

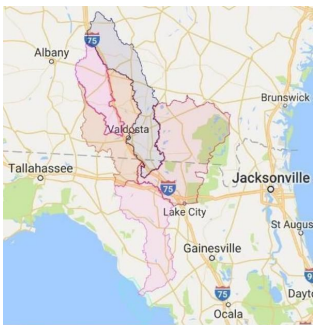
July 23, 2017



WWALS Watershed Coalition, Inc.



the WATERKEEPER® Alliance Member for the Suwannee, Withlacoochee and Alapaha Rivers



- Upper Suwannee River HUC 03110201
- Withlacoochee River HUC 03110203
- Alapaha River HUC 03110202
- Little River HUC 03110204
- Lower Suwannee River HUC 03110205
- Suwannee River Estuary

WWALS Watershed Coalition advocates for conservation and stewardship of the Withlacoochee, Willacoochee, Alapaha, Little, and Suwannee River watersheds in south Georgia and north Florida through education, awareness, environmental monitoring, and citizen activities.

To: [Georgia Public Service Commission](#)
244 Washington Street, SW
Atlanta, GA 30334-9052
gapsc@psc.state.ga.us

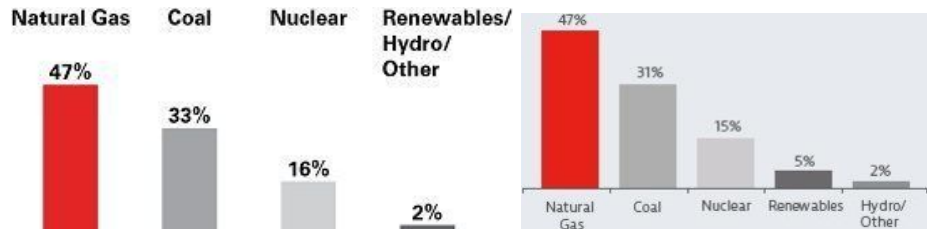
Dear Public Service Commissioners and Staff,

I write to ask you to stop cost overruns for Plant Vogtle and to require Georgia Power again to buy more solar power. Too many years of overruns, lack of planning, and now the bankruptcy of Toshiba all indicate that the time has come to end this experiment in nuclear power. There is no nuclear renaissance. The number of U.S. nuclear generating plants continues to fall, because, as [a report by a PSC staff consultant](#)¹ and now [a report from the U.S. Department of Energy](#)² show, nuclear power is no longer economically viable.

At the Southern Company (SO) stockholder meeting, May 24, 2017, SO CEO Tom Fanning, answering a shareholder “heavy in Southern” who wondered whether “we’re chasing a dead horse,” said the SO board would make a decision in August on whether to go ahead with Plant Vogtle *or not*.³ Fanning said any decision by the Georgia Public Service Commission (GA-PSC) would factor into that SO board decision. You have the power to stop further cost overruns on Plant Vogtle, and that could cause the SO board to shut down that failed Big Bet.

In a recent precedent, the Mississippi Public Service Commission in June refused to permit more cost overruns on Mississippi Power’s Kemper “Clean Coal” Plant,⁴ and Southern Company pulled the plug⁵ on that failed Big Bet. You can do the same for Plant Vogtle.

Four years ago WWALS, among many others, wrote and testified to ask the PSC to require Georgia Power to buy more solar power, and you did. That farseeing action by the Georgia PSC is a principal reason Southern Company’s renewable energy percentage doubled in one year, while coal and nuclear decreased and natural gas remained flat.⁶



[Southern Company Energy Mix: 2016 \(left\) and 2017 \(right\)](#)

¹ “Plant Vogtle, PSC Staff Consultant says project may not be ‘economic’ to complete,” JoAnn Merrigan, WSAV, June 29, 2017, <http://wsav.com/2017/06/29/plant-vogtle-psc-staff-consultant-says-project-may-not-be-economic-to-complete/>.

² “Electric Power System, Markets and Reliability Study: Interim Draft Report,” U.S. Department of Energy, July 2017, <https://www.scribd.com/document/353980477/DOE-Reliability-and-BaseLoad-Report-Draft-June-26>

³ Video: Solar panels, heck yeah! –Tom Fanning, CEO, at SO stockholder meeting 2017-05-24,” Lowndes Area Knowledge Exchange, June 29, 2017, quoting Southern Company’s own video of its May 24, 2017 stockholder meeting, 2017-05-24, <http://www.l-a-k-e.org/blog/2017/06/video-solar-panels-heck-yeah-tom-fanning-ceo-at-so-stockholder-meeting-2017-05-24.html#or-not>

⁴ “PSC to Mississippi Power: enough is enough on Kemper: Completion of the power plant in Kemper County is more than three years behind schedule,” Jack Weatherly, Mississippi Business Journal, June 21, 2017, <http://msbusiness.com/2017/06/psc-mississippi-power-enough-enough-kemper/>

⁵ “Mississippi Power Company to Suspend Lignite Coal Gasification at Kemper Co. Power Plant,” News Release, MS PSC June 28, 2017, <http://www.psc.state.ms.us/mpsc/press%20releases/2017/Mississippi%20Power%20Company%20to%20Suspend%20Lignite%20Coal%20Gasification%20at%20Kemper%20Co.%20Power%20Plant.pdf>

⁶ “Southern Company Shareholder meeting: renewables more than doubled in one year 2017-05-24,” Lowndes Area Knowledge Exchange, March 30, 2017, <http://www.l-a-k-e.org/blog/2017/03/southern-company-shareholder-meeting-renewables-more-than-doubled-in-one-year-2017-05-24.html>, using figures from Southern Company’s “PRE 14A: Proxy Statement - Notice of Shareholders Meeting (preliminary),” March 28, 2016, <http://investor.southerncompany.com/information-for-investors/corporate-governance/sec-filings/sec-filings-details/default.aspx?FilingId=11283804>, and “PRE 14A: Proxy Statement - Notice of Shareholders Meeting (preliminary),” March 24, 2017, <http://investor.southerncompany.com/information-for-investors/corporate-governance/sec-filings/sec-filings-details/default.aspx?FilingId=11954460>



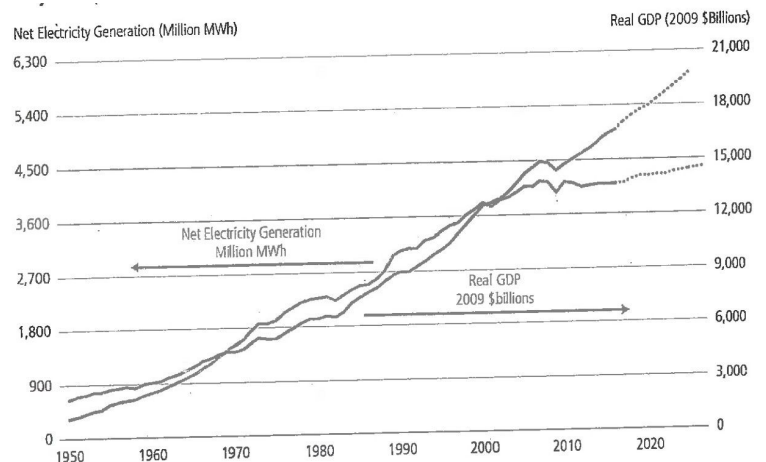
Meanwhile, solar power doubles deployed capacity every two years and creates jobs 17 times faster than the rest of the economy.⁷ The only other power source growing exponentially like that, like compound interest, is wind power, and it's not doubling as fast.⁸ Last year, in 2016, solar power provided more new U.S. electricity than any other source: more than wind, and more than natural gas.⁹

If Georgia Power has funds to spend on Plant Vogtle, those funds would be better spent on solar power. As we mentioned in [our letter four years ago](#),¹⁰ nuclear power requires massive amounts of cooling water, emits contaminants including radioactive tritium, and produces radioactive waste that is a storage problem for thousands of years. Solar power requires no water nor fuel and emits no contaminants. Four years ago [Google already bought more sun and wind power than that nuclear boondoggle would produce](#)¹¹ if it's ever finished, and for less than Plant Vogtle cost overruns. Vogtle cost overruns keep going up, the cost of solar panels keeps going down.

WWALS asks you once again to require Georgia Power to buy more solar power, this time instead of permitting more cost overruns on Plant Vogtle.

Why is Georgia Power building Plant Vogtle in the first place, considering that Georgia Power's John Kraft was cited in the *Valdosta Daily Times* (VDT) as saying his utility does not need any new power? "The utility company offers to pay the producer only as much as it costs to produce solar power. If a utility company can produce solar energy at a solar farm for 5 cents per unit, it isn't going to pay a residential producer a higher rate for energy it doesn't need."¹² If Georgia Power can produce solar power at 5 cents per kilowatt hour (the unit in question), why is Georgia Power not deploying solar farms even faster instead of wasting its customers' money on very late and overbudget nuclear units at Plant Vogtle?

It may indeed be true that Georgia Power needs no new electricity. The DoE study of this month says for the U.S. at large that electricity generation almost stopped growing around the year 2000, apparently due to conservation and efficiency.¹³



⁷ "Solar jobs growing 17 times faster than US economy," [Matt Egan](#), CNN Money, May 25, 2017, <http://money.cnn.com/2017/05/24/news/economy/solar-jobs-us-coal/index.html>

⁸ U.S. electric power source projections: solar still most by 2023, Lowndes Area Knowledge Exchange, February 20, 2017, based on figures from Federal Energy Regulatory Commission (FERC) and U.S. Energy Information Agency (EIA), <http://www.l-a-k-e.org/blog/2017/02/u-s-electric-power-source-projections-solar-still-most-by-2023.html>

⁹ "U.S. Solar Surged 95% to Become Largest Source of New Energy," Chris Martin, Bloomberg Markets, 15 February 2017, <https://www.bloomberg.com/news/articles/2017-02-15/u-s-solar-surged-95-to-become-largest-source-of-new-energy>

¹⁰ Ask Georgia Power to conserve our water, WWALS Watershed Coalition to Georgia Public Service Commission, May 12, 2013, www.wwals.net/2013/06/13/ask-georgia-power-to-conserve-our-water-wwals-to-ga-psc/, read to GA-PSC by WWALS board member Garry Gentry, June 18, 2013, <http://www.l-a-k-e.org/blog/2013/06/ask-georgia-power-to-conserve-our-water-garry-gentry-for-wwals-ga-psc-2013-06-18.html>

¹¹ "Google invests \$200 million in Texas wind farm," David Goldman, CNNtech, January 10, 2013, <http://money.cnn.com/2013/01/09/technology/google-wind-farm/index.html>

¹² "Here Comes the Sun: Solar Power faces challenges," by Thomas Lynn, *Valdosta Daily Times*, July 16, 2017, http://www.valdostadailytimes.com/news/local_news/here-comes-the-sun-solar-power-faces-challenges/article_99558f3b-93e3-5ebd-9487-6a0c395fce6b.html

¹³ "Coal and nuclear are uneconomic — more bombshells from Perry's draft grid study: 'High levels of wind penetration can be integrated into the grid without harming reliability.'" Joe Romm, ThinkProgress, July 17, 2017, <https://thinkprogress.org/draft-doe-study-bombshell-9221a62afefd>

But Georgia Power does need to continue decommissioning coal plants, so new power is needed to replace coal power. But not new nuclear or natural gas pipeline power: new solar power onshore and wind power offshore.

Georgia Power appears to be spending quite a bit of its customers' money on things that would be unnecessary for solar and wind power. One of our board members reports 7% of his bill goes to Nuclear Construction Cost Recovery (NCCR) and 9% to Environmental Compliance Cost Recovery (ECCR). We realize the actual calculation is more complicated than that, according to the PSC's [Georgia Power Bill Calculator - Effective June 2016](#). According to Georgia Power's [Rate Design Process web page](#), NCCR "charges recover financing costs related to the construction of two new nuclear units at Plant Vogtle near Waynesboro, Ga." and ECCR "charges recover the costs of installing and operating environmental controls mandated by the government."

Obviously NCCR could be reduced or eliminated if Plant Vogtle construction is halted, for example by the PSC refusing to permit further cost overruns. Georgia Power is not forthcoming about what exactly ECCR covers, but solar and wind power have few or no environmental issues, so the more solar and wind power the PSC requires Georgia Power to build, the less Georgia Power should need to charge its customers for ECCR. That's potentially approximately 16% of a typical Georgia Power customer's bill that could be saved, which is a lot of money that could go to deploying solar power in Georgia, and wind offshore.

And those NCCR and ECCR charges aren't all of it. Back in 2011, the PSC approved Georgia Power increasing its base rate by 10% and more "to recover the costs of investments in cleaner generation sources, power lines, smart grid technologies, environmental controls and energy efficiency programs to meet current and future customer demand."¹⁴

Among the items covered by that 2011 base rate increase was this:

- ***In Cleaner Natural Gas Generation***—To ensure adequate and cleaner energy when our customers need it. At [Plant McDonough](#), coal-fueled units are being replaced with natural gas units. The new units will produce enough electricity to power 625,000 homes. This change will ensure reliability of electric service to north Georgia while reducing the environmental impact of the plant on the local community.

While I've heard both Tom Fanning and Georgia Power CEO Paul Bowers say "if we can't do coal we have to have pipelines," that's actually not the case. Solar power is here now, and Georgia Power and Southern Company can go straight to sun power. The Mississippi PSC made the mistake of letting Mississippi Power convert Plant Kemper from coal to natural gas. The Georgia PSC does not have to make that mistake for Georgia coal plants.

The VDT story says Kraft asks people why they want solar power. Maybe to reduce arbitrary charges for things like NCCR and ECCR and base rate increases for natural gas. Also Georgia is the sixth most expensive state for energy costs, according to a study by [WalletHub](#)¹⁵ quoted in the [Atlanta Journal-Constitution](#)¹⁶. And it's the customer's roof and the customer's money, so

¹⁴ "Georgia Power hikes prices for gas and nuclear, then complains about solar," Lowndes Area Knowledge Exchange, October 22, 2012, based on a Georgia Power web page that has since been modified, but there must be records at the PSC,

<http://www.l-a-k-e.org/blog/2012/10/georgia-power-hikes-prices-for-gas-and-nuclear-then-complains-about-solar.html>

¹⁵ "2017's Most & Least Energy-Expensive States," Richie Bernardo, WalletHub, July 12, 2017, <https://wallethub.com/edu/energy-costs-by-state/4833/>

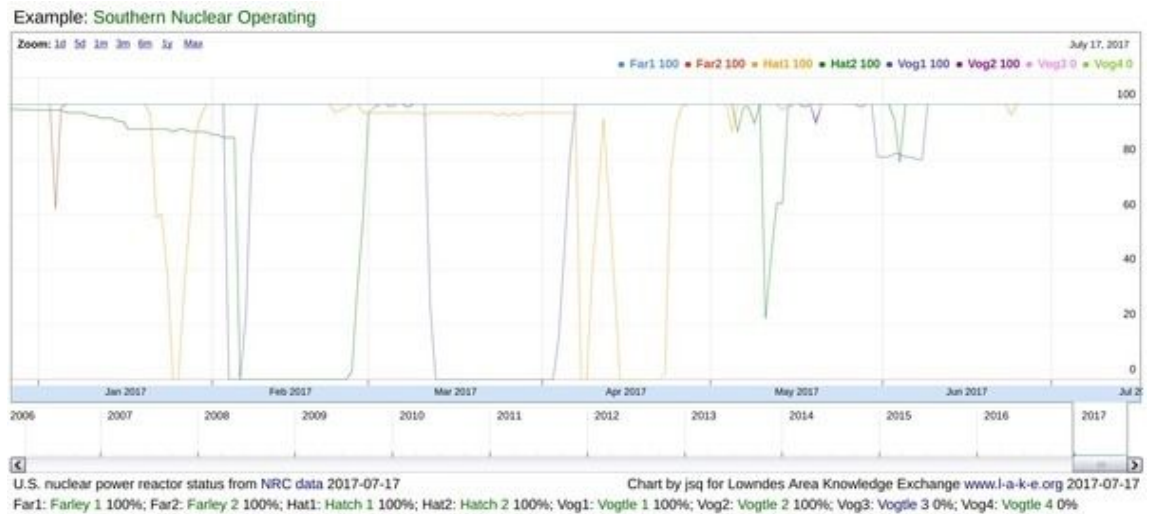
¹⁶ "Only five states have higher energy costs than Georgia," by Michael E. Kanell, *Atlanta Journal-Constitution*, July 13, 2017,

<http://www.ajc.com/business/economy/only-five-states-have-higher-energy-costs-than-georgia-turn-off-the-are-you-nuts/DUUbGKRFvjmhokGx0y6JRL/>

why should they have to justify themselves to Georgia Power for supplying energy back to the grid at no cost to the utility?

A better question is why is Georgia Power still wasting anybody's money on a failed quagmire of a nuclear project that bankrupted its builder Toshiba?¹⁷

The VDT story says “nuclear plants, which produce a constant output when operating.” Aye, there's the rub: “when operating.” All of Southern Company's nuclear plants have been down days, weeks, and months in the past several years, [according to Nuclear Regulatory Commission \(NRC\) data](#),¹⁸ sometimes scheduled, sometimes not. Hatch 2 on the Altamaha River was down most of February 2017. Vogtle 1 on the Savannah River, was down the last half of March. Hatch 1 was down a couple of days in January and most of April. And Vogtle units 3 and 4 are *still* not operating after the Georgia legislature approved those monthly customer charges back in 2009.



Cloudy Germany, as far north as Calgary, Alberta, Canada, is [the world leader in solar energy](#),¹⁹ (IEA data²⁰) and [renewable solar and wind power have improved Germany's electrical grid reliability](#).²¹ Yet in that VDT story Georgia Power still trotted out old canards about solar power being unreliable and Georgia being cloudy. Even though in the same story Georgia Power admits it knows how to increase grid reliability: buy solar and wind power in many different places.

My electric utility, Colquitt Electric (CEMC), was smart enough not to buy into Plant Vogtle. But CEMC charges me 10 cents per kilowatt hour and pays me only 4.5 cents, on the same “avoided cost” theory as Georgia Power uses. [My 15 kilowatts of solar panels](#) drive my bill way down, but if CEMC paid the same as they charge, they'd be paying me every month.

¹⁷ "[At Plant Vogtle, nuclear rebirth becomes financial quagmire.](#)" Russell Grantham Johnny Edwards, *Atlanta Journal-Constitution*, May 19, 2017, headline since changed to “How much will Plant Vogtle's new reactors really cost us?”

<http://www.ajc.com/business/how-much-will-plant-vogtle-new-reactors-really-cost/HBBCCO5R4Uv69R11DJvclM/>

¹⁸ “NRC Power Reactor Status,” Lowndes Area Knowledge Exchange, updated daily from NRC daily reports, <http://www.l-a-k-e.org/govt/nrc/reactor/status/>

¹⁹ “These 10 countries are leading the world in solar energy,” by [Rebecca Harrington](#), BusinessInsider, March 15, 2016,

<http://www.businessinsider.com/best-solar-power-countries-2016-3/#6-france-5678-megawatts-5>

²⁰ [Trends 2015 in Photovoltaic Applications](#), International Energy Agency, 2015,

http://www.iea-pvps.org/fileadmin/dam/public/report/national/IEA-PVPS_-_Trends_2015_-_MedRes.pdf

²¹ “Germany's electricity grid stable amid energy transition,” Sören Amelang, Jakob Schlandt, October 20, 2016,

<https://www.cleanenergywire.org/factsheets/germanys-electricity-grid-stable-amid-energy-transition>



[Gretchen Quarterman and John S. Quarterman on the new panels on the roof of the farm workshop at Okra Paradise Farms, Lowndes County, Georgia, 29 January 2012.](#)

Photo [CC BY-ND Okra Paradise Farms](#)

All the utility excuses for not paying one-to-one were busted years ago, first by [a study by Austin Energy in 2013](#), then [by the state of Minnesota in 2014](#). Customer solar energy generation reduces wear on utility lines because most of that solar power is used behind the meter and never travels through the wires. Loss of electricity while travelling through the lines is reduced because less travels through the lines. Solar power is distributed and robust in the face of storms that take down lines. When the sun comes out, solar panels are generating again! The cost of financing new generating plants is reduced because customers supply more energy.

No doubt the PSC is aware that the electric utility think tank, [Edison Electric Institute, warned back in 2013](#)²² that solar power generates the most in mid-afternoon, when utilities traditionally charge the most, which means solar power is a disruptive challenge such as utilities have never faced before, and if they don't get ahead of it they may go the way of AT&T Long Lines when the Internet exploded. Getting in the way of customer solar generation is not getting ahead of a disruptive challenge.

Later in the VDT story, "Kraft said the company has made a huge commitment to renewable energy." Yes, and [I congratulated Georgia Power and its parent, the Southern Company \(SO\), for that at the Southern Company Stockholder meeting in May](#). As SO CEO Tom Fanning said, ["Oh, solar panels? Oh, heck yeah!"](#)

²² "Disruptive Challenges: Financial Implications and Strategic Responses to a Changing Retail Electric Business," Peter Kind, for Edison Electricity Institute, January 2013, <http://www.eei.org/ourissues/finance/Documents/disruptivechallenges.pdf>



[“Oh solar panels? Oh heck yeah!”](#) SO CEO Tom Fanning, stockholder meeting, May 24, 2017, still from Southern Company video

Also in the VDT story: ““We have one of the biggest voluntary solar expansions in the nation,” Kraft said.” Well, voluntary in the sense that GA-PSC twice (in 2013 and 2015) required Georgia Power to buy about twice as much solar power as it wanted to.



[John S. Quarterman, WWALS board member, testifying to GA-PSC, June 18, 2013](#)

I’m proud to say I’m [one of two](#) WWALS board members who [testified along with many others to the GA-PSC in June 2013](#) before [your historic solar decision in July 2013](#).

At [this year’s Southern Company stockholder meeting](#), after I reminded Tom Fanning that it was [five years since I first asked him what was his exit plan when his Big Bet on Plant Vogtle goes bad](#), I asked him to lead the Southeast, the country, and the world in solar power.



[John S. Quarterman at Southern Company Stockholder Meeting, May 23, 2012](#)



[John S. Quarterman and other shareholders, Tom Fanning, CEO, Southern Company, at Stockholder Meeting, Pine Mountain, Georgia, May 24, 2017, still from Southern Company video](#)

Fanning said he'd lead if tax breaks were favorable and solar kept selling, but meanwhile SO was reducing last year's \$4.5 billion in renewable energy investments to \$1.5 million this year.



["I think renewables are exceedingly important in the future. Look at what we've done. I stand behind my word. We'll see how it develops. If it develops well, we'll be right there in a leadership role." Tom Fanning, CEO, Southern Company, stockholder meeting, May 24, 2017, still from SO video](#)

That is not what I meant by "lead."

As I'm sure PSC Commissioners and staff are aware, *Big Bets* is the title of Southern Company's authorized history book, which [it even promoted with a movie in 2012](#). Southern Company also has [another history book](#), *Innovative Solutions: A History of R&D at Southern Company*, which starts with none other than Alvin Vogtle, the namesake of Plant Vogtle, who in 1969 started what remains the largest private utility R&D operation in the U.S., according to Tom Fanning. As I have reminded Fanning at several SO stockholder meetings now, SO also has plenty of territory in which to use that R&D ability to get on with implementing a smart grid to distributed renewable solar and wind power.

If Georgia Power really wants to help Georgians get solar power, let Georgia Power pay its solar customers as much per kilowatt-hour as its customers pay Georgia Power.

I have plunked down deposits for two Tesla Powerwalls to store my solar energy, and they will greatly even up the "avoided price" problem by reducing my needs to buy from my utility.

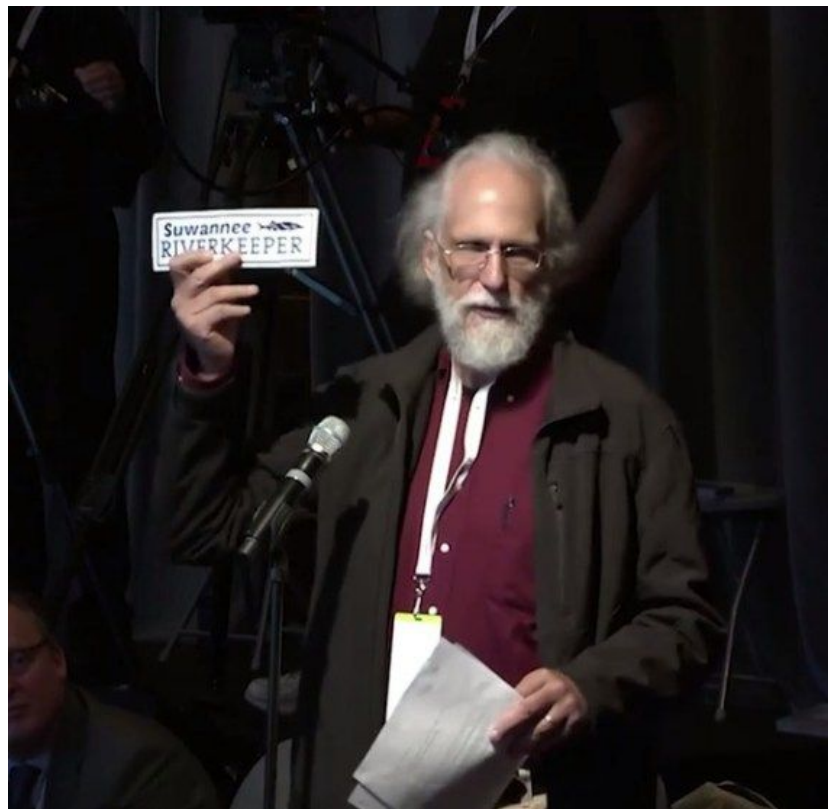
Southern Company has some sort of storage deal with Tesla, according to Tom Fanning at a previous SO stockholder meeting. If Georgia Power wants to help Georgians, let's see Georgia Power finance and sell Powerwalls to its customers. Green Mountain Power in Vermont does exactly that.²³

- *Tesla signed a deal with Vermont's largest utility Green Mountain Power.*
- *The utility hopes the deal will reduce peak load electricity costs.*
- *The fee will be \$15 per month, or one-time \$1,500 charge, for 10-year plan.*

What tiny Vermont has piloted, Georgia, with fifteen times the population, can perfect.

Perhaps most importantly, the Georgia Public Service Commission can end Georgia Power's cost overruns for Plant Vogtle, and that will probably end that failed Big Bet, freeing up many resources for solar power in Georgia and wind power offshore..

For the rivers and the aquifer,
John S. Quarterman, Suwannee Riverkeeper
President, WWALS Watershed Coalition
229-242-0102



John S. Quarterman, Suwannee Riverkeeper, at [SO Stockholder Meeting, Pine Mountain, Georgia, May 24, 2017](#), still from Southern Company video.

²³ ["Tesla does deal with Vermont utility to reduce electricity bills with Tesla batteries."](http://www.cnbc.com/2017/05/12/tesla-does-deal-with-vermont-utility-to-reduce-electricity-bills-with-tesla-batteries.html) by Robert Ferris, CNBC, May 12, 2017, <http://www.cnbc.com/2017/05/12/tesla-does-deal-with-vermont-utility-to-reduce-electricity-bills-with-tesla-batteries.html>