Material contributed by L. M. Cathles to LansingDiscussion web site

October 9, 2025, 10:59 AM contribution to [LansingDiscussion] Letter to the Editor

A few numbers might help this discussion. Local taxes for residents of the Town of Lansing include taxes for (1) the School, (2) the Town of Lansing, and (3) the Town of Lansing's share of Tompkins County's expenses. The taxes are levied as a per mil charge to property valuation. The assessed property value of the Town of Lansing was $2.024 Billion in 2025[1]. The proposed 2025 per mill rate for the Town of Lansing School tax is $17.92/1000[2], for the 2025 Town tax $1.97/1000[3], and the recommended 2025 Tompkins County rate is $4.92/1000[4]. Based on these rates, the yearly taxes on a property valued at $500,000, would be:

	17.92/1000	= $8960	(72%)	School
$500,000 x	1.97/1000	= $985	(7.9%)	Town of Lansing
	(4.92/1000)	= $2460	(19.8%)	Tompkins County
		$12,405	Total paid by $500,000 property	
		$24.81/1000	Total per mil rate	

The yearly budgets of the taxing entities are:

$39.7 million	Lansing Schools[2]
$3.9 million	Town of Lansing[1]
$57 million	Tompkins county[3]
$9.9 million	Town of Lansing share of Tompkins county =$2,024 billion x $4.92/1000
$ 53.5 million	Total Town of Lansing tax (Schools plus Town of plus Lansing share of Tompkins)

If TeraWulf indeed pays a tax of $10 million to Lansing, their contribution would be 18.7% of the total Town of Lansing tax ($10/$53.5).

TeraWulf's $10 million yearly tax payments could contribute $7.2 million per year to Lansing Schools, $793 thousand per year to the Town, and $1.98 million per year to Tompkins County.

Alternatively (as in the example they gave and has become a focus of discussion), TeraWulf's taxes could replace 18.7% of a $500,000 property owner's taxes of $12,405/year. This would amount to $2319/year or $193/month. TeraWulf's number was $188/month.

TeraWulf's potential tax reduction number thus seems reasonable, and the above calculations square well with what I pay in taxes. TeraWulf does not seem to have been dishonest in their estimate in any way I can determine. At least the numbers above show how they likely arrived at their tax reduction for an owner of a $500,000 Town of Lansing property. The numbers also illustrate the potential benefits to the Lansing schools, town, and Tompkins County of repurposing the old AES Cayuga site in an economically viable fashion.

1/ Town of Lansing Budget for 2025, https://lfweb.tompkins-co.org/WebLink/DocView.aspx?id=88803&dbid=7&repo=Lansing&cr=1

2/ https://tompkinsweekly.com/articles/lansing-schools-spending-plan-signifies-2-86-increase/

3/ https://www.ithaca.com/news/tompkins_county/tompkins-county-presents-recommended-budget-with-4-5-tax-levy-increase/article_cf941c9f-5bf8-4415-9069-b8666c6bd9a9.html

October 9, 2025 4:32 PM contribution to [LansingDiscussion] Letter to the Editor

Joe,

Thanks for your additional comments. This discussion is good, and I hope you won't mind one more question from me.

You seem to very much want a moratorium on major developments until a new zoning plan can be put in place. By NYS law[/1], such a moratorium must have a valid public purpose. There may be developments that should be blocked until Lansing revises its zoning, but, unless you anticipate the zoning of the old AES Cayuga site could be changed from commercial to something that would substantially impact the permissible kinds of commercial development permitted, I don't see how the AES Cayuga site could be validly included in a moratorium. Many of the concerns you raise seem to be about environmental matters that would be handled by environmental impact assessments and deliberations that would not be affected by zoning changes. A lot of the concern by you and others seems related to the time needed to properly consider questions that are not related to zoning. Could you enumerate the specific likely changes in zoning that could impact the Town's evaluation of a TeraWulf (or any other) commercial proposal on the old AES Cayuga site? What potential changes in zoning would prevent the Town from evaluating TeraWulf's proposal carefully now, getting the information that is needed to resolve any ambiguities, taking all the time that is needed to assess environmental impacts, etc., and making the decision to accept or deny in a timely focused fashion as is normal Town government function? My concern is that, unless the basis for applying a moratorium to await zoning changes impacting the AES Cayuga site is compelling, the moratorium would be quickly and successfully challenged in court. Any comments you have on this specific question would be most welcome.

1/ NYS Department of State, Local Government, Land Use Moratoria, James A. Coon Local Governments Technical Series. https://dos.ny.gov/land-use-moratoria-0

October 9, 2025, 12:36 PM contribution to [LansingDiscussion] Letter to the Editor

Joe,

Thanks for your comment. I also wondered about their tax projection. I am not privy to communications the Town has had with TeraWulf, but a tax payment by them of $10 million per year sometime after 2025 seems reasonable. According to a 2008 post in the Lansing Star[/1], AES Cayuga's tax was slated by the Tompkins County's Industrial Development Agency (IDA) to grow from $3.7 million in 2008 to $6.6 million in 2013. One might expect the valuation of TetaWulf's property would be similar to AES Cayuga's, and if a reasonable projection of AES Cayuga's taxes in 2013 was $6.6 million, a payment by TeraWulf sometime after 2025 of $10 million per year seems, if anything, a bit low.

It should be easy to ask TeraWulf for the basis of their $10 million per year tax estimate. Does the Town have plans to do that?

1/ https://www.lansingstar.com/entertainment-archive?task=view&id=133&date=2010-07-01&start=4000#:~:text=AES%2DCayuga%20Payment%20in%20Lieu%20of%20Taxes%20Agreement%20Approved&text=The%20County's%20Industrial%20Development%20Agency,county%2C%20school%20and%20town%20taxes.

October 11, 2025 4:52 PM contribution to [LansingDiscussion] Letter to the Editor

Joe's question "under what circumstances should a town pause development to consider long-term impacts" is a good one and deserves careful consideration. My answer is that a moratorium should be considered if there is demand for a particular use of land for which there are currently inadequate or non-existent controls. The moratorium provides the time to put the needed controls in place. This is the position of the NYS Document on Land Use Moratoria, and I agree with it. The question is whether there are currently inadequate controls or other better ways to assure the proper future use of the AES Cayuga property.

I would summarize our current situation this way: The town has been presented with an opportunity to repurpose the old AES Cayuga property as **a data storage facility that could bring substantial benefits**. Purportedly the benefits could be $7.2 million tax monies per year to Lansing Schools, $793 thousand per year to the Town, and $1.98 million to Tompkins County. If tax rates were reduced, a property valued at $500,000 could be taxed $188 less per month. **But a data storage facility could have undesirable side effects** that should be carefully evaluated. The question before the town is: Should we proceed with a development moratorium and zoning legislation, or should we proceed with discussions with TeraWulf to reach an acceptable agreement under current zoning rules? I argue here that we should explore the latter path and proceed to a moratorium and legislation if that path fails.

I elaborate the reasoning behind this recommendation in sections below. The ***first section*** addresses perhaps the most important question of whether the tax benefits could conceivably be as attractive as TeraWulf suggests. The answer to this seems to be clearly yes. The ***second section*** addresses some of the concerns that have been raised and how they might be resolved. The list is surely not complete and therefore only illustrative. The ***third section*** addresses how an effective moratoria could be crafted, drawing on the work of the Lansing Advisory Committee on Power Plant Future (LAC-PPF). This Town committee considered the repurposing of the AES Cayuga site for bitcoin mining from February 13, 2020 to July 20, 2022, and recommended a moratorium. Their considerable body of work and thought recognized that zoning cannot regulate against land use, but only the externalities of use, such as noise, electronic waste, and fire safety. Their minutes describe how a moratorium was effectively used by the town of Plattsburg, New York to better regulate, but not stop, bitcoin operations there. The ***last section*** gives my reasons for recommending the Town let the Planning Board proceed by talking with TeraWulf about their proposed data center. This normal procedure would allow us to discover issues that might be of concern, determine if they can be resolved by contract restrictions, and if not, identify very specific moratorium targets that can be resolved with legislation. The Planning Board-TeraWulf discussions could reasonably take 6 months or more and should not be rushed, but rather should take all the time required to be deliberate and thorough.

1. Are the tax benefits from a data center on the AES Cayuga land real and substantial?

> A $10 million per year tax contribution to the Lansing community would be the Town's single biggest tax contribution. A contribution this large seems almost too good to be true. It appears, however, to be quite plausible. TeraWulf has stated they will invest $400 million in the redevelopment of the site[/1]. At the current tax rate of $24.81/1000, a property valued at $400 million will pay $9.92 million per year in taxes to Lansing Schools, Tompkins County, and the Town[/2]. This level of tax contribution is reasonable. AES Cayuga was slated to pay $6.6 million

to Tompkins County, Lansing Schools and Lansing in 2013[/2b]. In 2022, Greenridge Generation paid its district, Town of Torrey and Penn Yan Central School $3.7 million (from the web).

2. What concerns have been raised about a Cayuga data center and how might they be resolved?

a. *Could the data center proposed by TeraWulf contaminate or warm Lake Cayuga?*

TeraWulf stated at the Middle School information session that no water would be taken from Cayuga Lake. The cooling will involve two circuits, one filled with imported deionized water and the other with food grade propylene glycol. There would be very minimal water leakage from the deionized water plumbing. This design would remove contaminant or thermal impact on the Cayuga Lake as a concern. However, this is a different design than previous cooling systems discussed by TeraWulf on the web, and should be verified.

b. *Will TeraWulf's electricity use increase the price of electricity in Lansing?*

TeraWulf stated at the Middle School information session that they will invest in modernizing the distribution grid in NYS Electricity District C, and this will lower the cost to all customers and reduce price increases. General cost increases must be expected, however, because of future increases in electricity demand that are related to data center operation. Data centers consumed 4.4% of U.S. electricity in 2023 and are expected to consume 12% in 2028. A Carnegie Melon University study found the average electricity costs in the U.S. could increase 8% by 2030 due to data center construction, but some areas could see increases of up to 25%[/1]. The average monthly electricity bill for homes in Lansing is $101 (from the web), so the household electricity increase due to data centers could be up to $25/month.

Such a data-center-related increase in electricity price is likely to occur whether a data center is located in Lansing or not. TeraWulf's tax contributions would reduce resident taxes (or the rise in taxes) enough to more than offset any electricity price increases related to data centers.

c. *Will the facility be noisy?*

TeraWulf stated at the Middle School information session that they had designed their fan coolers to be less noisy than a dishwasher, and would contractually guarantee a specified low noise level at their property boundary. Planting trees could further reduce noise.

d. *Will there be light pollution from the server farm?*

This question was raised but the discussion moved on before it was answered at the Middle School session. A light pollution restriction should be a Town requirement for development.

As stated earlier, there are undoubtedly additional concerns. For example, as discussed in the next section, there may be safety, structure, and other concerns that could be added to the list. For some of these latter issues that are specific to data servers, the legislation passed by Plattsburg could provide a model for Lansing legislation. My impression from the Middle School information session is that

TeraWulf is very open to working with the Lansing community to answer concerns, and wants to be a positive contributor to the community. At least this is what they say.

3. **Effective moratoria**

It turns out the Town of Lansing is not as ignorant and unprepared in server bank issues as many might think. We have known since 2021 that a data center was coming to Lansing and have discussed how to handle this possibility since before that date. This previous discussion is in the minutes and reports of the Lansing Advisory Committee on Power Plant Future (LAC-PPF), accessible at https://lfweb.tompkins-co.org/WebLink/Browse.aspx?id=67763&dbid=7&repo=Lansing . The paragraphs below are abstracted by me from these minutes. The minutes contain a good deal of information and thought that is highly relevant to our current discussions. Members of our community who were involved in the discussions include Joe Wetmore. They could give valuable background to the sparse minutes and expand on my summary.

> The LAC-PPF committee operated from February 13, 2020 to July 20, 2022. Lansing certainly learned that a server operation might be coming to Lansing when Beowulf and Terawulf made an SEC filing on April 2021, but some might have known before that. The LAC-PPF committee considered many matters of relevance to our discussion. They largely focused on bitcoin servers. They considered the utility of zoning regulations, and moratoria on development. With legal council involved, the committee concluded that, although zoning could not regulate land use, externalities such as "noise, electronic waste disposal and fire safety" could be regulated. At the end of January 2022 thr "LAC-PPF sent [a] draft moratorium to Town Board [and] recommended it be quickly passed". Discussion but no action ensued. The committee was put "on pause" by the Town Board on July 20, 2022.
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> The committee was in touch with other communities in upstate New York that were attracting bitcoin interest because of the availability of low cost electricity there. Most notable was Plattsburg, New York where bitcoin operations had caused a large increase in electricity price. Colin Read, a former Mayor of Plattsburg, gave a webinar that committee members attended entitled "Bitcoin Mining in the Finger Lakes". He stated "The town moved swiftly to address these concerns by first passing a moratorium and then drafting and passing local laws". The Mayor sent the LAC-PPF the text of the Plattsburg moratorium and the new rules they subsequently legislated. These are in the Lansing Town Archive at the above link.
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> Notable is the specificity of the Moratorium. It was specific to cryptocurrency, as evident in its title "Moratorium on commercial cryptocurrency mining operations" and statement that it "… shall impose a moratorium on applications or proceedings, or the issuance of approvals or permits, for commercial cryptocurrency mining operations in the City of Plattsburgh. " Its duration was precise: "Plattsburgh hereby declares an 18-month moratorium on all applications, or proceedings for applications, for the issuance of approvals or permits for the commercial cryptocurrency mining operations in the City of Plattsburgh." It was specific in purpose: "This moratorium will allow time for the Zoning Code and Municipal Lighting Department regulations to be amended to regulate this potential use." It was specific in requirements: "The Code Enforcement Officer, Building Inspector, Planning Board, or Zoning Board of Appeals shall not accept an application for a commercial cryptocurrency mining operation." It was specific in penalties: Violators of the moratorium "shall be subject to, in addition to any penalties

prescribed by state or local law, a civil penalty of not more than $1,000 for each day or part thereof during which such violation continues."

The new rules subsequently enacted concerned fire safety, emergency termination switches, and properties of the server containment structures (electrical specifications, heat disposal specifications, allowed maximum internal temperature, time limits of worker exposure to heat). "No commercial cryptocurrency mining operation may cause adverse or detrimental effects to adjoining lessees, owners, or residents that diminish the quality of life or increase the costs of serving their business or maintaining their homes." "No commercial cryptocurrency mining operation shall produce a noise level exceeding 90 dB from a distance of 25 feet from the exterior of the containment structure."

Google reports that the moratorium was lifted after 11 months, the mining companies now cover extra electricity costs (fashion unclear), the regulations legislated resulted in companies exploring ways to use excess heat, and crypto-mining continues under stricter regulations. Plattsburg appears to gain no significant tax benefit from the current crypto operators or their landlords.

4. My recommendations

I am highly supportive of good zoning and am delighted that the Town of Lansing is proceeding with a consultant to update and modernize their zoning. I have seen the long term benefits of good zoning over a period of more than 60 years. The town of Simsbury Connecticut where I grew up developed a good zoning plan in the 1950's, based substantially on the herculean efforts of one individual. The town then had a population of about 7,700; today the population is about 25,000. The town is a poster child of good development, thanks, I believe, to good early zoning.

I do not think, however, that a general zoning plan will help much in deciding how to handle TeraWulf's proposal. The general zoning plan is likely to take a long time to develop, discuss, and enact. It is likely to be controversial (c.f. Caroline New York). The Simsbury plan took a decade to develop. A general zoning plan is unlikely to be very specific on uses of electricity at the Cayuga site. Assessing the risks of a novel development plan will almost certainly involve factors that are unknown before a detailed plan is presented.

What is needed in my opinion is for someone to sit down with TeraWulf, explore in detail what their plans are, and identify any risks involved and how they can (or cannot) be managed. The logical group to do this is the Lansing Planning Board. Under normal procedures as I understand them, TeraWulf's proposal would be turned over to the Planning Board to evaluate. I recommend that this be done with the understanding that the Planning Board flag and report to the Town Board and community any issues that cannot or might be difficult to manage with binding conditions in the document that would approve the project. If substantial unresolvable risks are identified that Town legislation could address, such legislation could be passed before granting development approval. If needed, the Town could impose a highly specific moratorium on the server farm at the AES Cayuga site. This procedure would allow the Town to fully understand the risks associated with an apparently very attractive proposal. I don't see how these risks could be identified in any way other than in discussions with TeraWulf. The option of a moratorium would not taken off the table by such Planning Board discussions. In fact, the possibility of a moratorium could encourage more serious discussions and planning.

1/ Data Center Developer Secures Long-Term Lease od Cayuga Power Plant, Matt Dougherty, Oct 5, 2025, https://www.ithaca.com/news/tompkins_county/data-center-developer-secures-long-term-lease-of-cayuga-power-plant/article_af47439f-e785-4519-9018-6ad0a9de5048.html .

2/ October 9, 2025, 4:58 PM L. Cathles contribution to [LansingDiscussion] Letter to the Editor, and Oct 9, 2025, at 6:36 PM, Lawrence M. Cathles contribution to [LansingDiscussion] Letter to the Editor

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October 12, 2025 4:37 PM contribution to [LansingDiscussion] Letter to the Editor

Joe,

This has been quite a long discussion, but one that still seems to be useful.

First, I have to point out that I did not misquote your response. You posed two similar questions to Jack Young in two emails (listed below). I answered your question in the second email because it seemed more specific than your first. I quoted your second question accurately. My answer to both would, however, have been the same.

> *Joe Wetmore email to Jack 10/10/2025 10:55 AM:* "Under what circumstances would you favor a moratorium? If not now, when the town is beginning a major rewrite of its entire zoning code, then when?"
>
> *Joe Wetmore email to Jack 10/10/2025 1:51 PM:* "Under what circumstances should a town pause development to consider long-term impacts? That is what a moratorium does — it creates space to think carefully before moving forward with decisions that cannot be reversed."

Your response to me does raise the important question of what the moratorium should cover: I think we would all agree that it should cover only major projects. There seems no reason to freeze home construction and home improvements for 18 months. But, would a new small business building be paused? A large one? One that is to be constructed in a cornfield? I think there may be many difficulties crafting a general 18 month moratorium. Do we really want to delay consideration of TeraWulf's potentially very attractive proposal?

October 12, 2025 8:31 PM contribution to [LansingDiscussion] Letter to the Editor

Joe and Maureen,

Thanks for the clarification and another good question.

I would be OK with a moratorium on large future projects and understand the arguments for it. What I am uncomfortable with is delaying by 18 months the start of Planning Board evaluation of proposals already submitted to the Town. One easy way to resolve this is to change the first bullet of the draft moratorium Joe just shared

from

- Projects that have already received final or conditional final approval

to

- Projects submitted after the imposition of the moratorium

A compromise might be to allow projects that would be subject to the moratorium but were submitted before the start of the moratorium to proceed to discussions with the Planning Board while remaining under the 18 month moratorium.

My concern is that imposing an 18 month moratorium on starting Planning Board consideration of TeraWulf's proposal would deprive us of useful zoning information and possibly lose the Town an attractive investment. Would either of these two suggestions be a possible step toward consensus?

October 13, 2025 3:40 PM contribution to [LansingDiscussion] Letter to the Editor

Joe,

OK, now I'm confused. You stated previously (e.g. in JW 10-9-2025 6:06 PM email to Ben Finio) that the contract to Colliers Engineering & Design to rewrite the Lansing zoning is 18 months and somewhere else that Colliers expected to complete the report in about that interval of time. It will certainly take some time for the Town to discuss the new zoning and pass it into law. How will the projects delayed by a 1 year moratorium be handled if there is a gap between the end of the moratorium and the enactment of new Lansing zoning?