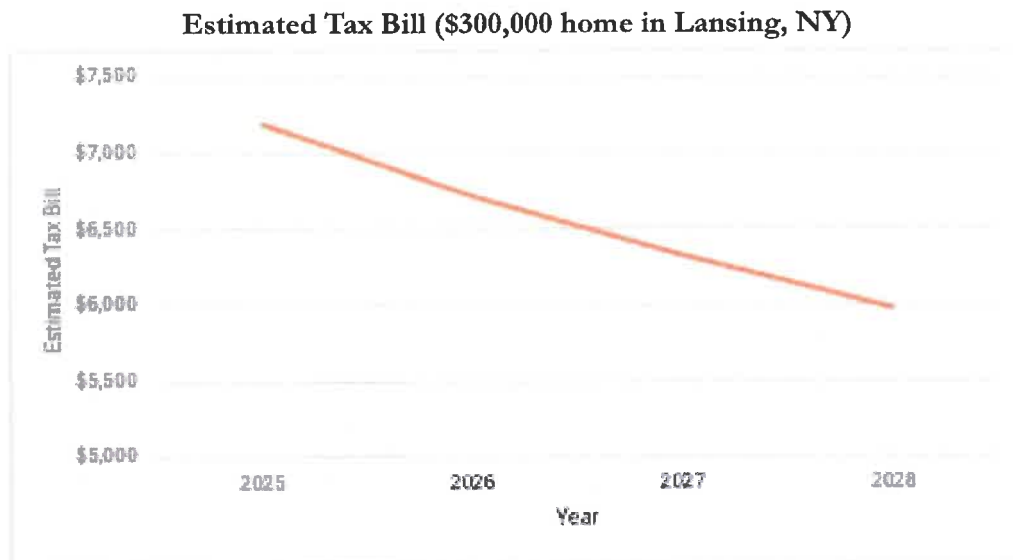


Note: To calculate school revenue, we use the school district's published 2024–25 tax rate of \$17.250989 per \$1,000; County and Town rates are \$4.793308 and \$1.917476, respectively. The revenue projections here are based on 2025 rates held steady to 2028. In reality, these rates will fluctuate. At today's combined rate (~\$24 per \$1,000), each \$100 M of assessed value yields ≈ \$2.4 million per year in property-tax revenue.

Final property-tax assessments and resulting revenues will ultimately be determined by the Tompkins County Department of Assessment in coordination with the Town of Lansing and relevant taxing jurisdictions. The figures presented here are preliminary, scenario-based estimates

intended for illustrative purposes only. Actual assessments may vary based on future project valuation, assessment methodology, and applicable exemptions or Payment in Lieu of Taxes (PILOT) agreements at the time of completion.

The value of the proposed data campus will increase the Town of Lansing's tax base because it increases the property value of the former Cayuga power plant site, which has been dormant since the coal plant retired in 2019. As a result, the tax rate for residents of the Town of Lansing could decrease. For example, consider a homeowner of a \$300,000 home in Lansing. Under the 2024-2025 tax rate, this homeowner pays \$7,189 to the Town of Lansing, Tompkins County, and Lansing Central School District. Now consider how this tax bill changes if the Town of Lansing's liabilities are held constant while its tax base increases to include the proposed data campus property value. Assume the proposed data campus gradually increases the tax base to \$362 million in 2028. The tax bill for a homeowner of a \$300,000 home in Lansing could decrease to \$5,977 by 2028.



Note: The estimated tax bill here is based on 2025 total liabilities held steady to 2028. In reality, these liabilities will fluctuate. The total liabilities in the Town of Lansing, Tompkins County, and Lansing Central School District are about \$3.9 million, \$54.9 million, and \$23.7 million, respectively. The 2025 tax base in the Town of Lansing was \$2.02 billion in the 2024-2025 tax year. The tax base in Tompkins County was \$11.5 billion, while the tax base for the Lansing Central School District was \$1.4 billion. Between 2026-2028, the tax base for each of these municipalities will increase as the Cayuga power plant property increases in value.

The proposed data campus has approved electrical interconnection capacity for up to 138 MW of load. TeraWulf currently holds an active interconnection position with the New York Independent System Operator (NYISO) to increase the proposed data campus's electrical capacity from approximately 138 MW to 400 MW, reflecting additional load requests under evaluation through the

NYISO's interconnection study process. This increase in capacity could potentially double the tax assessed value of the property.²

The second way the proposed data campus could have an economic impact on the Town of Lansing is through a Payment in Lieu of Taxes (PILOT) agreement. PILOTs are a negotiated payment schedule that can substitute for some or all required taxes. TeraWulf may negotiate a PILOT with the Town of Lansing, Tompkins County, and Lansing Central School District. Municipalities often accept PILOTs because they offer increased flexibility over how the money may be used. For example, PILOTs can offset a municipality's total liability directly without increasing the tax base (i.e., it can lower tax rates without increasing the tax base). If a PILOT is pursued between the Town of Lansing and TeraWulf, its payment amount and allocation to the town, county, and LCSD can be tailored to smooth revenues during the data center's construction phases.

If the Town of Lansing imposes a moratorium that delays the redevelopment of the Cayuga power plant site, the property's owner will only be responsible for paying taxes on the current assessed value of the property. The site currently comprises two taxable parcels assessed at \$2 million total, generating less than \$50,000 in annual tax revenue at today's rates.¹⁸ In other words, without further development to increase the property value of the dormant Cayuga site, the Town of Lansing tax base and revenue stream will remain essentially unchanged.

Employment Impacts

The conversion of the former Cayuga coal-fired power plant to the proposed data campus will have direct effects on the number of jobs available in the Lansing area. During the renovation and build-out phase, which is estimated to last five years, up to 500 construction workers are expected to be hired from the local labor market, providing opportunities for manual and skilled laborers. These employment estimations are based on the construction of TeraWulf's similar data center in Somerset, New York.

Permanent full-time workers will be hired as the proposed data campus scales in capacity. TeraWulf estimates that about 25 permanent employees will be needed for each 50 MW building. Accordingly, the proposed data campus is expected to have roughly 50 employees at a capacity of 100 MW in 2027. TeraWulf expects approximately 75 permanent employees by the end of phase one in 2028. Over half of these positions are expected to be hourly positions and include jobs such as data center operators, laborers, and technicians.³ Salary positions include jobs for electrical engineers and project managers, among others.

² This is a grid-contingent outcome. NYISO's planning process and reliability milestones gate large-load additions over time.

³ The estimated total employment numbers and the breakdown of hourly to salaried positions are based on the current full-time employee roster at TeraWulf's Lake Mariner campus in Somerset, NY.

It is important to place the estimate of roughly 75 permanent jobs in context. While this represents a modest but meaningful increase in local employment, the larger economic effect stems from the site's property-tax contributions rather than its workforce. For comparison, the tenth-largest employer in Tompkins County is the City of Ithaca, with about 410 employees.¹⁹ The proposed data campus is likely to be a mid-sized employer in Tompkins County.

Beyond direct construction and operational employment, bringing several hundred skilled workers into Lansing for multi-year construction will have measurable ripple effects throughout the community. Economic studies consistently find that each construction job typically supports additional local jobs in related sectors such as food service, retail, transportation, and lodging.^{20,21} Workers spend locally—on meals, fuel, materials, and recreation—stimulating demand for restaurants, hardware suppliers, rental housing, and other small businesses.

Beyond direct employment, public meeting records in Somerset, NY document sustained local hiring and contractor activity at TeraWulf's Lake Mariner campus, including multi-year work by regional union halls and Western New York contractors, with stakeholders noting fewer out-of-area commutes and more work retained locally—indicators consistent with indirect spending in food service, retail, and lodging.²²

Impact on Household Energy Bills

How does the proposed redevelopment of the Cayuga site into a data center relate to what Lansing households pay for electricity? The short answer is that it is unlikely to directly or materially change household bills. For most Upstate New York residents, monthly bills are composed of roughly one-third supply charges (the cost of energy itself, which fluctuates with statewide market prices) and two-thirds delivery charges (utility costs for maintaining and operating the transmission and distribution system, as approved by the NY Public Service Commission (PSC)). These rates are primarily influenced by statewide market conditions, PSC-approved delivery tariffs, and weather—not by any single customer or project (see Appendix A1).

While a data center would add steady demand to the regional grid, New York's interconnection rules require large users to pay for any bulk-system upgrades they trigger. That means no new line-item "data-center charge" on residential bills and no direct pass-through of project interconnection costs to households.

Headlines about data centers and rising electricity prices raise concerns about the potential consequences for this site.²³ In some regions, electricity bills have increased when regulators allowed utilities to pass on project-driven grid costs to general customers or granted special rate deals to large users. Examples include Virginia pursuing major transmission work and keeping coal units online alongside rapid data-center growth; Nebraska and Georgia adding fossil generation to meet new load; and parts of Washington buying more power on the market when hydropower was

limited.²⁴ These outcomes reflect policy choices—who pays for upgrades, how fast new supply and wires are added—rather than from the data centers alone.

New York’s structure differs in ways that matter for Lansing. Under NYISO’s interconnection rules, if bulk-system upgrades are required to connect a large project, those costs are assigned to the developer, not consumers.²⁵ At Cayuga, a system impact study has identified roughly \$15 million in voltage-support upgrades (e.g., capacitor banks at Milliken and Wright Avenue; an additional capacitor bank at Oakdale 345 kV) for the first phase of the project (~138 MW) to strengthen local and regional voltage stability.²⁶ TeraWulf bears the costs of these upgrades directly, not Lansing residents.

In addition, once operational, a large facility pays standard delivery charges like any other customer, which means more of the fixed cost of maintaining the system is carried by that new load rather than by households and small businesses. Individual residents’ energy prices continue to be determined in a statewide wholesale market. NYISO already models growing large-load requests while maintaining reliability margins by zone.²⁷ For context, Lansing sits in NYISO Zone C (Central) (see Appendix A2). Zone C is part of upstate New York’s generation backbone and has historically exported power to other parts of the state. It includes a mix of hydro, wind, solar, nuclear, and natural-gas generation, with additional renewable projects requesting interconnection.²⁸

Zone C maintains a sizeable reserve generation capacity (about 2,200 MW in 2025, rising to 3,400–3,700 MW in 2026–2028).²⁷ While a new data center would increase electricity demand in Zone C, the price effect of one new customer is muted given the excess capacity.

Another potential effect is that large users add to price pressure during peak hours. While this is a concern, modern data centers typically participate in demand response and other curtailment programs, reducing load at peak times. TeraWulf has a precedent of participating in these programs; for example, its Lake Mariner facility curtailed over 1,200 MWh in August 2024 as part of its demand response activities.²⁹ Taken together, these facts mean we do not expect a line-item “data center charge” on household bills. Any effect would show up—if at all—indirectly through broader market conditions. Two risks to watch are: (1) cumulative large-load additions outpacing new supply and transmission, and (2) any PSC-approved rate treatment that shifts local distribution costs to all customers.

In simple terms, what Lansing residents pay for electricity depends mostly on statewide markets, weather, and PSC-approved delivery rates rather than on any single project. The proposed data campus in Lansing would add some demand, but is unlikely to be a material driver of household bills. The main trade-off is economic: if energy prices continue to rise for reasons beyond local control, redeveloping the Cayuga site can expand the tax base and help offset those broader costs.

III. ENVIRONMENTAL ANALYSIS

Water Impacts

Closed Loop Cooling System

Unlike the previous coal power generation station, **the proposed data campus will use no water from Cayuga Lake for cooling.**

The old coal plant (owned by Cayuga Operating Company, LLC) was permitted to draw 245,000,000 gallons/day from Lake Cayuga; most of that draw was for cooling steam through heat exchange; with the resulting hot water being discharged back into the lake. That cooling water permit expired on February 1, 2021 (Appendix B1). An amendment to the previous water permit was submitted on June 10, 2021. It reduces permitted draws from the lake to approximately 1,000,000 gallons/day (0.4% of the permitted draw for the old coal plant.) That amendment is currently under review (Appendix B2) **(data campus cooling is not part of that pending amendment.) Furthermore, the Cayuga Operating Company, LLC (the data campus landlord) has informed the Town of Lansing on October 31, 2025 (Appendix B3) that it would surrender all of its water withdrawal permits for Lake Cayuga, in the event that the proposed data campus were to move forward, as proposed.** Cayuga Operating Company, LLC has also alerted TeraWulf of this commitment, and entered into an agreement with them, to this effect (Appendix B4.)

Bolton Point

At the start of operations, the proposed data campus will require an initial 300,000 gallon cooling system charge of potable water. While trucking this water into the site is possible, it would be more environmentally friendly (in light of: e.g., vehicle exhaust, fuel consumption, road wear, etc.) to simply make the 300,000 gallon draw directly from the Bolton Point service within the Town of Lansing. Bolton point is designed to produce 9,000,000 gallons/day of drinking water, but can produce approximately 12,000,000 gallons/day if required. Since the average daily draw from Bolton point production was only 2,560,000 gallons/day (in 2022), there is more than enough capacity in the system to support the modest, one-time draw of 300,000 gallons; needed to fill the closed loop cooling system at the proposed data center. To make things more concrete, consider that an average residential subdivision requires that 1000 gallons/min (1.4 Million gallons/day) of water flow be available within the local distribution system capacity, to fight fires (the “fire flow”). If one of the hydrants within this hypothetical residential subdivision were used to furnish the initial cooling system charge of the proposed data campus, it would take 5 hours of fire flow to do so; a duration of time that is not out of line when extinguishing a large house fire. **With this example in mind, the initial filling of the proposed data center cooling system should not represent an undue burden against the designed capacity of the local distribution system.**

While the system is closed loop, and reuses the initial charge of water, there will be some inevitable, small losses (due to leaks, etc.); thus, it is anticipated that there will be periodic, but modest “top-off” draws from the Bolton Point distribution system. Such draws will be orders of magnitude smaller draws, than the initial 300,000 gallon cooling system charge.

Electricity and greenhouse gases

Energy reliability, along with environmental stewardship are crucial considerations in assessing the impacts from the proposed data center. **As already mentioned in Section II, it is clear that New York Power grid Zone C, Central New York, where the proposed data campus resides within, has a substantial excess capacity of power generation to easily support the up to 138MW data campus load.**

Clean Energy Sources

The proposed data campus would directly connect to the transmission backbone within Zone C of the New York Power grid. Zone C contains a mix of natural gas, hydroelectric, and wind generation facilities. **Approximately 80% of Zone C's generation is emission-free.**²⁸ Renewable sources alone (hydro, wind, solar) account for a significant majority of the generation capacity in Zone C. This zone is also a net exporter of clean energy to downstate New York. Additionally, Zone C has seen a large number of requests for new wind and solar projects to interconnect; indicating a continued growth in these green resources within the zone.

Specific power generation facilities located within or primarily supporting Zone C include:

- Greenidge 4 Power Plant: A natural gas-fired facility located in Torrey.
- City of Oswego (High Dam): A small hydroelectric facility operated by Niagara Mohawk Power Corp. (National Grid).
- Munsville Wind Power: A wind power facility, owned by Consolidated Edison Energy, Inc., located in the upstate region that includes Zone C.
- Baron Winds: A large wind farm located in Steuben County which is in Zone C, owned by EDP Renewables North America LLC.
- Eight Point Wind Energy Center: Another significant wind power project in the Steuben County area, within Zone C.
- Nine Mile Point Nuclear Generation Station, owned by Constellation Energy, Long Island Power Authority, located in Oswego.

Additionally, the major New York Power Authority (NYPA) hydroelectric projects, while not strictly within the Zone C boundary, are large upstate generators whose power is transmitted throughout the region and the entire state, including to Zone C. These include:

- Niagara Power Project (Zone A)
- St. Lawrence-FDR Power Project, Hawkins Point (Zone D)
- Blenheim-Gilboa Pumped Storage Power Project (Zone F)

There is more than enough emission-free, Zone C capacity to handle the 138MW draw for the proposed data campus.

Transmission Level Connection Upgrades and Reliability

The proposed data campus will connect to the grid at the zonal transmission level, within Zone C; thus, greatly reducing potential reliability impacts to residential customers. Additionally, TeraWulf is required to fund NYSEG grid upgrades that will enhance service reliability for these same residential customers. Furthermore, increased distribution charges, at the transmission level (that TeraWulf would pay), may moderate future rate pressures by expanding the customer base funding system-wide maintenance. The specifics of these improvements are now discussed.

To support the proposed data campus, TeraWulf has proposed funding a set of voltage-support upgrades to the NYSEG system that will increase service reliability for all electricity customers within the surrounding area. These improvements total roughly \$15 million and include: (1) installing a 25 MVAR capacitor bank at the Milliken substation to stabilize local voltage during normal operations and outages; (2) upgrading the existing capacitor bank at Wright Avenue to a two-step (2×25 MVAR) configuration so the utility can more precisely manage voltage during higher-stress conditions; and (3) adding a 50 MVAR capacitor bank at the Oakdale 345 kV substation to reinforce voltage stability on the wider regional transmission network.²⁶

Looking now more broadly, reliability upgrades are also generally needed across New York's grid, as the system ages and more growth in electrification occurs. These costs tend to ultimately show up in residential and small-business electricity bills, as "delivery charges." Because the proposed data campus project falls under NYISO's interconnection program, TeraWulf (and not residential and small-business ratepayers) is responsible for these upgrades, which means they will not end up as charges to future residential delivery rates. In other words, TeraWulf will pay for grid-level upgrades so the residents will not have to. Additionally, if operational, the proposed data campus will be one of the largest contributors to NYSEG delivery revenues in the region; meaning a greater share of ongoing system upkeep and modernization will be shouldered by TeraWulf, instead of being spread across households and small businesses. **In summary, TeraWulf is paying for improvements that upgrade and improve reliability within the local grid, to the benefit of the entire community.**

Noise

Frequently cited concerns regarding data center siting pertains to noise resulting from the cooling plant that services the facility. At their Somerset, NY facility, TeraWulf has been engaged in cryptocurrency (e.g., Bitcoin) mining activities, along with third party data center hosting. It is the former case (mining operations) that result in the largest cooling system noise emissions, since the servers used in crypto-mining operations typically rely on air-cooling, and are operating at peak capacity, 24/7. In contrast, **the proposed data campus will host no such mining hardware, and**

thus can rely on state-of-the-art closed-loop water cooling, employing large, low-speed fans to enhance heat transfer, while greatly reducing noise emissions. Additionally, the proposed cooling system is “dry,” and thus will not produce any “brine,” or “salt blow-down” waste streams.

Cooling System

The proposed data campus will employ thirteen Evapco Double Stacked Dry Coolers with the “super low sound fan option.” **Thirteen units of this cooling system have a manufacturer-specified noise output, at 100% fan speed, that results in a perceived 51 dB(A) noise intensity at a stand-off distance of 1,500 feet (Appendix B5).** For reference, a conversation between two people frequently occurs at 60 dB(A), while a commercial office building has an internal, ambient background noise level of about 56 dB(A). Additionally, a TeraWulf commissioned study corroborates these values and further predicts a noise level of 43 dB(A) at the closest existing residence, proximal to the site (Appendix B6.) For reference, that predicted noise level is consistent with the expected ambient noise level within a rural setting. In simple terms, at this closest residence, the data campus is predicted to be inaudible.

IV. COMMUNITY IMPACT

Visual Character and Aesthetics

Comments collected by the town of Lansing have raised questions about how the proposed redevelopment will affect the visual character of the Cayuga Lake shoreline. Reflecting these concerns, one individual noted that “a giant data center would be ugly and disturb the breathtaking view that we have of Cayuga Lake.”³⁰ The proposal does not introduce new industrial activity to an undeveloped shoreline. The site has long hosted the now-retired Cayuga Power Plant (originally Milliken Station), a coal-fired facility built in the 1950s and decommissioned in 2019. For decades, the plant and its tall smokestack (for byproducts of combustion) have been among the most visible structures on the lake.

Because the project redevelops an existing industrial site rather than introducing new construction in a natural area, its aesthetic impact is best understood in relation to the site’s current and historic appearance. The redevelopment will include the demolition of the existing stack, a structure that has long defined the horizon of Cayuga Lake. All materials from that demolition will be recycled as scrap so that nothing is sent to a landfill.

The Cayuga data campus intentionally lowers the visual relief of the site, replacing the former coal plant and its prominent stack with a series of one-story data center buildings set below the surrounding treeline. No lake-facing structures will exceed 35 ft in height (excluding roof mechanicals <= 30 ft). This shift substantially reduces the height and prominence of built structures while maintaining a simple, orderly layout consistent with the site’s long industrial history.

At the Somerset, NY site, the company oversaw demolition of the former power plant's smoke stack and redevelopment of the property into a data center campus, creating a visibly cleaner horizon and a site that blends naturally with its surroundings (see demolition images from Somerset in Appendix C1).

The same approach is planned for the Cayuga site, where removal of the existing stack will eliminate the red flashing lights that have been a frequent source of community complaints. Taking down the stack is the only way to remove those lights, and doing so will also lower the visual profile of the shoreline. As the renderings below show, the redeveloped site will maintain its existing industrial footprint while shifting to a low-profile, one-story design that blends more naturally into the surrounding landscape.

Renderings of the Cayuga Data Center (aerial and water view).



Source: TeraWulf.

Civic Investments

Waterfront and Trail Improvements

In addition to reducing the site's visual prominence, the developer has committed to dedicating a portion of the lakefront acreage for conservation and public use. Plans include contributing part of the shoreline to a wildlife management area and placing additional waterfront land in trust for the Town of Lansing or another local entity to ensure long-term protection. This preserved area would allow for public access, nature trails, and ecological restoration, creating a continuous, publicly accessible green corridor along the water's edge.

Local Service Partnerships

TeraWulf intends to form a community foundation to support public service initiatives through a proposal-based process. Anticipated areas of funding include emergency and medical services—such as the Lansing Fire Department, EMT training programs, and Cayuga Medical Center—along with other projects identified and selected by local stakeholders.

Community and Educational Engagement

A proposed Upstate New York “Innovation Hub,” under discussion with local schools and colleges, including Cornell University and TC3, and regional workforce organizations, would provide technical training in data center operations, electrical systems, and computing infrastructure. The initiative is designed to expand local workforce readiness and strengthen the region's position as a center for advanced technology and sustainable industry.

V. SUMMARY

The independent assessment concludes that TeraWulf's proposed redevelopment of the former Cayuga Power Plant site would repurpose dormant industrial land into a modern data campus powered largely by zero-emission generation. The evidence indicates significant environmental improvements relative to historic use, including no water withdrawal from Cayuga Lake, elimination of direct emissions, and a markedly lower noise and visual profile.

Economically, the Project would add to the local tax base, generating an estimated \$8.7 million in annual property-tax revenue once it reaches 138 MW of deployed data center capacity. The project will generate up to 500 construction jobs during the 2026–2028 buildout phase and sustain about 75 full-time operational employees thereafter. Further economic benefit is realized by TeraWulf's commitment to fund required grid upgrades directly, rather than through ratepayer surcharges.

Community-enhancing measures, including potential lakefront conservation contributions, and the establishment of an Innovation Hub, in collaboration with local schools and regional colleges, would provide additional local benefits.

As with any major redevelopment, ongoing coordination among the developer, the Town of Lansing, and regional stakeholders will be critical. Ensuring transparency in environmental monitoring, sustaining open dialogue on community initiatives, and aligning workforce training with regional needs will help determine how effectively the Cayuga data campus supports both economic revitalization and environmental stewardship.

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Supporting Documentation for Economic Analysis

A1: An individual's electricity bill has three main parts: supply, delivery, and surcharges.

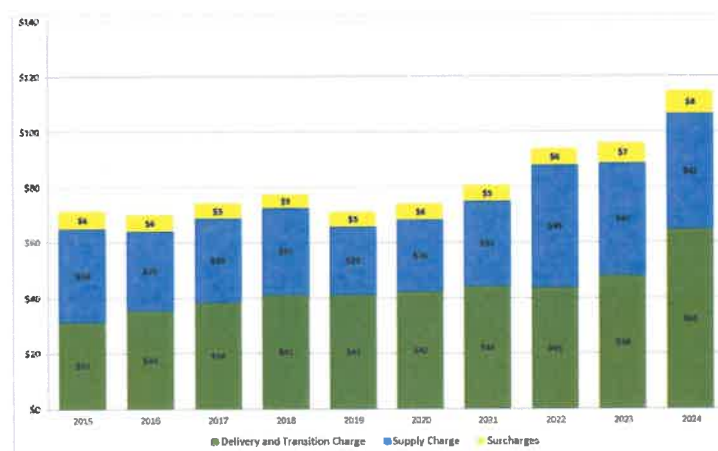
- Supply covers the cost of electricity itself, which NYSEG buys each hour on the wholesale market operated by the New York Independent System Operator (NYISO). NYSEG doesn't profit from this portion—it simply passes through what it pays, plus a small administrative fee called the Merchant Function Charge.
- Delivery pays for the poles, wires, substations, and customer service that bring power to your home. These rates are reviewed and approved by the New York Public Service Commission (PSC) through formal utility rate cases.
- Surcharges are state-mandated items added to all customer bills. They include taxes, the System Benefits Charge (which funds energy-efficiency and low-income programs), a State Assessment required under state law, and reliability support charges when needed.

Each part changes for different reasons, which is why household bills fluctuate even when usage stays the same.

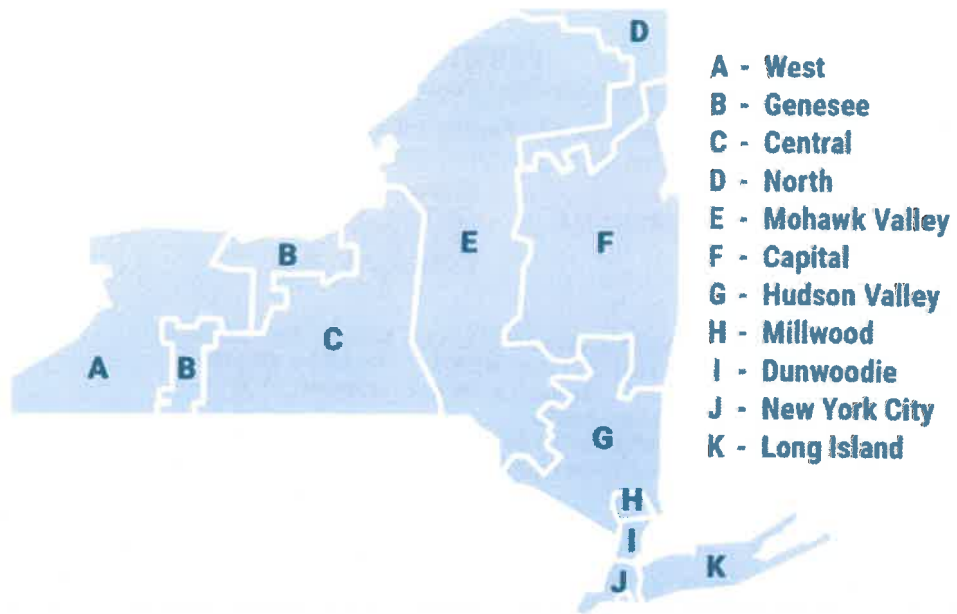
Recent history is a good guide to baseline expectations about energy bills. Using NYSEG's own "typical bill" data for a household using 600 kilowatt-hours per month, the average bill rose from roughly \$71 in 2015 to about \$115 in 2024—an increase of about \$44 over nine years, or ~5–6% per year on average (about \$5 more per month each year). If that trend continued, a \$115 monthly bill in 2024 would be on the order of \$128 in 2026 and ~\$135 in 2027, recognizing that the actual bill varies with the weather and how much electricity is used. Nothing in the data suggests bills will stop fluctuating or that they can be pinned on any one local customer.

Monthly Residential Electricity Cost

Based on average use of 600 kilowatt-hours per month



A2: New York State Independent Operator Map of Energy Grids



Appendix B. Supporting Documentation for Environmental Analysis

B1: Expired water permit for drawing 245,000,000 gallons/day from Lake Cayuga to support the operation of the old coal power generation plant.

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Facility DEC ID 7-5032-00019

PERMIT Under the Environmental Conservation Law (ECL)

Permittee and Facility Information

Permit Issued To:
CAYUGA OPERATING COMPANY LLC
228 CAYUGA DR
LANSING, NY 14882
(607) 533-7913

Facility:
CAYUGA OPERATING COMPANY, LLC
228 CAYUGA DR
LANSING, NY 14882

Facility Location: in LANSING in TOMPKINS COUNTY Village: Town of Lansing
Facility Principal Reference Point: NYTM-E: 365.905 NYTM-N: 4717.889
Latitude: 42°36'06.4" Longitude: 76°38'04.7"

Project Location: East bank of Cayuga Lake
Authorized Activity: This permit authorizes the withdrawal of a supply of 245,000,000 gallons per day (GPD) of water from Cayuga Lake for cooling purposes and other processes related to electrical generation.

Permit Authorizations

Water Withdrawal Non-public - Under Article 15, Title 15
Permit ID 7-5032-00019/00024 (WWA No. 11,753)
Renewal Effective Date: 1/26/2015 Expiration Date: 2/1/2021

NYSDEC Approval

By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with the ECL, all applicable regulations, and all conditions included as part of this permit.

Permit Administrator: KENT P SANDERS, Deputy Chief Permit Administrator
Address: NYSDEC HEADQUARTERS
625 BROADWAY
ALBANY, NY 12233

Authorized Signature: Kent P. Sanders

Date 1/26/2015

Permit Components

WATER WITHDRAWAL NON-PUBLIC PERMIT CONDITIONS
GENERAL CONDITIONS, APPLY TO ALL AUTHORIZED PERMITS

Page 1 of 4



NOTIFICATION OF OTHER PERMITTEE OBLIGATIONS

WATER WITHDRAWAL NON-PUBLIC PERMIT CONDITIONS

- 1. Approval of Completed Works from NYS P.E.** Any new works constructed or modified pursuant to this water withdrawal permit shall be constructed under the general supervision of a person licensed to practice engineering in this state (professional engineer). Upon completion of construction and pre-operational testing, such works may not commence final operation until the professional engineer first certifies in writing to the Department that the works have been constructed in accordance with the issued permit.
- 2. Permit Expiration and Renewal** Any permittee who intends to continue to operate a water withdrawal system beyond the period of time covered in the applicable water withdrawal permit must apply for a renewal of the permit at least 30 days prior to its expiration.
- 3. Transfer of Ownership of Water Withdrawal Systems** Unless otherwise specified in this permit, a new water withdrawal permit application is required for the acquisition or condemnation of the approved water withdrawal system.
- 4. Cooling Water Withdrawals Regulated by SPDES** Nothing in this water withdrawal permit shall supercede the need to, where necessary, obtain an appropriate SPDES permit that allows for the operation of a cooling water intake structure and the discharge of the amounts of water approved by this water withdrawal permit. If any modifications to the location, or capacity of the intake structure are required by the permittee's SPDES permit, permittee must also apply for a modification of this water withdrawal permit to reflect such changes.
- 5. Incorporation of the Cooling Water SPDES Water Conservation and Fisheries Protection Measures** Required measures for water conservation and the reduction of impacts to the fisheries resource contained in the Biological Monitoring Requirement Section of the facilities SPDES permit are hereby incorporated by reference into this permit.
- 6. Annual Water Withdrawal Reports** The permittee must submit a Water Withdrawal Reporting Form to the Department's Division of Water, Albany, NY, by March 31st of each year. The form is available on the Department's website and includes information regarding approved sources of water supply, source capacities, average and maximum day water use data and water conservation and efficiencies employed during the past calendar year.
- 7. Source Meter Calibration** All source meters or measuring devices shall be calibrated for accuracy at least once each year.
- 8. Meter All Sources** The permittee must install and maintain meters or other appropriate measuring devices on all sources of supply used in the system. Source master meters or measuring devices are to be read, and records kept of those readings, on at least a weekly basis. The permittee must maintain records of water withdrawn and consumptive use for each calendar year.

GENERAL CONDITIONS - Apply to ALL Authorized Permits:



1. Facility Inspection by The Department The permitted site or facility, including relevant records, is subject to inspection at reasonable hours and intervals by an authorized representative of the Department of Environmental Conservation (the Department) to determine whether the permittee is complying with this permit and the ECL. Such representative may order the work suspended pursuant to ECL 71- 0301 and SAPA 401(3).

The permittee shall provide a person to accompany the Department's representative during an inspection to the permit area when requested by the Department.

A copy of this permit, including all referenced maps, drawings and special conditions, must be available for inspection by the Department at all times at the project site or facility. Failure to produce a copy of the permit upon request by a Department representative is a violation of this permit.

2. Relationship of this Permit to Other Department Orders and Determinations Unless expressly provided for by the Department, issuance of this permit does not modify, supersede or rescind any order or determination previously issued by the Department or any of the terms, conditions or requirements contained in such order or determination.

3. Applications For Permit Renewals, Modifications or Transfers The permittee must submit a separate written application to the Department for permit renewal, modification or transfer of this permit. Such application must include any forms or supplemental information the Department requires. Any renewal, modification or transfer granted by the Department must be in writing. Submission of applications for permit renewal, modification or transfer are to be submitted to:

Deputy Chief Permit Administrator
NYSDEC HEADQUARTERS
625 BROADWAY
ALBANY, NY 12233

4. Permit Modifications, Suspensions and Revocations by the Department The Department reserves the right to exercise all available authority to modify, suspend or revoke this permit. The grounds for modification, suspension or revocation include:

- a. materially false or inaccurate statements in the permit application or supporting papers;
- b. failure by the permittee to comply with any terms or conditions of the permit;
- c. exceeding the scope of the project as described in the permit application;
- d. newly discovered material information or a material change in environmental conditions, relevant technology or applicable law or regulations since the issuance of the existing permit;
- e. noncompliance with previously issued permit conditions, orders of the commissioner, any provisions of the Environmental Conservation Law or regulations of the Department related to the permitted activity.

5. Permit Transfer Permits are transferrable unless specifically prohibited by statute, regulation or



another permit condition. Applications for permit transfer should be submitted prior to actual transfer of ownership.

NOTIFICATION OF OTHER PERMITTEE OBLIGATIONS

Item A: Permittee Accepts Legal Responsibility and Agrees to Indemnification

The permittee, excepting state or federal agencies, expressly agrees to indemnify and hold harmless the Department of Environmental Conservation of the State of New York, its representatives, employees, and agents ("DEC") for all claims, suits, actions, and damages, to the extent attributable to the permittee's acts or omissions in connection with the permittee's undertaking of activities in connection with, or operation and maintenance of, the facility or facilities authorized by the permit whether in compliance or not in compliance with the terms and conditions of the permit. This indemnification does not extend to any claims, suits, actions, or damages to the extent attributable to DEC's own negligent or intentional acts or omissions, or to any claims, suits, or actions naming the DEC and arising under Article 78 of the New York Civil Practice Laws and Rules or any citizen suit or civil rights provision under federal or state laws.

Item B: Permittee's Contractors to Comply with Permit

The permittee is responsible for informing its independent contractors, employees, agents and assigns of their responsibility to comply with this permit, including all special conditions while acting as the permittee's agent with respect to the permitted activities, and such persons shall be subject to the same sanctions for violations of the Environmental Conservation Law as those prescribed for the permittee.

Item C: Permittee Responsible for Obtaining Other Required Permits

The permittee is responsible for obtaining any other permits, approvals, lands, easements and rights-of-way that may be required to carry out the activities that are authorized by this permit.

Item D: No Right to Trespass or Interfere with Riparian Rights

This permit does not convey to the permittee any right to trespass upon the lands or interfere with the riparian rights of others in order to perform the permitted work nor does it authorize the impairment of any rights, title, or interest in real or personal property held or vested in a person not a party to the permit.

Item E: SEQR Type II Action Under the State Environmental Quality Review Act (SEQR), this project has been determined to be a Type II Action and therefore is not subject to further procedures under this law.

B2: Pending water permit for proposed data center (no cooling application)

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Facility DEC ID 7-5032-00019



DRAFT PERMIT
Under the Environmental Conservation Law (ECL)

Permittee and Facility Information

Permit Issued To:
CAYUGA OPERATING COMPANY LLC
228 CAYUGA DR
LANSING, NY 14882
(607) 533-7913

Facility:
CAYUGA OPERATING COMPANY, LLC
228 CAYUGA DR
LANSING, NY 14882

Facility Location: in LANSING in TOMPKINS COUNTY

Facility Principal Reference Point: NYTM-E: 365.905 NYTM-N: 4717.889
Latitude: 42°36'06.4" Longitude: 76°38'04.7"

Authorized Activity: This permit authorizes the withdrawal of up to 1,008,000 gallons per day (gpd) of water for cooling/process water, water treatment, sump pumping, and dust control at the Cayuga Operating Company LLC facility in accordance with the terms and conditions of this permit.

Permit Authorizations

Water Withdrawal Non-public - Under Article 15, Title 15

Permit ID 7-5032-00019/00024 (WWA No. 11,753)

Renewal Proposed Effective Date: Proposed Expiration Date:

NYSDEC Approval

By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with the ECL, all applicable regulations, and all conditions included as part of this permit.

Permit Administrator: JONATHAN J STERCHO, Deputy Permit Administrator
Address: NYSDEC Region 7 Headquarters
615 Erie Boulevard W
Syracuse, NY 13204 -2400

Authorized Signature: _____ **Date** ____/____/____

Permit Components

WATER WITHDRAWAL NON-PUBLIC PERMIT CONDITIONS

GENERAL CONDITIONS, APPLY TO ALL AUTHORIZED PERMITS

Draft Permit

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NOTIFICATION OF OTHER PERMITTEE OBLIGATIONS

WATER WITHDRAWAL NON-PUBLIC PERMIT CONDITIONS

1. Source Approval Table

This table summarizes all system source approvals					
Well Field or Source of Water Supply		Status	Past WWA Number	Individual Source Capacities (gpm)	Maximum Permitted Well Field or Supply of Water (gpd)
Cayuga Lake	House Service Pump	Active	-	700	1,008,000 GPD
	Emergency Fire Pump*	Active	-	2,000*	
	Emergency Fire Pump*	Active		1,000*	
Total Approved					1,008,000 GPD
*Note – Emergency withdrawals for fire suppression purposes are exempted under 6 NYCRR Part 601.9 and are not included in permitted total.					

2. Permit Expiration and Renewal Any permittee who intends to continue to operate a water withdrawal system beyond the period of time covered in the applicable water withdrawal permit must apply for a renewal of the permit at least 90 days prior to its expiration.

3. Transfer of Ownership of Water Withdrawal Systems Unless otherwise specified in this permit, a new water withdrawal permit application is required for the acquisition or condemnation of the approved water withdrawal system.

4. Approval of Completed Works from NYS P.E. Any new works constructed or modified pursuant to this water withdrawal permit shall be constructed under the general supervision of a person licensed to practice engineering in this state (professional engineer). Upon completion of construction and pre-operational testing, such works may not commence final operation until the professional engineer first certifies in writing to the Department that the works have been constructed in accordance with the issued permit.

5. Meter All Sources The permittee must install and maintain meters or other appropriate measuring devices on all sources of supply used in the system. Source master meters or measuring devices are to be read, and records kept of those readings, on at least a weekly basis. The permittee must maintain records of water withdrawn and consumptive use for each calendar year.

6. Source Meter Calibration All source meters or measuring devices shall be calibrated for accuracy at least once each year.



Draft Cayuga WW Permit Renewal
(Pending).pdf

regulated by SPDES Nothing in this water withdrawal permit shall supercede the need to, where necessary, obtain an appropriate SPDES permit that allows for the operation of a cooling water intake structure and the discharge of the amounts of water approved by this water withdrawal permit. If any modifications to the location, or capacity of the intake structure are required by the permittee's SPDES permit, permittee must also apply for a modification of this water withdrawal permit to reflect such changes.

8. Incorporation of the Cooling Water SPDES Water Conservation and Fisheries Protection Measures Required measures for water conservation and the reduction of impacts to the fisheries resource contained in the Biological Monitoring Requirement Section of the facility's SPDES permit are hereby incorporated by reference into this permit.

9. Permittee Must Maintain Records The permittee must retain records of production and consumption, reports of audit results, and summaries of leaks detected and repaired for at least ten years. The permittee must provide copies of such of these records, reports, and summaries as might be requested in writing by the Department within one month of receiving such a request.

10. Conduct Water Audits At least once annually, the permittee must conduct a system-wide water audit that utilizes metered water production and consumption data to determine unaccounted-for water.

11. Leak Detection and Repair The permittee must develop and implement a leak detection and repair program using visual inspection of above ground piping and fittings and sonic detection equipment, meter-to-meter readings reconciliation or other methods acceptable to the Department for the inspection of the facility's underground piping in a systematic fashion. Leaking pipes and fittings shall be repaired in a timely manner.

12. Annual Water Withdrawal Reports The permittee must submit a Water Withdrawal Reporting Form to the Department's Division of Water, Albany, NY by March 31st of each year. The form is available on the Department's website and includes information regarding approved sources of water supply, source capacities, average and maximum day water use data and water conservation and efficiencies employed during the past calendar year.

GENERAL CONDITIONS - Apply to ALL Authorized Permits:

1. Facility Inspection by The Department The permitted site or facility, including relevant records, is subject to inspection at reasonable hours and intervals by an authorized representative of the Department of Environmental Conservation (the Department) to determine whether the permittee is complying with this permit and the ECL. Such representative may order the work suspended pursuant to ECL 71- 0301 and SAPA 401(3).

The permittee shall provide a person to accompany the Department's representative during an inspection to the permit area when requested by the Department.

A copy of this permit, including all referenced maps, drawings and special conditions, must be available for inspection by the Department at all times at the project site or facility. Failure to produce a copy of the permit upon request by a Department representative is a violation of this permit.



2. Relationship of this Permit to Other Department Orders and Determinations Unless expressly provided for by the Department, issuance of this permit does not modify, supersede or rescind any order or determination previously issued by the Department or any of the terms, conditions or requirements contained in such order or determination.

3. Applications For Permit Renewals, Modifications or Transfers The permittee must submit a separate written application to the Department for permit renewal, modification or transfer of this permit. Such application must include any forms or supplemental information the Department requires. Any renewal, modification or transfer granted by the Department must be in writing. Submission of applications for permit renewal, modification or transfer are to be submitted to:

Regional Permit Administrator
NYSDEC Region 7 Headquarters
615 Erie Boulevard W
Syracuse, NY 13204 -2400

4. Permit Modifications, Suspensions and Revocations by the Department The Department reserves the right to exercise all available authority to modify, suspend or revoke this permit. The grounds for modification, suspension or revocation include:

- a. materially false or inaccurate statements in the permit application or supporting papers;
- b. failure by the permittee to comply with any terms or conditions of the permit;
- c. exceeding the scope of the project as described in the permit application;
- d. newly discovered material information or a material change in environmental conditions, relevant technology or applicable law or regulations since the issuance of the existing permit;
- e. noncompliance with previously issued permit conditions, orders of the commissioner, any provisions of the Environmental Conservation Law or regulations of the Department related to the permitted activity.

5. Permit Transfer Permits are transferrable unless specifically prohibited by statute, regulation or another permit condition. Applications for permit transfer should be submitted prior to actual transfer of ownership.

NOTIFICATION OF OTHER PERMITTEE OBLIGATIONS

Item A: Permittee Accepts Legal Responsibility and Agrees to Indemnification

The permittee, excepting state or federal agencies, expressly agrees to indemnify and hold harmless the Department of Environmental Conservation of the State of New York, its representatives, employees, and agents ("DEC") for all claims, suits, actions, and damages, to the extent attributable to the permittee's acts or omissions in connection with the permittee's undertaking of activities in connection with, or operation and maintenance of, the facility or facilities authorized by the permit whether in compliance or not in compliance with the terms and conditions of the permit. This indemnification does



not extend to any claims, suits, actions, or damages to the extent attributable to DEC's own negligent or intentional acts or omissions, or to any claims, suits, or actions naming the DEC and arising under Article 78 of the New York Civil Practice Laws and Rules or any citizen suit or civil rights provision under federal or state laws.

Item B: Permittee's Contractors to Comply with Permit

The permittee is responsible for informing its independent contractors, employees, agents and assigns of their responsibility to comply with this permit, including all special conditions while acting as the permittee's agent with respect to the permitted activities, and such persons shall be subject to the same sanctions for violations of the Environmental Conservation Law as those prescribed for the permittee.

Item C: Permittee Responsible for Obtaining Other Required Permits

The permittee is responsible for obtaining any other permits, approvals, lands, easements and rights-of-way that may be required to carry out the activities that are authorized by this permit.

Item D: No Right to Trespass or Interfere with Riparian Rights

This permit does not convey to the permittee any right to trespass upon the lands or interfere with the riparian rights of others in order to perform the permitted work nor does it authorize the impairment of any rights, title, or interest in real or personal property held or vested in a person not a party to the permit.

DRAFT

B3: Cayuga Operating Company, LLC intent to relinquish water permits if Cayuga Data Campus is approved and moves forward

CAYUGA OPERATING COMPANY LLC
228 Cayuga Drive
Lansing, NY 14882
Telephone: (607) 533-7913
Fax: (607) 533-8744

October 31, 2025

Town Clerk
Town of Lansing, New York
PO Box 186
29 Auburn Rd.
Lansing, New York 14882
Attn: Ms. Debbie Munson, RMC

RE: Notice for the Public Record - NYSDEC Permit Application Notification

Dear Ms. Munson:

On October 30, 2025, we received notice from the New York State Department of Environmental Conservation (NYSDEC) notifying Cayuga Operating Company LLC that the renewal applications we submitted for our State Pollutant Discharge Elimination System (SPDES) and Water Withdrawal permits for our site at 228 Cayuga Drive are complete. Town Supervisor Ruth Groff was copied on this notice from the NYSDEC. This notice could cause some confusion given recent discussions about our new tenant TeraWulf's development of the Cayuga Data Campus on our site.

Our SPDES water permit renewal application was originally submitted on June 27, 2014, while the coal-fired plant was operational. Our water withdrawal permit was submitted on December 22, 2020. Subsequently, on June 10, 2021, we submitted an amendment to the SPDES permit application. This amendment reflected the extensive environmental remediation we successfully completed following closure of the coal-fired plant in 2020. Separately, the water withdrawal permit application reflects a reduction from 245 million gallons per day to just over one million gallons per day based on the closure of the plant.

These permit applications predate TeraWulf's lease on our site and are entirely unrelated to the Cayuga Data Campus project. The Cayuga Data Campus will not withdraw water from Lake Cayuga. For the sake of good order, we have agreed to surrender our Water Withdrawal permit in the event the Cayuga Data Campus receives all requisite permits and approvals to advance as planned.

Respectfully submitted,



Rebecca Francus, President
Cayuga Operating Company LLC

B4: Cayuga Operating Company, LLC agreement with TerWulf to relinquish water permits if Cayuga Data Campus is approved and moves forward

CAYUGA OPERATING COMPANY LLC
228 Cayuga Drive
Lansing, NY 14882
Telephone: (607) 533-7913
Fax: (607) 533-8744

October 31, 2025

TeraWulf Inc.
9 Federal Street
Easton, MD 21601
Attn: Kerri Langlais

Re: Acknowledgment of DEC Notice and Water Permit Status – Cayuga Site

Dear Ms. Langlais:

Cayuga Operating Company LLC ("COC"), as landlord of the site located at 228 Cayuga Drive in Lansing, New York, acknowledges receipt of the New York State Department of Environmental Conservation ("NYSDEC") notice dated October 30, 2025, regarding the SPDES and Water Withdrawal permit renewal applications previously submitted by COC.

As you know, these applications were filed several years prior to execution of TeraWulf's lease of a portion of the property for the Cayuga Data Campus project in August 2025. The purpose of those filings was to preserve optionality and flexibility for potential future development at the site, including but not limited to potential new power generation, which has been identified by the State as a priority for maintaining regional reliability and resource adequacy.

That being said, COC hereby confirms and covenants that, should the Cayuga Data Campus receive all requisite permits and approvals to advance as planned, COC will surrender the subject Water Withdrawal permit in coordination with TeraWulf and the NYSDEC, ensuring full regulatory alignment between site operations and applicable environmental requirements.

Please let us know if any further documentation or correspondence is required.

Sincerely,



Rebecca Francus
President
Cayuga Operating Company LLC

B5: Manufacturer specification sheets for Evapco Double Stacked Dry Coolers with the “super low sound fan option”



Re-Submittal

Date:	October 28 th , 2024	Customer:	Data Airflow
Project Name:	Lake Mariner Phase 2	Engineer:	Northshore
Job Number:	2401-1252	Spec Section:	23

Johnson Barrow respectfully submits the following equipment for review:

Product	Tag	Qty.	Model	Manufacturer
Dry Coolers	DC-1 thru DC-13	13	EAW	Evapco

General Notes:

- This submittal is for approval. Approval is **required** in order for equipment to be released for fabrication
- Submittal revised to include rating with 33% Propylene Glycol in lieu of 40% Propylene Glycol.

Submitted By:

Shane Ahlers
Johnson Barrow Oregon
Direct/Cell: 971-325-4301
Email: SAhlers@JBarrow.com

Sign	Date
Approved as Noted Approved with Comments Revise and Re-submit	

735 SW 20th Place 230, Portland, OR 97205
PHONE (971) 717-7123



Submittal

Scope of Offer and Clarifications

Evapco Double Stacked Dry Coolers

Unit Tag	Model	Qty
DC-1 thru DC-13	EAW	13

Scope of Supply:

- (13) Evapco EAW Double Stacked Dry Coolers
- Capable of Cooling 977gpm of 33% Propylene Glycol from 115F to 110F with an Entering Dry Bulb of 94F and Entering Air Wet Bulb of 75F
- G-235 Galvanized Steel Structure and Casing
- 304L Stainless Steel Coil with AL Fins
- Plain End Coil Connections
- Nitrogen Charged Coil
- Belt Drive Fans
- Vibration Switch
- Internal Drive Access Platform
- NEMA Inverter Capable, Premium Efficient Fan Motors
- Low Voltage Terminal Block
- Factory Mounted Disconnects for Each Fan Motor
- Return Ben Cover Plate
- 100% Thermal Performance Guarantee and CTI Certified
- Startup by Factory Trained Technician
- (13) 200hp ABB VFDs to Each Serve Three 60hp Motors
 - Individual Manual Motor Protection for Individual Isolation
- External Service Platform with Ladder
- Low Sound Fans

Exclusions / Clarifications:

- Startup, alignment, balancing, commissioning, and owner training
- Spare parts
- Installation, rigging, wiring, and storage
- Seismic calculations, certifications, isolation, bases, etc.
- Labor warranty
- Insulation and/or jacketing
- Outdoor rated motors
- 5' Tall Elevation Platforms

735 SW 20th Place 230, Portland, OR 97205
PHONE (971) 717-7123

Closed Circuit Cooler Technical Data Sheet



Shane Ahlers
735 SW 20th Place
Suite 230
Portland, Oregon 97205
☎ 971-325-4301
✉ shahlers@jbarrow.com

(13) EAW-DD33S3XL045X4-625AXSP04

Project Details

Project Name : Lake Mariner
Location: 7725 Lake Road Barker New York 14012

Date: 10/28/2024
Customer:
Contact:
Contact Email:

Product Description

The eco-Air Series V-Configuration Double Stack Industrial Cooler is a high capacity factory assembled 100% dry cooler which maximizes heat transfer surface area and airflow to provide maximum cooling capacity for a given plan area. Every eco-Air Series unit comes with **EVAPCO's exclusive 100% thermal performance guarantee**, ensuring peace of mind in selecting the ideal cooling solution for your needs.

Selection Criteria	Total	Each Unit	Required Capacity
Flow:	12,701.4 GPM	977.0 GPM	90,000.00 MBH
	33%	33%	6,000.00 Tons
Fluid:	Propylene Glycol	Propylene Glycol	Altitude: 0 ft
Entering Fluid Temp:	115.0 F	115.0 F	
Leaving Fluid Temp:	100.0 F	100.0 F	
Entering Wet Bulb:	75.0 F	75.0 F	
Relative Humidity:	41.8%	41.8%	
Entering Dry Bulb:	94.0 F	94.0 F	



Unit Selected

Thirteen(13) EVAPCO EAW-DD33S3XL045X4-625AXSP04 at 100.3% capacity (6,943.67 MBH each)

Product line is CTI certified for water, propylene glycol or ethylene glycol as process fluid. Selection is rated in accordance with CTI Standard 201 Dry RS.



Physical Data Per Unit

Overall Dimensions (WxLxH):	11'-10 1/2" x 38'-8 1/4" x 20'-1 1/2"
Operating Weight:	46,260 lbs
Shipping Weight:	40,230 lbs
Heaviest Section:	23,350 lbs
*weights and dimensions could vary depending on options selected	
Fin Spacing:	10 fins per inch
Fin Thickness:	0.01 inches
Surface Area:	151,249.7 sq ft

Fan Motor Data Per Unit

Number of Fans:	3
# of Fan Motors:	3
Nameplate Power (460/3/60):	60 HP Per Motor
Total Connected Nameplate Power:	180.00 HP
Motor Type:	NEMA

Additional Details Per Unit

Air Flow:	618,998 CFM
Coil Volume:	713.9 gal per unit
Coil Design Pressure:	250 psi

Hydraulic Data

Pressure Drop Through Coil:	11.1 psi
-----------------------------	----------

Layout Criteria

From FACE B/D to wall:	4.00 ft
From FACE A/C to wall:	10.00 ft
Between FACE B/D ends:	8.00 ft
Between FACE A/C sides:	20.00 ft

Sound Data(dB(A) @ 5'/50')

Face A (Opp Mtr. Side):	79/66	Face C (Motor Side):	79/66
Face B (End):	70/62	Face D (Opp End):	70/62
Top:	82/69		

Notes: Sound Pressure Levels are according to CTI Standard ATC-128 and verified by an

Full Speed Complete Sound Data



Shane Ahlers
735 SW 20th Place
Suite 230
Portland, Oregon 97205
971-325-4301
sahlers@jbarrow.com

Sound Pressure Levels (SPL) in dB RE 0.0002 Microbar
Sound Power Levels (PWL) in dB RE 10-12 Watt

Model EAW-DD3353XL045X4-625AXSP04
Motor 60 HP
Motors 3
Speed Full Speed

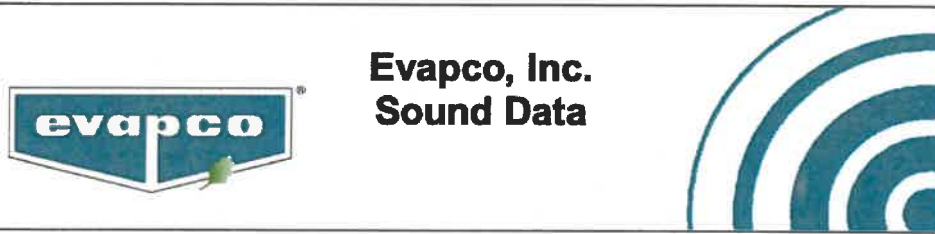
Single Unit Data

Band	Sound Pressure Level (dB)										Sound Power Level (db)
	End		Motor Side		Opp End		Opp Mtr. Side		Top		
	5.0 ft (1.5m)	1,500.0 ft (457.2m)	5.0 ft (1.5m)	1,500.0 ft (457.2m)	5.0 ft (1.5m)	1,500.0 ft (457.2m)	5.0 ft (1.5m)	1,500.0 ft (457.2m)	5.0 ft (1.5m)	1,500.0 ft (457.2m)	
63	79	42	88	46	79	42	88	46	91	49	111
125	78	41	87	45	78	41	87	45	90	48	110
250	73	36	82	41	73	36	82	41	85	44	105
500	66	29	75	33	66	29	75	33	78	36	98
1000	61	22	70	26	61	22	70	26	73	29	93
2000	58	16	67	20	58	16	67	20	70	23	90
4000	54	7	63	11	54	7	63	11	66	14	86
8000	50	-8	59	-4	50	-8	59	-4	62	-1	82
Calc dBA	70	32	79	36	70	32	79	36	82	39	102

Sound option(s) selected: None

- Remarks:
1. Sound Pressure Levels are according to CTI Standard ATC-128 and verified by an independent CTI-licensed sound test agency
 2. Sound Power Levels are calculated according to the Small Units Section 8
 3. Sound from free-field conditions over a reflecting plane with -1/+2 db(A) tolerance
 4. Noise levels can increase with variable frequency drives depending on the drive manufacturer and the drive configuration
 5. Complete unit sound data with all fans operating

Sound rating is for a single fluid cooler running at 100% fan speed. See next page for sound rating with all thirteen units running at 100% fan speed.



Sound Pressure Levels (SPL) in dB RE 0.0002 Microbar
 Sound Power Levels (PWL) in dB RE 10⁻¹² Watt

MODEL: (13) EAW-DD33S3XL045X4-625AXSP04 Sound Reduction Options
 MOTOR: 60 Hp (45 kW) Super Low Sound Fan
 # MOTORS: 39
 SPEED: 100.0%

BAND	SOUND PRESSURE LEVEL					ISO-3744 SOUND POWER LEVEL
	End	Mtr. Side	End	Opp. Mtr. Side	Top	
	1500 ft (457 m)	1500 ft (457 m)	1500 ft (457 m)	1500 ft (457 m)	1500 ft (457 m)	
63 HZ	53	54	53	54	60	122
125 HZ	52	53	52	53	59	121
250 HZ	48	49	48	49	55	117
500 HZ	40	41	40	41	47	110
1 kHz	35	36	35	36	42	104
2 kHz	31	32	31	32	38	101
4 kHz	18	19	18	19	25	97
8 kHz	10	10	10	10	13	93
dBA	44	45	44	45	51	113

- REMARKS: 1. Sound Pressure Levels are according to CTI Standard ATC-128.
 2. Sound Power Levels are calculated according to ISO-3744
 3. Sound from free-field conditions over a reflecting plane with +/- 2 db(A) tolerance.
 4. Noise levels can increase with variable frequency drives depending on the drive manufacturer and the drive configuration.
 5. Complete unit sound data.

Sound rating is for a thirteen units running at 100% fan speed. Assumed layout is two rows, end to end, one row with six units and the other with 7 units. If unit ends face property line, the perceived sound will be 51dBA at 1,500'. If unit sides face property line, the perceived sound will be 56dBA at 1,500'.



**ENVIRONMENT
& HEALTH**

MEMO

Project name **Lake Hawkeye**
Project no. **1940113922**
Client **Terawulf, LLC**
From **Hanna Yangliou, P.Eng., Senior Lead Consultant, Ramboll**
Jeff Szymanski, P.E., Senior Managing Consultant, Ramboll
Brent Ferran, P.E., Principal, Ramboll
Description **Preliminary acoustical design evaluation for the Cayuga Lansing campus project consisting of three (3) data center buildings. This assessment is based on the site drawing dated September 10, 2025. This work was undertaken in accordance with the agreement between Ramboll Americas Engineering Solutions, Inc. (RAES) and Cayuga Operating Company, LLC, dated May 6, 2025.**

Cayuga Lansing Design Engineering Project – Preliminary Acoustical Design Evaluation R1

Date: October 27, 2025

This memo provides a summary of preliminary acoustical design evaluation for the Cayuga Lansing campus of three (3) data centers.

Applicable Regulatory Limits

The State of New York Environmental Quality Review Act (SEQR) has a policy and guidelines for assessing noise impacts. Table 1 outlines the applicable recommendations for the site in reference to the SEQR Section V.B.1.c., "Thresholds for Significant Sound Pressure Level Increase."

Ramboll
82 Corporate Woods
10851 Mastin Boulevard
Suite 100
Overland Park, KS 66210
USA

T+1 913 553 5922
<https://ramboll.com>

Table 1. State of New York SEQR Summary

New York State Environmental Quality Review Policy	
Receptor Classification	Maximum Permissible Sound Pressure Levels
Non-Industrial (Residential)	Ambient + 6 dBA (Complaint Risk)
	Upper Limit of 65 dBA

Existing conditions have not yet been established and will be assessed through an ambient sound level survey. Therefore, the specific applicable regulatory limits cannot yet be identified and are noted above as "Ambient +6 dBA".

Acoustical Design Analysis

Ramboll has completed a preliminary acoustical design analysis for the Cayuga Lansing campus. The acoustical analysis incorporated the project layout and design from the Cayuga Site Development Package R2 dated September 10, 2025 and internal Ramboll models, with equipment sound power level specifications as provided by the manufacturers. Sound levels were evaluated along the property boundaries of the closest north, east, and south residential receptors near the project site. The results are shown in Table 2 and Figure 1.

Based on the predicted sound pressure levels, a measured ambient noise level of 37+ dBA at R1, 33+ to 34+ dBA at R2 and R3 would be required to meet the regulatory requirements. This area is

characterized by a rural environment, with sound pressure levels typically ranging from 30 to 45 dBA. The exact ambient sound levels measurements will depend on the nature and intensity of the existing noise sources.

If facility sound levels exceed regulatory limits, mitigation options like enclosures, silencers, or acoustical barriers may be considered after assessing ambient conditions to meet project acoustical criteria.

Table 2. Predicted Modeling Results for Specific Receptors

Receptor Location	Description	Most Stringent Regulatory Limit (dBA)	Predicted Sound Levels at Receptors from the data center (dBA)	Maximum Ambient Sound Level at Receptors that would trigger noise abatement ¹
R1	South Residential	Ambient + 6	43	37
R2	East Residential	Ambient + 6	40	34
R3	North Residential	Ambient + 6	39	33

¹ For example: if the ambient is above 37 DBA at Receptor R1 then no noise abatement is needed for regulatory compliance and if the ambient is 37 DBA or below at Receptor R1 then noise abatement is needed for regulatory compliance.

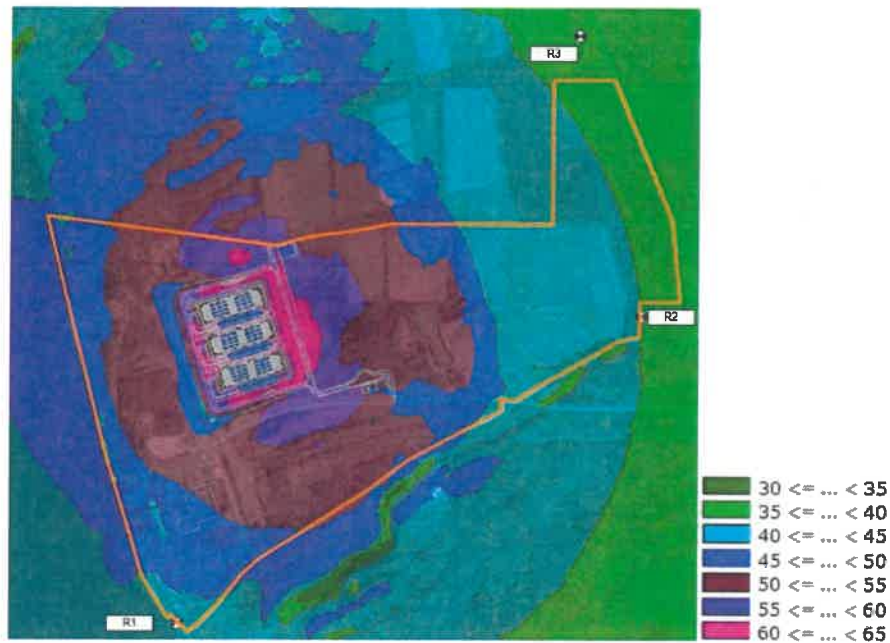


Figure 1. Predicted Sound Pressure Level Contours and Receptor Locations for Project Site

Appendix C. Supporting Documentation for Community Impact.

C1: Somerset, NY facility demolition of the smokestack in January 2025.

