## Jennifer Rivera (Administration)

**From:** Katie L. Greenway (Planning) **Sent:** Friday, October 17, 2025 5:30 PM

To: John Gentry (Administration); David Gibbs (County Commission); Gregg Poole (County

Commissioner); Jeff Stowe (County Commission); Billy Powell (County Commission);

Kathy Cooper (County Commissioner)

Cc: Zachary Propes (Administration); Casey Ramsey (Administration); Justin R. Lawhon (Legal

Services); Sarah Crowe (Administration); Jennifer Rivera (Administration); Jennifer Rivera

(Administration); Beth Garmon (Planning); Kaitlyn Elliott (Planning)

**Subject:** RE: Data Center Virtual Tours | STACK Infrastructure

**Attachments:** BOC Questions\_Answers (17OCT2025).docx

**Categories:** Green Category

Mr. Chairman and District Commissioners:

Please find attached the responses from the applicant regarding 2400 Okelly Road.

Please let us know if you have any questions.

Thank you,

Katie Greenway - MURP
Planning and Zoning Administrator
Hall County Community Development and Infrastructure
(direct office) 770-297-2649
klgreenway@hallcounty.org

From: John Gentry (Administration) < jgentry@hallcounty.org>

Sent: Friday, October 17, 2025 5:06 PM

To: David Gibbs (County Commission) <dgibbs@hallcounty.org>; Gregg Poole (County Commissioner)

<gpoole@hallcounty.org>; Jeff Stowe (County Commission) <jstowe@hallcounty.org>; Billy Powell (County Commission)

<bpowell@hallcounty.org>; Kathy Cooper (County Commissioner) <kcooper@hallcounty.org>

Cc: Zachary Propes (Administration) <zpropes@hallcounty.org>; Casey Ramsey (Administration)

<cramsey@hallcounty.org>; Justin R. Lawhon (Legal Services) < irlawhon@hallcounty.org>; Sarah Crowe (Administration)

<scrowe@hallcounty.org>; Jennifer Rivera (Administration) < jrivera@hallcounty.org>; Katie L. Greenway (Planning)

<klgreenway@hallcounty.org>

Subject: Fw: Data Center Virtual Tours | STACK Infrastructure

## Mr. Chairman and District Commissioners:

Below is a link for a virtual tour of the Alpharetta Data Center that will be similar design and construction but only 2 structures. I believe the intent is to have 3 x 300,000 sg/ft at the Okelly site.

Please let Jennifer know if you would like for us to set up an onsite tour and we will coordinate a date and time in pairs, depending on the total number wishing to visit.

Per our discussions the other day, the developer is requesting to proceed and is claiming he has water and electrical capacity letter commitments that will expire if tabled. This is for your discussion Monday.

Subject to your guidance

V/r,

John T. Gentry, Jr.
Assistant County Administrator
Hall County Government
t. 770-297-5504
jgentry@hallcounty.org
www.hallcounty.org

From: Cameron Grogan < cgrogan@williamsbrothersdev.com >

**Sent:** Friday, October 17, 2025 12:56 PM

**To:** Katie L. Greenway (Planning) < <a href="mailto:klgreenway@hallcounty.org">klgreenway@hallcounty.org</a>; Chris Hoag < <a href="mailto:com">chris@projectturbollc.com</a>;

John Gentry (Administration) < <u>igentry@hallcounty.org</u>> **Subject:** Data Center Virtual Tours | STACK Infrastructure

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Katie and John, I reached out to a contact with Stack, but have not heard back. Below is a link for a virtual tour as well as a request to tour in person. They have a small campus in Alpharetta.

https://www.stackinfra.com/take-a-tour/

Sent from my iPhone

Specifically, he wants to make sure the BOC (and citizens) have the complete details on the water use/recycling process. Include info on the process. How much does it reduce the water consumption as a result of a recycle system? For the daily consumption, I would get Gainesville to provide you a list of other consumers with similiar consumption rates for comparison.

Our initial request was for 500,000 gallons per day. This would allow us to design for a cooling system that relies mostly, if not all, on liquid and no air; this initial request was to accommodate the most cost-effective but water resource-intensive design.

We have since revised and received approval from Gainesville DWR for a peak use of 225,000 GPD, achieved by using a <u>hybrid architecture combining air-cooled and liquid-cooled systems</u>.

With this hybrid design, we are able to reduce our water needs by 55% from our initial request. The water used in the liquid-cooled loop (liquid-to-chip/L2C) will be recycled continuously through the L2C loop until the concentration of dissolved minerals and treatment chemicals builds up enough to make the water too "hard" or corrosive to continue through the cooling loop (a result of the evaporative process that removes pure water and causes the buildup in minerals).

Once discharged, the "hard" water will then be recycled and used elsewhere on-site for graywater uses (like irrigation), before being treated onsite and eventually returned to sanitary sewer (with POTW approval) or a permitted EPD/NPDES outfall with sampling and reporting requirements.

We also have access to (2) water lines, an 8" on O'Kelly and a 12" on Wallace Rd. Through Gainesville DWR, we performed recent flow tests on the hydrants at our site, showing that the water lines are capable of supplying over 2.8 MGPD combined, leaving over 2.5 MGPD of available flow in the water lines after our water needs.

We spoke with Gainesville DWR to discuss how Project Turbo's water usage compares to other commercial projects in the community and to provide reference examples.

As such, Gainesville DWR calculates Residential water average use at **250** gallons/day/unit. For example, the first phase of Rabbittown's Gainesville Township residential project received a capacity letter from Gainesville DWR for an average use of **189,000** gallons per day and a peak use of **475,000** gallons per day. Phase I consists of 356 multifamily units and 400 single family units, and is all supplied from (1) 8" water line.

Thus, this residential development example is permitted to use over double the peak allowed use for Project Turbo.

Also, he would like to know about considering solar options. If BOC required solar panels what could be sent back to the grid on a daily basis? You even mentioned purchasing a solar panel system elsewhere that would infuse into the grid, etc. Other options to reduce grid consumption or regenerate to the grid.

For alternative power generation sources generally, our power source will come from natural gas generation facilities and potentially supplemented with power from solar farms and/or battery storage.

For a sense of scale on surface coverage required for solar projects to supply power to the grid, we are in discussions with a large solar project that is in the permitting/interconnection process now in Southeast Georgia. The gross land for that project is 3,100 Acres, and is designed to deliver 400MW to the grid. Due to the variability inherent in weather and thus solar receptivity at the site, the "nameplate" 400MW generated by the project is downsized by upwards of 75% to the firm power recognized by the utility. (For example, if Project Turbo purchases power from a 400MW solar farm project, the utility will translate that source to a firm power load for consumption at nearly 100MW).

There is another project we are aware of in Georgia that is 2,000 acres and will be able to deliver 250MW of "nameplate" power.

Thus, the most effective and efficient way to include solar in the generation mixture is to purchase the power directly from these large-scale solar farms already permitted through the PSC/Georgia Power and/or GTC interconnection process (which is a comprehensive and capital-intensive permitting protocol).

Further, the roof-top equipment required to achieve a hybrid air-cooled / liquid-cooled and noise-mitigating design significantly limits available rooftop surface area. Between the dry coolers, air-handling units, dampers, power raceways, roof drains, and similar components, the limited rooftop space suggests the best way to achieve a solar component to the project at substantial scale is to purchase that generation directly from a solar project already permitted to connect that generation to the grid.

As an additional reference, relative to our 119-acre site, the necessary amount of land for any meaningful solar project is roughly 10x the size of Project Turbo's gross acreage.

Thus, we are in advanced discussions with these active (and soon-to-be permitted) solar projects in Georgia and look forward to continuing pursuing a path to add renewable energy to the grid. Similar to the primary power generation we are working to secure, these commitments cannot be made without major financial implications and deposits, which we cannot make until we have a site approved for data center use.

## Microreactors:

This is an exciting topic and at the forefront of conversation in the data center space. Admittedly, the evolution of this seems to change almost daily, so we only have a cursory understanding of this technology.

Similar to the projects you mentioned, there are several private and public plans underway and at various stages of the permitting and regulatory process to implement small modular reactors (SMR's) for commercial uses.

- TVA's Clinch River Site (<a href="https://www.tva.com/energy/our-power-system/nuclear/clinch-river-small-modular-reactor">https://www.tva.com/energy/our-power-system/nuclear/clinch-river-small-modular-reactor</a>)
- Amazon / X-Energy Cascade project (<a href="https://www.world-nuclear-news.org/articles/amazon-updates-smr-progress-with-new-images-of-proposed-plant">https://www.world-nuclear-news.org/articles/amazon-updates-smr-progress-with-new-images-of-proposed-plant</a>)

Right now, the primary hurdle is the regulatory and permitting processes required for these SMR implementations. The US Dept of Energy has signaled support for the accelerated permitting and grants to de-risk SMR deployment, but then there are still lots of technical hurdles to achieve deploying SMR's at scale.