Comment closes Wednesday on permit for giant new natural gas power plant in Charles City

By Sarah Vogelsong - March 19, 2019



Dominion Energy's coal-fired Chesterfield Power Station. (Ryan Kelly/ For the Virginia Mercury)

A proposed new natural gas-fired power plant in Charles City County, which, if built, would be among the largest power generators in the state, has sparked few objections, even as other new gas infrastructure has faced a contentious path to approval.

Only three people spoke at a hearing hosted by the Virginia Department of Environmental Quality March 5 on the granting of a "prevention of significant deterioration" permit for the planned Chickahominy Power Station.

The permits are required for the construction of any new air pollution source that emits more than 100 tons per year of any of a set of pollutants identified by DEQ, including sulfur dioxide, carbon monoxide and particulate matter, among others.

For Charles City Supervisor Bill Coada, who attended DEQ's March 5 hearing, there was little to fear from the proposed natural gas power station.

"Of course we have concerns about the air quality," he said. But, he added, "if you compare it to a coal-fired unit, you'll find these are much cleaner."

The Chickahominy Power Station is being developed by Chickahominy Power, LLC, a subsidiary of Balico, LLC, that was formed for the purpose of developing and

operating the facility. Plans submitted to the State Corporation Commission and DEQ describe it as a combined-cycle natural gas generation facility with three turbines that will be capable of producing 1,650 megawatts. By comparison, Dominion Energy's recently finished Greensville combined cycle power station is 1,588 megawatts and the company's coal-fired Chesterfield Power Station is the largest fossil-fuel plant in Virginia at 1,640 megawatts.

As an independent power producer, Chickahominy would sell its power directly to the PJM Interconnection wholesale market.

Located just over half a mile east of the intersection of Chambers and Roxbury Roads, the project's 185-acre site surrounds Dominion Energy's existing Chickahominy Substation and is crossed by two of Dominion's transmission lines and a Virginia Natural Gas pipeline.

Documents from DEQ show that of 10 proposed emission constituents, seven are above the threshold set by the department to classify a facility as a major stationary source of the pollutant. These include three types of particulate matter, nitrogen oxide, carbon monoxide, volatile organic compounds and carbon dioxide equivalents.

Mary Finley-Brook, an associate professor of geography and environmental science at the University of Richmond aired concerns about the level of emissions that the plant is expected to produce at the March 5 hearing and recommended that the project be sent to the State Air Pollution Control Board for review.

"The one actually that concerns me the most would be the greenhouse gas emissions, so the carbon dioxide equivalent," she told DEQ. "One of the main reasons why I think this permit should be rejected is because we are looking to limit our greenhouse gas emissions from our fossil-fuel sector."

Steve Fuhrmann of Providence Forge also cited worries about emissions.

"We already have a higher incidence than normal of both [chronic obstructive pulmonary disease] and asthma in this county, and any additions to our polluting atmosphere ... is of great concern," he said. (VDH maps show that relative to other areas of Virginia, Charles City County and the surrounding region show higher incidences of asthma.)

An engineering report by DEQ has found that "approval of the proposed permit is not expected to cause injury to or interference with ... health." As a further safeguard, the department has also attached to its draft permit the requirement that the facility carry out continuous emissions monitoring, which will constantly track and record the pollutants the power station is producing.

A 'sudden surge of interest'

Still, for some residents, the proposed Chickahominy Power Station is only the tip of the iceberg.

The project is the third major energy generator proposed for the county in the span of four years. In 2015, the Board of Supervisors approved a special use permit for the C4GT power station, another natural gas facility that Michigan-based NOVI Energy says it plans to develop on 88 acres less than a mile from the Chickahominy facility.

The C4GT facility, which has not begun construction (earlier this month, the SCC granted its certificate of public convenience and necessity a two-year extension), has a planned capacity of 1,060 megawatts.

Finally, this spring, the board is considering ambitious plans by Utah-based sPower to construct a 340-megawatt solar farm on more than 2,000 acres of land previously used for timber. While that project has not yet received the special use permit it needs to move forward in the county, the Charles City Planning Commission showed little opposition to it, voting 5-1-1 to recommend its approval.

If all three facilities are built, Charles City County will become one of Virginia's biggest power producers, according to data collected by DEQ.

"Geography has dictated this sudden surge of interest in Charles City County," Coada said.

Balico director of development Jef Freeman, Jr., said growth in Virginia's data centers is a primary driver of Balico's interest in the Chickahominy project.

"It's really driven by the economic activity that's going on in the region," he said. "Data centers themselves require significant amounts of energy to support what they do and very reliable power."

However, many of the companies building data centers are increasingly pushing to power them with renewable energy.

Charles City County, for its part, has highlighted the desire to develop its industrial assets in its 2014 Comprehensive Plan, which calls for the creation of a second industrial park, industrial reserve areas and a new industrial corridor overlay district.

Still, the handful of residents at the March 5 hearing expressed qualms about how the combination of new power generators might affect air quality overall.

Stanley Faggert, the DEQ's minor new source review coordinator, said the agency had included the projected emissions from the C4GT plant in its air quality modeling for the Chickahominy Power Station.

"We do model the background and we take into account existing sources around the facility," said Michael Dowd, DEQ's Air and Renewable Energy Division director. "It's something we look at carefully."

Fuhrmann asked that if DEQ decides to grant the permit, it take steps to do additional monitoring, as the closest monitoring station, at Shirley Plantation, sits in the opposite direction from prevailing winds relative to the Chickahominy Power Station. Dowd, however, said that the Shirley monitoring station "is darn close as far as monitoring goes" and observed that "many of these air quality impacts are regional in nature and not local."

For Coada, the question comes down to not only the need for Charles City County to expand economically, but Virginia's broader attempts to embrace clean energy.

"When you look at what it's replacing," he said, "it's actually doing the commonwealth a favor."

Not everyone agrees.

Thomas Hadwin, a former electric and gas utility executive in New York and Michigan who lives in Waynesboro, said that approval of the project "may not be good energy policy in the long run."

Besides emitting significant amounts of greenhouse gases, he said, the plant would consume a large amount of Virginia Natural Gas' supply to the region, which VNG has indicated is constrained.

Furthermore, Hadwin questioned whether the demand exists in Virginia for two new major natural gas plants.

PJM, the regional transmission organization that coordinates wholesale electricity in all or parts of 13 states and the District of Columbia, including Virginia, is expecting capacity to significantly outstrip demand in the near future, according to data from the organization. Dominion has said it has no plans to build new combined-cycle natural gas facilities.

And C4GT, which this March petitioned the SCC to extend its certificate of public convenience and necessity for an additional two years, justified the project's delay on the basis of "unexpected change in market for additional electric generating capacity."

"These people are trying to move into a marketplace that's already flooded with capacity," said Hadwin.

Freeman, however, said that Chickahominy Power would not be pursuing a project that it didn't think was viable.

"There's a lot that goes on behind the scenes to determine this kind of project," he said, adding that "even with the two projects that are proposed, neither are assured of proceeding."

The comment period for DEQ's draft permit for the Chickahominy Power Station ends Wednesday.

Sarah Vogelsong

Sarah covers environment and energy for the Mercury. Originally from McLean, she has spent over a decade in journalism and academic publishing. Most recently she covered environmental issues in Central Virginia for Chesapeake Bay Journal, and she has also written for the Progress-Index, the Caroline Progress, and multiple regional publications. In 2017, she was honored as one of Gatehouse's Feature Writers of the Year, and she has been the recipient of numerous awards from the Virginia Press Association. She is a graduate of the College of William & Mary. Contact her at svogelsong@virginiamercury.com

DEQ says groundwater proposal for contested Chickahominy power plant will protect aquifer

By Sarah Vogelsong - December 11, 2019



As Virginia tries to protect its eastern aquifers, the state Department of Environmental Quality is limiting the amount of groundwater that a controversial new natural gas plant can withdraw.

Plans to build the Chickahominy Power Station, a privately financed generation facility that is expected to produce more power than Dominion's largest fossil-fueled power plant, have been moving forward, despite a late wave of opposition from environmentalists and some locals. Now a compromise solution with DEQ may allow the project to clear its final regulatory hurdle: state approval of its water usage.

That task isn't as easy as it might seem.

Chickahominy's planned site in Charles City County sits atop the Potomac aquifer, a massive reserve of high-quality water that supplies most of Virginia east of Interstate 95. Since 2013, with data showing an unsustainable rate of withdrawal from this reserve, officials have been drastically limiting how much users can take.

Consequently, Chickahominy's application for a standard 15-year groundwater withdrawal permit that could be renewed at the close of its term posed a dilemma for DEQ.

"The project presents an overall policy question about allowing a new groundwater withdrawal from the Potomac Aquifer that is for an industrial use and not for

human consumption," an internal DEQ memo dated April 23, 2019, stated. "Particularly, when considering the efforts to cut back groundwater from top users in Eastern Virginia to stabilize the Potomac Aquifer."

The solution the agency landed on was a special exception for withdrawal, an infrequently used form of permission to withdraw groundwater "in unusual cases" that cannot be renewed.

"We don't typically issue them," said Scott Kudlas, director of DEQ's Office of Water Supply. But, he said, "by minimizing the term of the withdrawal, we are minimizing the impact on the aquifer overall."

"The issuance of a groundwater withdrawal permit, rather than a Special Exception, would allocate available groundwater supply within a multi-county area with identified groundwater resource limitations for a use other than human consumption for a permit term of up to 15 years, or longer if reissued," a DEQ "Justification for Use of a Special Exception" noted. "DEQ does not believe the issuance of a typical groundwater withdrawal permit is consistent with the Groundwater Management Act of 1992 under these circumstances."

Emails between officials and consultants working with the developer behind the Chickahominy project, Balico, show protracted negotiations over the term of the special exception. Ultimately, it was drafted to last seven years — shorter than Chickahominy's 10-year ask but longer than DEQ's original five-year proposal.

"To obtain financing, a project will require a secure source of water for a minimum of 10 years post commercial operation," wrote Balico director Jef Freeman in an email forwarded to DEQ by a consultant working for the company in August. "Therefore it is important that the term ... be linked to this same time horizon to enable the project to be favorably viewed in the current finance marketplace, be able to secure adequate financing and ultimately proceed into construction and eventual operation."

Freeman did not respond to a request for comment on Chickahominy's views of the draft special exception.

Under the conditions of that exception, which must be approved by the State Water Control Board, Chickahominy would be allowed to withdraw a maximum of 30 million gallons of groundwater per year and 3.5 million gallons per month, far less than the millions of gallons per day being drawn by the state's largest users.

The seven-year term was chosen to give the facility time to connect to a waterline being planned by New Kent County, with which Chickahominy has already negotiated to fulfill its future water needs. But, Kudlas cautioned, "there's very little cushion in there."

Despite DEQ's more protectionist stance, local residents and environmentalists who attended an informational session in Charles City County Dec. 5 expressed dissatisfaction with the proposal.

Dan Roberts, a local who opposes the Chickahominy project, said he was worried about water levels declining in wells adjacent to the facility's property, adding that if the special exception is approved, the company should be responsible for testing those wells' water levels.

"It's going to affect the whole system," he said.

Others' objections were broader, focusing less on groundwater and more on the overall project, particularly in the context of the county's approval of another massive (and as-yet unbuilt) natural gas plant known as C4GT and a large-scale solar installation being developed by sPower. If all three are built, Charles City will become one of the state's largest power producers.

"One of the aesthetic values of living in this county is we don't have the industry. ..

We work outside the area and we come home to a pleasant place to live," said

Donald Charity, a lifelong county resident and a member of the Concerned Citizens
of Charles City County, or C5, group opposing the project. "That's not to say there
shouldn't be economic development ... but to all of a sudden up and make these
three decisions that aren't included in the comprehensive plan is sort of suspect."

Bonita Lewis, another resident and C5 member, complained of what she saw as the similarities between the Chickahominy project and Dominion Energy's Buckingham compressor station in Union Hill, which ignited a contentious battle over environmental justice that has made national headlines.

"It's the same kind of demographics," she said, referring to the area's large minority population. "It seems plain."

DEQ has contested the characterization of the Chickahominy site as being an environmental justice hotspot based on comparisons of resident demographics within one-, two- and five-mile radiuses with state demographics. Notably, that approach was sharply criticized by 4th Circuit Court of Appeals Chief Judge Roger Gregory during an October hearing on the Union Hill compressor station.

Despite complaints, Charles City Supervisor William "Bill" Coada, who voted to approve the project on a local level in 2015-16, said he continued to be "tickled to death" with the Chickahominy Power Station.

"DEQ has deemed the air safe, the water safe," he said. "I feel very confident in their findings." The public comment period for the proposed water permit will be from Dec. 26 to Feb. 14.

Sarah Vogelsong

Sarah covers environment and energy for the Mercury. Originally from McLean, she has spent over a decade in journalism and academic publishing. Most recently she covered environmental issues in Central Virginia for Chesapeake Bay Journal, and she has also written for the Progress-Index, the Caroline Progress, and multiple regional publications. In 2017, she was honored as one of Gatehouse's Feature Writers of the Year, and she has been the recipient of numerous awards from the Virginia Press Association. She is a graduate of the College of William & Mary. Contact her at svogelsong@virginiamercury.com

Did briefing on proposed Charles City gas plant 'come close enough' to statutory requirements?

By Sarah Vogelsong - June 19, 2019



Regulators from the Virginia Department of Environmental Quality raised questions about whether the company seeking an air permit to build a massive gas plant in Charles City County met statutory requirements for informing the public of the project's impacts, emails from the agency show.

The permit for the 1,650-megawatt plant, being developed by Chickahominy Power, LLC., heads to the State Air Pollution Control Board Friday. If built, the plant would edge out Dominion Energy's Chesterfield Power Station for the claim to the largest fossil fuel-fired plant in Virginia.

On May 17, 2017, Chickahominy, a subsidiary of Balico, LLC, held an informational briefing on plans to build the plant on 185 acres in Charles City. The site is located next to Dominion Energy's Chickahominy substation and traversed by a Virginia Natural Gas pipeline.

Virginia administrative code requires that an informational briefing be held on any new stationary source of air pollution between 30 and 60 days after notice of the project is published in a newspaper in the region. According to the statute, at this briefing, the project applicant "shall inform the public about the operation and air quality impact of the source" and answer any related questions.

"At a minimum," it says, "the applicant shall provide information on and answer questions about (i) specific pollutants and the total quantity of each which the

applicant estimates will be emitted and (ii) the control technology proposed to be used at the time."

But emails from members of DEQ's Air Division indicate that Chickahominy Power, LLC may have fallen short of these requirements.

The emails were obtained as part of a Freedom of Information Act request by Mary Finley-Brook, a University of Richmond professor who has openly opposed the Chickahominy project and criticized the lack of public awareness of the proposed plant.

In a summary of the May 17, 2017, briefing sent to six other DEQ staff members the day after, air permit writer Alison Sinclair noted that the presentation consisted of "only about four PowerPoint slides detailing the name of the company, where the project is located, that the facility includes three natural gas-fired turbines, that the company will have to apply [best available control technology], and what the project's timeline looks like (they hope to get a draft permit by January). That's it."

A subsequent email from Sinclair explained that there was "no mention of specific pollutants, quantities, or controls by the consultant."

One citizen who attended the briefing, Sinclair said, "was a bit taken aback by the brevity and lack of content of the presentation."

Air permit coordinator Stanley Faggert responded: "It's almost like they didn't meet the regulatory requirements for their briefing."

"However," he added, the statute "could be interpreted to gives [sic] us the ability to say they came close enough."

The emails show DEQ staff attempting to conduct damage control at the briefing.

"I spoke up and briefly explained what was proposed, although I couldn't remember the actual proposed quantities of emissions," Sinclair wrote. In an email to other DEQ officials a year later, she described herself and another staffer as having had to "cover" for the applicant "when the one citizen that showed up had many questions that the representatives could not answer."

DEQ spokeswoman Ann Regn said the department "believes the regulatory requirements for an informational briefing conducted in 2017 by Balico were satisfied."

"While the presentation by Balico's consultant was brief, the consultant and DEQ staff answered the questions asked by the community," she said.

Asked how that conclusion was in line with the account of the meeting described in its staffers' emails, Regn said the requirements were "satisfied based on the combination of the information in the applicant's public briefing notice, the applicant's public presentation and the participation of DEQ staff." She added that "the one citizen in attendance indicated satisfaction with the answers to his questions and the information provided" and subsequently had a one-on-one meeting with DEQ officials.

Besides the May 17 meeting, the project was discussed in public meetings of the Charles City County Planning Commission and Board of Supervisors while they were considering granting a special use permit to the facility. Only one person offered a comment in four public hearings held on the subject.

The State Corporation Commission also reviewed the plan and issued a certificate of public convenience and necessity on May 8, 2018.

In 2018, concerned about the amount of time that had passed between the original permit application and a revised application that the department was waiting to receive, Sinclair also wrote the project's engineer to say that "another Information Briefing should be held according to the requirements of 9 VAC 5-80-1775.C to let the public know of the changes to the original application." The engineer requested that DEQ hold off on requiring another hearing until it received the revised application.

Regn said that a second briefing was never held because the revised application "was more stringent than the original proposal," including a turbine that produced fewer greenhouse gas emissions.

The department subsequently held a public hearing and public comment period for the draft permit, both of which are also mandated by state law.

"We believe all regulatory requirements regarding public information have been met," Regn said.

Jef Freeman, director of development for Balico, said he "disagreed completely" with the idea that the briefing had not met state standards and called a "retrospective" characterization of the events "unfair."

"I think it did meet the regulatory requirements when the application was first filed, and since then there have been other public outreach opportunities," he said.

UPDATE: This story has been updated to include additional comments from DEQ received Thursday morning.

Sarah covers environment and energy for the Mercury. Originally from McLean, she has spent over a decade in journalism and academic publishing. Most recently she covered environmental issues in Central Virginia for Chesapeake Bay Journal, and she has also written for the Progress-Index, the Caroline Progress, and multiple regional publications. In 2017, she was honored as one of Gatehouse's Feature Writers of the Year, and she has been the recipient of

numerous awards from the Virginia Press Association. She is a graduate of the College of William & Mary. Contact her at svogelsong@virginiamercury.com

Natural gas development is speeding up in Virginia. Legislators will have to square that with state climate goals.

By Sarah Vogelsong - December 30, 2019



A Dominion Energy employee surveys the natural gas-fired Greensville County Power Station which began commercial operations in December 2018. (Dominion Energy news release)

This September, Gov. Ralph Northam took the stage at the inaugural Virginia Clean Energy Summit to announce he was committing the state to a carbon-free grid by 2050.

"I always say that I want Virginia to be a welcoming place, with our lights on and our doors open," he said. "Well, I also want those lights to be powered by clean energy."

But as the governor received a standing ovation, elsewhere in the commonwealth work was underway to massively expand infrastructure supporting a very different — and decidedly not carbon-free — type of energy: natural gas.

The past year has seen a flow of investments in natural gas in Virginia, from ongoing work on the Mountain Valley Pipeline and continued efforts to construct the Atlantic Coast Pipeline to plans by state utilities and private investors to build up to 12 new natural gas plants.

Now, as the General Assembly prepares to convene this January under new Democratic leadership, lawmakers are struggling to chart a course for Virginia's

energy policy in a state split between carbon-free goals and intensive natural gas investment.

"I would rather we not (build new natural gas plants)," said Sen. Jennifer McClellan, D-Richmond, shortly after she and Democratic Dels. Rip Sullivan of Fairfax, Jennifer Carroll Foy of Prince William and Alfonso Lopez of Arlington introduced a sweeping proposal to transition Virginia to clean energy. "But I think we are going to have to make sure that while we're in this transition, we can meet demand."

Utilities, and a handful of private investors, have contended that to meet that demand and keep Virginia's lights on, natural gas is a necessary bridge. But many clean energy advocates and industry analysts say there are other options — and that continuing to build out the natural gas grid bears environmental and financial risks for the state.

"The economics in and of itself would seem to indicate that we're transitioning away" from traditional forms of generation, said Harry Godfrey, executive director of Virginia Advanced Energy Economy, an industry group that advocates for clean energy on economic and business grounds.

"I think that should raise real questions in regulators' minds and in the minds of consumers about whether or not investing in a set of assets whose economics are increasingly in question makes the most sense for the benefit of ratepayers," he said. "Is the only way to meet an identified need by building a new power plant, or are there other responses?"

A bridge to renewables — or nowhere?

Over the past five years, Virginia has seen a burst of interest in renewables: across the state more than 17 gigawatts of solar are in various stages of development, Dominion Energy is gearing up to build a 2.6-gigawatt offshore wind farm (set to be the nation's largest), and even onshore wind is gathering steam with projects in Botetourt and Pulaski counties.

Simultaneously, however, investment is continuing to pour into natural gas.

Two large-scale interstate pipelines, the 303-mile Mountain Valley and the 600mile Atlantic Coast, have grabbed most of the attention. Controversial projects both, the pipelines have been justified by developers as necessary to meet mounting energy demand.

But the pipelines are only the tip of the iceberg. Statewide, natural gas plant construction has accelerated. Over the past decade, Dominion has poured billions into new facilities powered with natural gas, including the Brunswick, Greensville and Warren County power stations, while also converting coal units to gas. More

are on the way: plans submitted by the utility to the state since 2018 have called for the construction of eight to 10 natural gas plants over the next few decades, with specific projects announced in Pittsylvania and Chesterfield.

Private investors have also taken notice: in Charles City County, two projects are underway by separate backers to build the 1,600-megawatt Chickahominy Power Station and the 1,060-megawatt C4GT plant, both natural gas-fueled merchant generators betting that their gamble on the fuel will reap dividends.

Dominion declined to provide comments for this story, citing its ongoing policy of not speaking with the Virginia Mercury. But in statements to other news outlets, the utility has justified the need for new natural gas plants to "fill the gap of the intermittency of renewables" and meet demand.

Whether that demand exists is questionable — an investigation earlier this month by S&P Global Market Intelligence found that the utility "has consistently overforecast" the need for new capacity. (Dominion abruptly and without explanation canceled a request for proposals to add 1.5 gigawatts of energy to its fleet the day after the report.) Nevertheless, lawmakers have historically left such technical determinations to the company itself and regulators at the State Corporation Commission to resolve.

Until now. With climate change increasing public attention to energy, the oncearcane field of policy is rapidly becoming fertile ground for politics. And on no issue may Virginia legislators face as much tension as natural gas, where the gap between the state's carbon goals and its actions is unusually wide.

'One or the other'

For legislators, if the state's natural gas expansion is the rock, then Northam's September executive order committing Virginia to a carbon-free grid by 2050 puts them in a hard place. If the state is to meet that goal, all of its currently operating natural gas plants have only 30 years left in their lives, while those still in the planning pipeline will have less, perhaps just over two decades.

For natural gas plants, that's an unusually short amount of time. While the U.S. Energy Information Administration puts the average age of such plants nationwide at 22 years, PJM has reported that on average, natural gas units within its territory last 48 years, and Dominion has a number of facilities powered by the fuel that were built in the early 1990s and are still in operation.

What that means, said Will Cleveland, a lawyer with the Southern Environmental Law Center who has challenged many of Dominion's plans before the State Corporation Commission, is that new natural gas facilities are likely to become "stranded costs" — infrastructure that has been built but becomes either useless or redundant before the end of its life, and before users have finished paying it off. In simple terms, a facility might no longer be running, but its cost would still be factored into a customer's bill.

When it comes to such new plants, said Cleveland, either "you are knowingly and deliberately saddling customers with a stranded cost, or you're not serious about meeting the governor's objectives. It's one or the other."

Long-term, "gas has a lot more problems in it than the industry and lawmakers have addressed," said Thomas Hadwin, a former utility executive who now lives in Waynesboro. "We're going to be paying for these things a long, long time whether they're useful or not."

Northam's office did not respond to requests for comment on how natural gas development fits with the governor's goals.

Further complicating the picture is the prospect of Virginia joining the Regional Greenhouse Gas Initiative, a cap-and-trade market that seeks to reduce carbon emissions throughout New England and the Mid-Atlantic. Republicans blocked the state's membership last year, but new Democratic majorities make it likely that Virginia will commit to the coalition in 2020.

Under RGGI, all major carbon emitters in the power sector would be required to purchase emissions allowances at auction. Not only would that add extra costs to any natural gas facility, but, Hadwin warned, carbon-emitting private generators like the Chickahominy Power Station and C4GT could put further strain on utilities by cutting into the pool of allowances.

"These two merchant generators going in would cost utility ratepayers in the state a lot in excess charges if they have to buy offsets for the carbon plants," said Hadwin. "There's a lot of downsides that I don't think the regulator has considered."

But in a regulatory environment that largely assesses risk in financial rather than environmental terms, few mechanisms exist to determine the true costs of new fossil fuel development.

That's particularly true when the development is being undertaken by private investors rather than utilities. Merchant generators still must obtain a certificate of public convenience and necessity from the State Corporation Commission before embarking on a project, but the scrutiny they face and the standards they must meet are far less than those borne by utilities.

The logic is that the investors themselves, rather than ordinary people paying electric bills, bear the brunt of the risks if the effort fails. As hearing examiner Ann Berkebile wrote in her report on C4GT's application for its certificate in 2017, "unlike a regulated public utility whose costs of constructing a generation facility

are passed on to ratepayers, C4GT is not required to establish that the facility is required by the public convenience and necessity as a condition of approval."

But in a world where emissions have a price, and where they are increasingly seen as a public burden that taxpayer funds must go to reduce, the calculations have shifted.

That's evident in McClellan's own stance: in 2017, the senator wrote a letter in support of the C4GT plant in Charles City County, citing the economic benefits it would bring. Since then, however, she said her views have changed in light of residents' concerns and the announcement of the neighboring Chickahominy plant.

Still, to some residents and clean energy advocates, the impression left is that no one in Virginia is minding the store.

"We ought to be asking all the hard questions, and we're not doing it," said Lynn Wilson, a Henrico resident who opposes the Chickahominy Power Station and C4GT projects. "There's not even a mechanism for doing it."

One such mechanism that's already been proposed is a dramatic one: an outright ban on further fossil fuel development. The idea is part of Green New Deal legislation put forward by Sam Rasoul, D-Roanoke, and groups like Food and Water Watch are also supporting such a measure.

But whether a moratorium has enough political currency to pass the General Assembly is uncertain; notably, the Clean Economy Act being championed by McClellan, Carroll Foy, Sullivan and Lopez contains no such prohibition.

"This bill doesn't necessarily preclude" new natural gas plant construction, said Carroll Foy. "We leave that open."

CORRECTION: This story has been updated to correct Lynn Wilson's residence. She lives in Henrico, not Charles City County.

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