Dominion Energy's POWER GRAB

food&water watch

About Food & Water Watch

Food & Water Watch champions healthy food and clean water for all. We stand up to corporations that put profits before people, and advocate for a democracy that improves people's lives and protects our environment. We envision a healthy future for our families and for generations to come, a world where all people have the wholesome food, clean water and sustainable energy they need to thrive. We believe this will happen when people become involved in making democracy work and when people, not corporations, control the decisions that affect their lives and communities.

Food & Water Watch has state and regional offices across the country to help engage concerned citizens on the issues they care about. For the most up-to-date contact information for our field offices, visit *foodandwaterwatch.org*.

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COVER PHOTO: DOMINION'S MOUNT STORM POWER STATION; BISMARCK, WEST VIRGINIA

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Executive summary

Dominion Energy is one of the biggest U.S. utility companies and wields outsized political power in its home state of Virginia, where it has designed the rules that oversee its operations, padding its profits and threatening the climate with a renewed commitment to fossil fuels. Dominion Energy's coal-fired power plant legacy has polluted local communities and spewed climate-destroying greenhouse gases.

Today, Dominion Energy and its subsidiaries and affiliates (Dominion) are aggressively pushing another fossil fuel — natural gas — to slowly replace the company's coal-fired operations. Dominion promotes the controversial hydraulic fracturing (fracking) gas drilling technique that has threatened communities near drilling rigs with water pollution, air emissions and ecosystem degradation. Natural gas is no climate solution: gas-fired power plants emit greenhouse gases, and natural gas infrastructure like pipelines and power plants leaks the potent greenhouse gas methane that warms the climate.

Dominion has bought, constructed and is continuing to build major fracked gas infrastructure across the country including the Cove Point liquefied natural gas export terminal in Maryland, the Atlantic Coast Pipeline from West Virginia through Virginia to North Carolina, and gas storage and processing facilities across the Marcellus and Utica shale basins in Ohio, Pennsylvania and West Virginia. The company's Wexpro subsidiaries in the Rocky Mountains even operated nearly 1,400 gas wells — mostly relying on fracking.

This growing portfolio of natural gas assets locks the United States into a fracked gas future that threatens the climate, destroys the environment along pipeline routes and perpetuates the corrosive impacts of fracking. Dominion's other lowlights include:

- **Dominion has lavished politicians with at least $59 million over the past two decades:** Dominion has spent at least $59 million since 1998 on campaign contributions, lobbying and gifts to influence Virginia legislators and officials, the U.S. Congress and other states across the country where it has operated. Nowhere is that more evident than in Virginia, where Dominion has long been the biggest corporate contributor to political campaigns, a dominant lobbying force and a generous gift-giver to legislators and officials. Dominion gave Virginia legislators over $430,000 in meals, cocktails, conferences, sporting events and hunting trips from 2008 to 2016, according to data from the Virginia Public Access Project — including nearly $122,000 for Washington Redskins games.
- **Dominion has repeatedly successfully crafted — and recrafted — Virginia's electric utility rules to benefit Dominion while driving up electric**

VIRGINIA STATE CAPITOL • PHOTO CC-BY-SA © SKIP PLITT, C'VILLE PHOTOGRAPHY / FLICKR.COM

CLOVER POWER STATION, CLOVER, VA • PHOTO CC-BY-SA © DAVID HOFFMAN / FLICKR.COM

bills: Dominion exercised its political power to repeatedly reshape Virginia's electric utility regulation over its key subsidiary Virginia Power, largely to pad its profits by preventing the state regulator from protecting ratepayers from high electricity costs.

- **Dominion's legacy of pollution continues to threaten communities:** Dominion's power plants have been significant polluters, and the company has amassed millions of dollars in settlements with the U.S. Environmental Protection Agency (EPA) over alleged violations of the Clean Air Act. Coal continues to account for one-fifth of Dominion's power capacity, emitting climate-altering gases and dangerous air pollutants. The company's decades of coal combustion have generated mountains of coal ash waste that can pose environmental and public health risks. Environmental testing has found that Dominion's coal ash ponds have leaked potentially toxic coal residues into nearby water bodies.
- **Dominion's climbing climate emissions:** Despite Dominion's slow shedding of dirty coal-fired power plants, it is building more gas-fired power plants, and its total climate emissions from its fleet of power plants have been rising steadily. Dominion's carbon dioxide emissions from its current coal, gas, oil and biomass power plants have been trending upward, and in 2018 it purchased South Carolina utility SCANA, adding to its coal and gas power plant portfolio.

The urgency of climate change requires a dramatic shift away from fossil fuels, but not only is Dominion increasing investments in gas-fired power plants and gas pipelines, it has only modestly invested in wind and solar power — and mostly outside of Virginia. Only 0.3 percent of Dominion's Virginia Power utility capacity comes from solar energy, and although the company has a pilot offshore wind project in the works, its massive gas-fired power plant under construction in Greensville County is over 100 times bigger than its wind project.

Virginia and the nation must chart a decisive new energy future that rapidly shifts to wind, solar, tidal and geothermal energy sources that have zero greenhouse gas emissions. The entrenched political power of Dominion is the single greatest obstacle to charting a clean energy future in the Commonwealth.

Introduction

Dominion's history stretches back hundreds of years, but today the company is emblematic of power politics at its worst. As the biggest electric and gas utility in Virginia, operating a sprawling network of fracked gas infrastructure, Dominion exerts a powerful influence over the Virginia state legislature, ensuring weak regulatory oversight that safeguards its profits while electric bills continue to rise.

Dominion lavishes elected officials with campaign cash and luxury trips and entertainment while fielding a battalion of well-heeled lobbyists that have crafted and passed its legislative agenda for the past two decades. Today, Dominion's power plants spew climate and air pollutants across Virginia, and its pipelines and power plants are promoting the expansion of the environmentally destructive hydraulic fracturing (fracking) gas drilling technique. The company uses its economic and political muscle to entrench fracked gas infrastructure that will stave off renewable energy investments and lock Virginia into a fossil fuel future for decades to come.

Dominion's controversial projects like the Atlantic Coast Pipeline, Cove Point export terminal, power plants and electric transmission lines have been imposed on the people of Virginia — imperiling communities, seizing private land and threatening the environment and the climate.

From colonial beginnings to the creation of Dominion

The roots of Dominion Energy stretch back to a firm chartered to improve water transportation on the Appomattox River in 1787.[1] The company grew through mergers with canal and river transportation companies, and by the end of the 1800s it was operating generators to power its electric streetcars.[2] Frank Gould, son of the infamous Gilded Age tycoon Jay Gould, became the majority owner of the Virginia Railway and Power Company by the beginning of the twentieth century, operating trolley lines and delivering residential electricity and gas.[3]

The Virginia Electric Power Company (Virginia Power) was formed in 1925 when a syndicate of investors purchased and merged the Spotsylvania Power Company with the Virginia Railway and Power Company.[4] Virginia Power quickly bumped up against

PHOTO CC-BY BILL SMITH / FLICKR.COM

the Virginia State Corporation Commission (SCC), a state authority added to the Virginia state constitution in 1902 to curb the power of railroad monopolies.[5] The SCC had to approve Virginia Power's takeover of another large Virginia utility in the 1940s, which made it one of the biggest utilities in the country.[6]

In 1983, Virginia Power created Dominion Resources, spinning off a smaller firm to be the holding company that was the parent of Virginia Power.[7] It was an unusual corporate move, where the Virginia Power spinoff, Dominion, owned its larger creator, the now subsidiary Virginia Power.[8] In 1994, the SCC challenged Dominion's effort to subvert the utility's independence, contending that it violated the SCC order that approved the creation of Dominion and could undermine the public interest.[9]

The SCC wanted Virginia Power to remain an independent utility, but Dominion launched an aggressive lobbying campaign to seize control of Virginia Power.[10] The multi-year dispute ended in 1997, when Dominion stacked the Virginia Power board with loyalists; the SCC did not object to this corporate intrigue, cementing Dominion's authority over Virginia Power.[11] By the end of the 1990s, Dominion was in charge and the SCC was cowed.[12] This set the stage for Dominion's continuing ability to steamroller the regulator for the past two decades.

Dominion's portfolio of power and profits

Today, Dominion Energy and its subsidiaries and affiliates (Dominion) is a Richmond, Virginia-based Fortune 500 company that is one of the country's largest energy companies.[13] Dominion brags that it is "one of the nation's largest producers and transporters of energy" that provides natural gas, electricity and energy transportation through its electric transmission lines and gas pipelines.[14] It has facilities in 19 states that generate energy, process and pipe natural gas, and deliver power and gas to homes and businesses (see Map 1).[15]

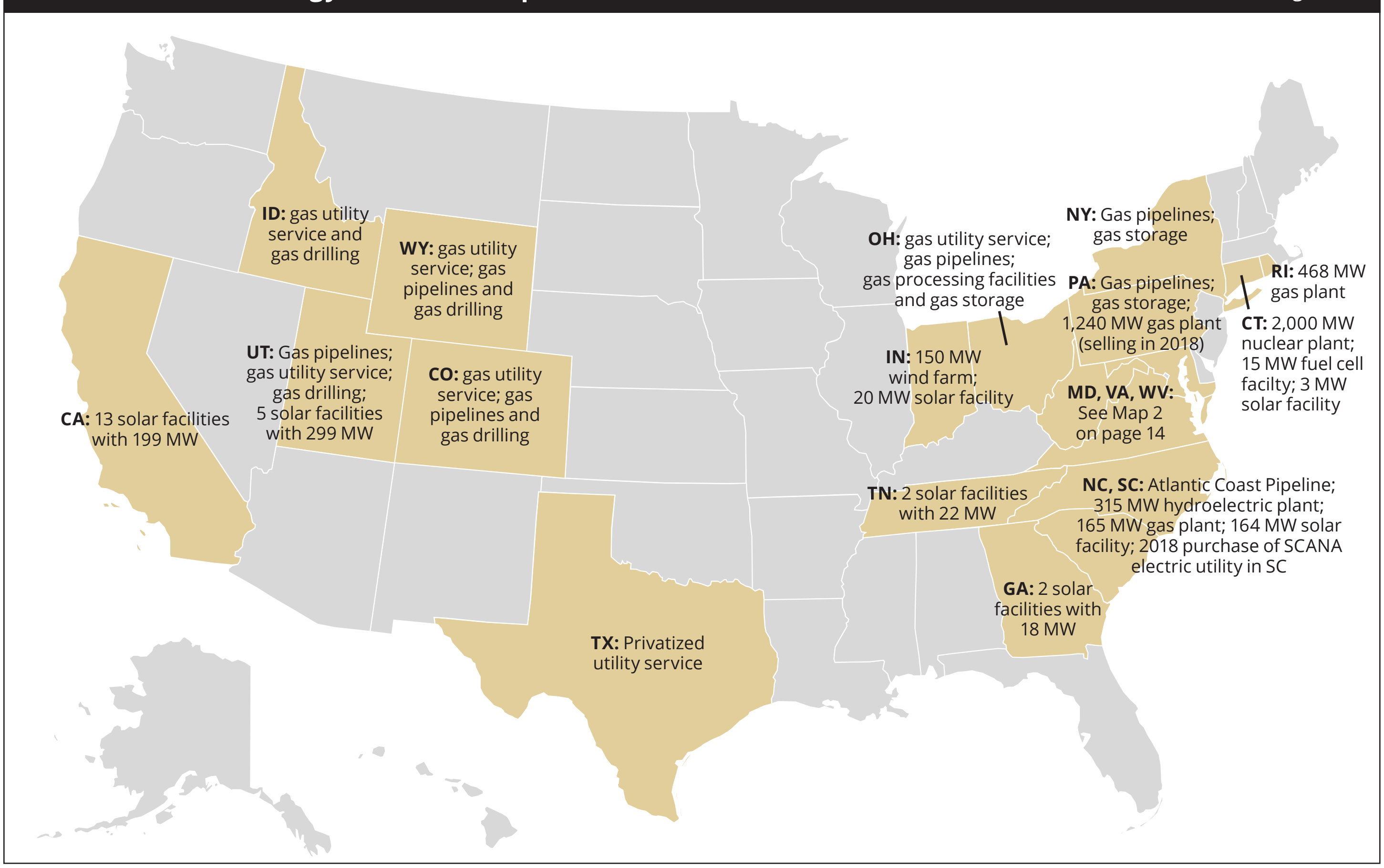
Power plants and electric transmission

Dominion operates 83 energy generation stations including 21 large power plant complexes, mostly in Virginia.[16] These power plants are divided between its Virginia Power utility and another segment that sells electricity into local markets across the country (known as merchant power).[17] Its total electric generation has a combined capacity of over 26,000 megawatts, making it the fifth largest utility in the country.[18] In 2017, about two-thirds of Dominion's total power plant capacity still came from fossil fuels, including coal, oil and natural gas.[19] In contrast, solar power was less than 5 percent of Dominion's total capacity, and the company had built no wind power in the Commonwealth.[20] While Dominion has been slowly shedding coal plants, it has been aggressively building more natural gas power plants, including one in an economically distressed and predominantly African-American county in Virginia.[21] Building additional natural gas power plants would further accelerate greenhouse gas emissions and cause irrevocable harm to the climate.[22]

Gas and electric utilities

Dominion's electric and gas utility business has nearly 6 million customers; about half were in Virginia and North Carolina, with the remainder spread across Idaho, Ohio, Pennsylvania, Utah, West Virginia and Wyoming.[23] Dominion's 2018 purchase of South Carolina-based utility SCANA included 1.6 million utility customers in the Carolinas.[24] But Virginia Power is the jewel in Dominion's crown. Virginia Power delivers power to almost two-thirds of Virginia electric customers and generates nearly two-thirds of the company's earnings and 80 percent of its cash.[25]

MAP 1 • Dominion Energy National Footprint **MW** = Megawatt



SOURCE: Dominion Energy Annual Report.

Dominion's gas infrastructure fuels fracking boom

Dominion is now expanding to become a key player processing, storing and delivering fracked gas from the drilling wells in the Marcellus and Utica shale basins in Ohio, Pennsylvania and West Virginia.[26] Over the past decade, the controversial drilling technique has supercharged a natural gas rush. For example, Pennsylvania, ground zero of the fracking boom, added more than 30,000 gas wells between 2000 and 2016.[27]

Dominion is fueling fracking through its sprawling network of gas infrastructure. In 2017, Dominion and its affiliates operated nearly 19,000 miles of interstate gas pipelines and gathering lines (collecting gas from drilling operations) and an additional 51,800 combined miles of distribution lines (utility gas lines to customers).[28] Dominion's hotly contested Atlantic Coast Pipeline (see page 15) and Cove Point export terminal (see page 17) are creating more demand for fracked gas, expanding the environmentally destructive footprint across the Northeast.

Powerful earnings

Dominion has racked up substantial profits that have risen about 60 percent over the past decade, from $1.8 billion in 2008 to $2.9 billion in 2017.[29] Shareholders have been handsomely rewarded. Dominion's shareholder return nearly tripled, rising 182 percent from 2007 to 2017, far higher than the typical 116 percent return for utility stocks.[30]

FLOODING IN CENTRAL VIRGINIA, HURRICANE ISABEL, 2003
PHOTO CC-BY-NC-ND B3ND3R / FLICKR.COM

Perhaps no one has profited more handsomely than Dominion's chief executive and chairman Thomas Farrell II. Farrell joined Dominion in 1995, during the struggle to control Virginia Power, and rose to control the boardroom by 2007.[31] Farrell's total compensation from Dominion was almost $15.5 million in 2017 (including nearly $100,000 worth of private travel in the company airplane) — 50 percent more than he received in 2015.[32]

Farrell is a prominent figure in Virginia. He leads both the Colonial Williamsburg Foundation and the Virginia Museum of Fine Arts and was appointed by both Republican and Democratic governors to serve on the University of Virginia board.[33] The $5 million Civil War movie *Field of Lost Shoes*, which he co-wrote and that dramatizes cadets at the Virginia Military Institute fighting for the Confederacy at the battle of New Market, received $1 million in tax credits and grants.[34] Farrell's son, who was a Virginia state legislator before stepping down before the 2017 election, was a co-producer and even had a role in the movie.[35]

Environmental and climate urgency in Virginia

Dominion is pursuing this highly profitable fossil fuel future while Virginia suffers the effects of a climate crisis. Virginia is especially vulnerable to the destructive effects of climate change. Since 1970, Virginia average temperatures have increased by more than 2 degrees Fahrenheit (about 1 degree Celsius).[36] Rising temperatures and sea levels due to climate change have resulted in saltwater intrusion, disappearing beaches, and more-intense storms and floods in coastal Virginia.[37] The U.S. Geological Survey estimated that these rising sea levels will "very likely" contribute to the loss of Virginia's barrier islands.[38] Several highly populated coastal Virginia communities will face chronic inundation of seawater by the end of the century.[39]

Increasing temperatures contribute more frequent and stronger extreme weather events.[40] Over the past five decades, heavy storm precipitation has increased by 27 percent in the Southeast and is expected to keep rising.[41] In 2003, the Hurricane Isabel storm surge caused severe flooding in Fairfax County and flash flooding of the South and Shenandoah rivers that cost over $925 million.[42] Sea-level rise contributed to Hurricane Isabel's greater damage compared to previous and more powerful storms.[43]

Protracted higher temperatures will deliver worsening detrimental health impacts.[44] Climate change will make extreme heat days more common in Virginia, exacerbating heart and lung disease that disproportionately impacts senior residents.[45] Climate change will also worsen air and raise water temperatures that increase the risk of vector-borne diseases like Lyme disease and West Nile virus.[46] The most vulnerable residents — including lower-income populations and communities of color, who already endure disparate pollution burdens — will experience the brunt of these impacts.[47]

Despite the ongoing climate crisis, Dominion is expanding its fossil fuel footprint with more pipelines and power plants that will lock Virginia into a fracked gas future for decades. The sunk investment costs in these new greenhouse gas emitters not only discourages investments in clean, renewable energy, but also magnifies demand for natural gas, encouraging more fracking, pipelines and associated leaks of the potent greenhouse gas methane.[48]

Dominion's extraordinary political power in Virginia and beyond

Dominion has long been the dominant corporate donor and player in Virginia politics.[49] The *Richmond Times-Dispatch* reported that state "legislators agree that Dominion's power is unmatched at the state Capitol."[50] Dominion provides a gusher of campaign cash; showers legislators with gifts, meals and trips; and fields a battalion of lobbyists. Food & Water Watch estimated that since 1998 Dominion has spent at least $59 million on campaign contributions, lobbying and gifts to influence Virginia, the U.S. Congress and states across the country where it has operated.[51]

Dominion's largesse is eased by Virginia's lax campaign finance and conflict-of-interest rules. Virginia allows unlimited corporate campaign donations and permits elected officials to vote on legislation affecting companies in which they have substantial investments (as long as other legislators have holdings as well).[52] (See Appendix for list of 2018 Virginia legislators' campaign contributions from Dominion and votes on key legislation affecting Dominion.)

Dominion's political muscle is bolstered by its workers and retirees who are constituents and voters, its philanthropic donations that fund civic improvements, and its role in the economy.[53] Richmond, Virginia features two Dominion office towers, with a new building scheduled to be completed in 2019, and the company's corporate sponsorships include art venues, sports teams, school programs and an international bicycle race.[54]

Dominion facilities are often the single biggest source of local tax revenue, which encourages boosterism by local officials. For example, Dominion's Cove Point tax payments would constitute 30 percent of Calvert County, Maryland's tax revenue (but it received a considerable tax break for the first nine years).[55] The county officials supported a Cove Point pipeline, saying that Dominion had been "a proven community member."[56] Dominion's Millstone reactor provides one-third of the tax revenue to Waterford, Connecticut.[57] In 2018, Connecticut enacted legislation allowing the state to decide whether to make preferential nuclear power purchases from Millstone (comparable to wind and solar procurement preferences) after Dominion spent nearly $1 million lobbying and threatened to shutter the plant.[58]

Dominion has boasted about its political muscle, stating that "we are proud of our participation as a company and as individuals in the political process."[59] From 2017 to 2018, Dominion increased its Virginia lobbying, gift and advertising expenditures 10-fold while successfully pushing to enact a law that was expected to substantially increase customers' electric bills.[60]

Dominion's cornucopia of campaign cash and gifts

Dominion has been the biggest corporate campaign donor in Virginia over the past 20 years, but it has been a significant player in Virginia politics since at least the 1970s.[61] Dominion's political expenditures have successfully pushed an agenda that benefits the company's bottom line. As former Republican Virginia Attorney General Ken Cuccinelli said of the company's political activity: "Dominion's investing. It's paid off handsomely."[62]

From 1998 to mid 2018, Dominion's political action committee (PAC) and employees contributed over $10 million to Virginia candidates, campaigns and causes.[63] The ample campaign generosity is bipartisan: 86 percent of Virginia legislators have received cash from its PAC and/or employees. Of the $2.7 million funneled to Virginia's current lawmakers, 25 state legislators received more than half of the largesse. And the top five recipients received nearly one-third of its contributions (see Table 1).[64]

Dominion has been especially supportive of Virginia's gubernatorial candidates. While Governor Terry McAuliffe (D) refused to accept money from Dominion's PAC as of 2009, he raised nearly $12,000 from Dominion executives and lobbyists.[65] The president of Dominion had donated nearly $53,000 to the campaigns of Republican Bob McDonnell by the time McDonnell ran for governor in 2009.[66] In 2006, Dominion paid for then-governor (and current U.S. Senator) Tim Kaine's trip to Indianapolis for a Final Four college NCAA basketball tournament game.[67] In 2002, Dominion was one of only three company PACs to donate $50,000 to Virginia Governor-elect (and now Senator) Mark Warner's inaugural celebration.[68]

The 2017 election cast Dominion in a more ominous light and marked a turning point for Dominion and its political machinations. Public opposition to its divisive Atlantic Coast Pipeline drew protestors at public campaign events.[69] Activate Virginia, a grassroots Democratic campaign organization, launched a pledge to get candidates to promise not to take campaign contributions from Dominion.[70] In 2017, more than 60 Democratic challengers for the Virginia House of Delegates and all three Democratic candidates for lieutenant governor pledged not to take Dominion political campaign donations.[71]

Still, Dominion's influences persisted. The Democratic gubernatorial primary featured a pipeline opponent, Tom Perriello, and Ralph Northam, who won the race while refusing to take a firm stand on the pipelines.[72] Northam promised tougher environmental reviews while promoting the alleged economic development benefits of the pipelines. Northam held between $5,000 and $50,000 worth of Dominion stock before he was elected.[73]

Northam's transition team included several people affiliated with Dominion, and it donated at least $50,000 to Northam's inaugural committee.[74] After he was sworn in, Northam's campaign promise to perform an in-depth review of the ACP route turned out to be merely a reaffirmation of a pre-existing federal study that found that the route posed little environmental risk, with little additional state scrutiny beyond the federal oversight that critics said was far from rigorous.[75] Northam even reappointed the head of the Virginia Department of Environmental Quality (DEQ) that signed off on the pipeline, even though the DEQ director accepted a trip from Dominion to the Masters golf tournament in 2014.[76]

TABLE 1 • Top 5 Virginia Recipients of Dominion Campaign Cash, 1998-2018

Incumbent and party	State legislative body and district	Dominion PAC contributions	Dominion employee/ individual contributions	Total Dominion contributions
Richard L. Saslaw (D)	Senate District 35 (Fairfax)	$255,500	$18,750	$274,250
Terry G. Kilgore (R)	House District 1 (Wise County)	$171,391	$25,250	$196,641
M. Kirkland Cox (R)	House District 66 (Chesterfield County)	$106,611	$42,110	$148,721
Thomas K. Norment, Jr. (R)	Senate District 3 (Hampton Roads)	$92,990	$22,550	$115,540
R. Creigh Deeds (D)	Senate District 25 (Charlottesville)	$104,450	$5,850	$110,300

SOURCE: Food & Water Watch analysis of National Institute for Money in Politics data.

Dominion, its PACs and employees funnel money to Congress, special interest groups and other states

Dominion also gives generously to Congress and elected officials in other states. Since 2007, Dominion's PAC and its employees contributed more than $8 million to other congressional candidates and leadership PACs.[77] After being one of the top 10 corporate donors to Virginia Senator George Allen's campaign, Dominion nominated his wife to the company's board of directors in 2003.[78] When Senator Allen was appointed to the Senate Energy and Natural Resources Committee in 2005, Susan Allen resigned from Dominion's board to avoid the appearance of a conflict of interest.[79] The company has even provided more unique entertainment for politicians, like its lunchtime circus performances for delegates from Maryland, Ohio, Pennsylvania, Virginia and West Virginia to the 2008 Republican National Convention.[80]

Dominion has also poured approximately $31 million into federal lobbying since 1999.[81] And from 2010 to 2017, the company gave an additional $6.3 million to professional associations to lobby on behalf of their interests.[82] These associations — which included the American Gas Association, the Virginia Chamber of Commerce, Edison Electricity Institute and the Marcellus Shale Coalition — cannot only lobby but also engage in political activity under their tax code status that shields the identity of their donors, known as "dark money" groups.[83] Dominion donated another $1.4 million over the same period to political party and leadership PACs like the Democratic Governors Association and Republican Attorneys General Association.[84]

In Connecticut, Illinois, Indiana, Maryland, Massachusetts, Ohio, Utah and Wisconsin — other states where Dominion has operated power plants — its PAC and employees have contributed at least $2.2 million to candidates, campaigns and causes in an attempt to influence the political system over the past two decades.[85] For example, in 2005 Dominion's executives donated $43,650 to Wisconsin governor Jim Doyle after the state Public Service Commission rejected the company's bid for a nuclear power plant; the PSC later approved a modified bid.[86] In Utah, where Dominion's Questar Gas utility subsidiary operates, the company was the largest donor to Governor Gary Herbert in 2018.[87]

Dominion's generosity greases Virginia legislative skids

Dominion has lavished gifts, entertainment and trips on the Virginia legislature. Between 2008 and 2016, the company spent over $430,000 on meals, cocktails, conferences, sporting events and hunting trips, according to data from the Virginia Public Access Project.[88] Dominion spent nearly $122,000 taking legislators to Washington Redskins games and over $36,000 to host lawmakers at the Masters golf tournament.[89]

Dominion's big hospitality event has been an annual hunting trip to an exclusive hunting plantation in Georgia. Between 2008 and 2016, Dominion spent over $47,000 sending legislators to the Gillionville Plantation quail hunting resort.[90] It was profiled in *Fortune* as an "obscenely expensive" hunting resort for the wealthy to pursue quail on 10,000 manicured acres with white-coated butlers, mule-drawn wagons and 30 bird dogs with personal handlers.[91] Dominion brought the powerful Virginia State Senator Thomas "Tommy" Norment to Gillionville several times.[92] Norment was the Chairman of the Virginia Commission on Electric Utility Deregulation, set up to monitor electricity regulations, and he sponsored at least two of Dominion's legislative initiatives.[93]

Legions of lobbyists, front groups and hush money

Dominion's well-oiled lobbying machine

The company's lobbying operation is executed "with extraordinary skill," according to one Virginia political analyst.[94] In 2017, Dominion fielded six in-house lobbyists and paid for four hired-gun lobbyists from outside firms.[95] During the 2018 utility regulation fight, Dominion fielded 22 lobbyists, including hiring one of Governor Northam's key political advisers.[96]

This lobbying muscle includes a revolving door of former state legislators and lawyers from blue-chip Richmond law firms, giving the company access and credibility.[97] In 2018, former delegate Jack Rust lobbied for Dominion and helped write the utility regulatory legislation that was eventually enacted.[98] Former delegate Melanie Rapp moved to Dominion's external affairs shop after leaving the legislature in 2007.[99] In 2005, then-governor Mark Warner's top lawyer left to work for Dominion, joining its top lobbyist James W. Beamer, a former aide to Governor George Allen and a former finance director of the General Assembly Republican Caucus.[100]

Dominion's astroturf and media campaigns

Dominion supplements its lobbying and campaign contributions with sophisticated public relations efforts that amplify the voices of its shareholders and workers, including creating corporate-funded fake grassroots groups, called astroturf by real grassroots groups. Dominion's spokesperson stated that "it's not unusual for the company to encourage participation" including "politically as part of the democratic process."[101]

Dominion poured money into polling, focus groups and media ads to win the public relations battle for the Atlantic Coast Pipeline.[102] In 2018 alone, it spent $4.4 million on advertisements and media promoting its Virginia legislative agenda and its takeover of the South Carolina utility, including television ads during the Super Bowl.[103] A Dominion official bragged that the company's pro-Cove Point advertisements ran "so often and in so many places that project opponents became annoyed that they could not escape it."[104]

Dominion also has pumped money into shell organizations that downplay their direct industry ties in order to create astroturf support for their projects.[105] Dominion, other Atlantic Coast Pipeline investors and the American Gas Association funded astroturf groups to engage the voters to "elect a pipeline" during the 2017 Virginia elections.[106] Dominion also sent 76,000 mailers to its employees, shareholders and retirees urging them to consider candidates' pipeline positions when casting their 2017 vote.[107] In 2018, these Dominion supporters contacted state legislators to back the Dominion-drafted utility bill.[108]

Dominion's philanthropy provides political cover

Dominion's plentiful charitable donations provide additional leverage for its political causes — and those donations have been rising. In 2015, the company's foundation donated $15 million targeted solely to the states where it operated or had significant business interests.[109] By 2017, those donations rose by one-third to $20 million.[110] A large portion of these grants — $2 million — went to communities affected by the Atlantic Coast Pipeline, which critics contended purchased political cover from local groups.[111]

DOMINION PRESENTS A $50,000 CHECK TO VIRGINIA ASSOCIATION FOR PARKS, 2013
PHOTO CC-BY VIRGINIA STATE PARKS / FLICKR.COM

Some of these donations shored up environmental groups that might have been concerned about Dominion's activities, while others shored up political allies. In 2014, the company's Ohio charitable largesse included land conservation efforts on Lake Erie.[112] In 2011, Dominion's foundation supported small grants to water conservation groups in Western Pennsylvania, the heart of the fracking industry.[113] In 2016, Dominion CEO Thomas Farrell and Dominion's foundation combined gave $125,000 to the Peter Paul Development Center, which employed Virginia Delegate Lamont Bagby.[114]

These foundation grants can appear to buy support or at least buy silence from recipients, including environmental groups that might otherwise oppose Dominion's dirty energy operations. Organizations that receive donations from Dominion often give testimony in support of pro-Dominion bills.[115] A North Carolina Boys & Girls Club executive testified in favor of the Atlantic Coast Pipeline after receiving a $10,000 grant from Dominion to repair hurricane damage, but he contended that his support for the pipeline was unrelated to the financial support.[116] One supporter of a Potomac River environmental group wondered if its receipt of Dominion foundation funding might have contributed to the group's silence on a Dominion fracked gas compressor station.[117]

Dominion's political muscle drives favorable (and lucrative) utility regulations

Dominion exercised its political power to repeatedly reshape Virginia's electric utility regulation over its key subsidiary Virginia Power — each time adjusting the rules to benefit Dominion while driving up electric bills. It also has thwarted popular and progressive energy measures. For example, Dominion ensured that utilities (like its subsidiary Virginia Power) would be gatekeepers for community-based solar projects instead of allowing churches, apartment complexes or other community organizations to develop and benefit from their own solar projects.[118]

But electricity deregulation — and various iterations of re-regulation over coming years — was the big legislative prize for Dominion as the company rode the late-1990s wave of state electricity deregulation. When that deregulation failed to deliver the benefits that Dominion promised, the company promoted a series of changes to Virginia's utility law that confounded regulatory oversight and ensured that its allies in the legislature had the final say over utility regulation. In the end, Dominion's efforts created a system of such light regulatory oversight that in 2017 Goldman Sachs referred to Virginia as "one of the top state regulatory environments for utilities."[119]

Regulated utility companies once made money by generating and delivering electricity to customers in their service area in exchange for the right to earn a reasonable profit for delivering power.[120] Long viewed as a natural monopoly, electric utilities owned transmission lines and power generation and distributed it to consumers.[121] State regulatory agencies like Virginia's State Corporation Commission (SCC) determined the profit margin for private utilities like Virginia Power by setting the rate of return on electric infrastructure investments, and reviewed plans for proposed power plants.

The push for national electricity deregulation

In the late 1990s, energy and utility companies pushed to bust up the utility regulatory compact — a guaranteed market and guaranteed return in exchange for regulated prices — and to replace it with an untested, market-based plan to separate electricity distribution (the utility delivery of power) from power generation and marketing. These deregulatory proposals were expected to boost power company profits. Former Dominion Chairman William W. Berry was a leading proponent of national electricity deregulation, and Dominion's support was joined by Enron, one of the biggest deregulation champions, which salivated at the prospect of speculating on the wholesale electricity market and selling directly to consumers in the $215 billion retail electricity market.[122]

In 1996, the Federal Energy Regulatory Commission (FERC) required interstate electricity transmission companies to offer "open access" for any power company that wanted to sell electricity, creating a massive incentive to generate and sell more electricity.[123] This created a national wholesale market that transformed electricity into a speculative commodity.

YORKTOWN POWER STATION • PHOTO CC-BY © CARMEN SHIELDS / FLICKR.COM

Electricity deregulation encouraged utility companies to branch out from power delivery to the riskier business of buying and trading energy.[124] Dominion built new power plants to sell electricity onto deregulated markets.[125]

In 2000, Dominion's CEO told shareholders that the company aimed to "dominate the Northeast market as much as we can without going to jail for violating the antitrust laws."[126] The company was heavily involved in the same sort of wholesale power trading that brought down Enron.[127] But the downside of deregulation caught up with the company as the national deregulation experiment unraveled with Enron's collapse. Dominion estimated that Enron's bankruptcy could cost the company up to $97 million.[128] At one point during 2002, Dominion's energy trading losses drove its stock down 30 percent in six days.[129]

The federal Energy Policy Act of 2005 further entrenched electricity deregulation. It eliminated price controls on wholesale electricity, ensured open access to the interstate transmission grid and smoothed the approval of power plants, transmission lines and gas pipelines.[130] It also repealed the New Deal's protections under the 1935 Public Utility Holding Company Act, which had prevented utilities from gouging consumers to fuel their speculative business expansions.[131]

Wenonah Hauter, now Food & Water Watch's executive director, predicted at the time that these electricity deregulation schemes would be debacles. In 1999, she said that the Dominion-backed deregulation proposal was "among the most anti-consumer bills" in any state.[132] She was right. In Virginia, the Dominion-driven deregulation and re-regulation has raised electric bills and bumped up Dominion's profits.

Dominion demands — and gets — deregulation

While the FERC deregulated interstate power transmission, the states started to deregulate utility electricity. In 1997, Dominion started pushing for electric utility deregulation designed to let other power companies compete with Virginia Power for customers — even though ratepayers had largely financed the utility's power plant and transmission networks that the new electricity marketers would use.[133] In theory, consumers would be more able to choose among power providers that would compete for customers, improving service and reducing prices. In practice, these savings did not materialize. In 2007, the chairman of the U.S. House Energy and Commerce Committee, Joe Barton, lamented that electricity rates had not declined under deregulation.[134]

Virginia Senator Tommy Norment sponsored the Dominion-designed electricity deregulation legislation in 1999, which not only split delivery from power marketing but reduced regulatory oversight.[135] The SCC opposed Dominion's deregulatory proposal.[136] Virginia enacted electricity deregulation driven by Dominion's lobbying muscle; the law allowed customers to begin choosing their electricity provider by 2004.[137]

But retail electricity competition never materialized in Virginia, and other states that tried the deregulation experiment faced rocketing electricity prices.[138] The Virginia Attorney General's Office found that during five years under electricity deregulation, Dominion earned $858 million more than it would have earned under SCC regulation.[139] Between 1998 and 2008, Dominion's stock price almost doubled and its return on equity (power infrastructure investments) rose to 22 percent.[140]

Dominion pushes profitable 2007 re-regulation

Dominion led the charge for a return to utility regulation on its own self-serving, profitable terms.[141] The re-regulation prevented the SCC from lowering consumer electricity rates but obligated the SCC to approve rate hikes if Dominion's profits slid.[142] Instead of rules that promoted rates based on revenues and reasonable expenses, the re-regulation not only enabled the utility to deduct many investment costs but also curbed the authority of regulators to review rates.[143] The SCC chairman stated that the re-regulation would "unfairly favor the interest of utilities over that of consumers."[144] The Dominion-backed bill (again pushed by Norment) passed rapidly.[145]

Virginia Power's base electricity rates remained steady, but base rates alone did not constitute the entirety of customers' power bills, since the company imposed "rate adjustment clauses" to build five power plants and other infrastructure.[146] Dominion raised its electricity prices by 18 percent in 2008 after the legislation went into effect, the largest one-time rate hike in three decades.[147] By late 2012, the re-regulation scheme increased Dominion's revenues by nearly $300 million and ratepayers' bills by $1.8 billion.[148]

Cost recovery is a giveaway to Dominion

Much of the Virginia electricity deregulation has made it easier for Dominion to get ratepayers to pay for new power plants or other infrastructure. These "cost recovery" provisions allowed Virginia Power to deduct its expensive infrastructure investments from its profits.[149] Since the SCC regulates customer rates based on Virginia Power's profits, these deductions essentially amount to an accounting trick that prevents the SCC from being able to give rebates to ratepayers.

The 2007 legislation allowed Dominion to pad its profits by getting ratepayers to pay for new coal and nuclear power plants.[150] The cost-recovery provisions allowed Dominion to shift the $1.8 billion cost of building a coal-fired power plant onto the ratepayers.[151]

A 2014 Virginia law allowed Dominion to deduct hundreds of millions of dollars in expenditures for a proposed new reactor at its North Anna plant and recover a large portion of the costs from customers.[152] Dominion spent $600 million before abandoning the project — by 2017, customers had already picked up $300 million of these costs for a reactor that was never built.[153]

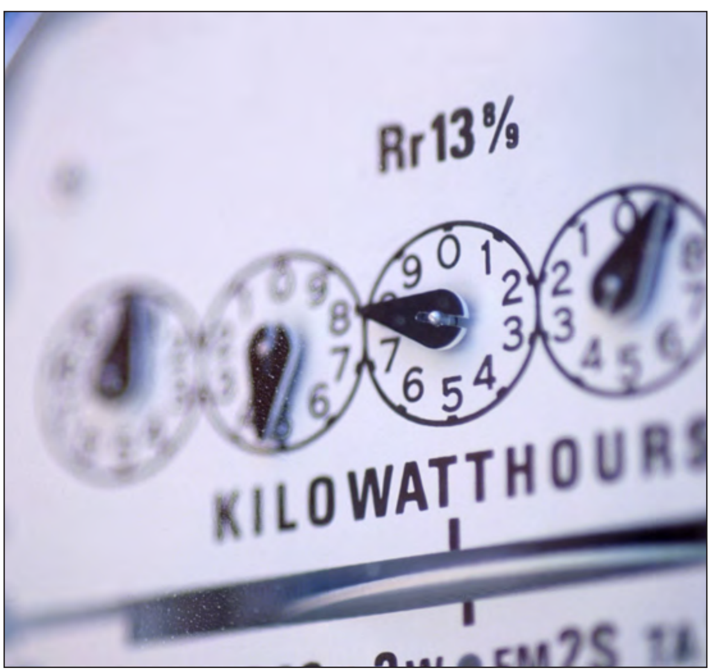
2015 rate freeze lines Dominion's pockets

In 2015, Dominion wrote new legislation that reduced SCC oversight even further and locked in Dominion's profitable prices.[154] It froze electricity rates until 2022 and eliminated the biennial review of Dominion's base rates that allowed the SCC to lower rates or order rebates if Dominion's earnings exceeded fair returns.[155]

While it froze base electricity rates, it still allowed Dominion to charge additional rate adjustments.[156] It also put ratepayers on the hook to fund new power plants, solar facilities and underground power lines.[157] A Virginia Poverty Law Center lobbyist said the legislation gave Dominion "a regulatory holiday."[158] The legislation was projected to deliver as much as $1 billion in excess profits to Dominion that should have been refunded to customers.[159]

Dominion justified the rate freeze as a way to insulate the utility from costs of complying with the Obama administration's proposed Clean Power Plan climate policy (which was derailed by the Trump administration).[160] Its senior vice president for corporate affairs suggested that the rate freeze was designed to "protect customers from a potential price spike tied to environmental costs."[161] This justification was a ruse, since Dominion could have passed any environmental costs on to consumers through rate adjustments (which would have been unaffected by the freeze to base rates).[162]

The rate freeze has soaked Virginia utility customers and padded Dominion's profits. The freeze allowed Dominion to capture $300 million to $700 million in excess profits in two years.[163] Although the legislation froze base rates, Dominion piled on rate adjustment charges, and typical households paid 30 percent more per month for electricity in 2016 than in 2006 before the rate freeze — more than a $300 annual hike in electricity prices for each household.[164] Virginia ratepayers would have been entitled to refunds of between $133 million and $175 million without the rate freeze.[165]



Unfreezing the rates, but keeping regulators at bay

In 2018, Dominion helped craft another bill to replace the divisive rate freeze giveaway.[166] The *Washington Post* reported that Dominion's new legislative efforts constituted "an exercise of raw power" to prevent the public from putting a regulatory leash on Dominion.[167]

The enacted 2018 legislation partially restored oversight of base electric rates, but with a review conducted every three years instead of every two years as before the rate freeze.[168] This would slow the SCC's ability to deliver rebates to consumers from overpayments.[169] It also rebated $200 million in overpayments and further reduced rates by $125 million to pass on the Trump tax cuts.[170] But these refunds barely scratched the surface of what Dominion earned under the rate freeze. The SCC found that the rate freeze enabled Virginia Power to earn an excess of $426 million in 2016 alone.[171]

More importantly, the 2018 law allowed Dominion to overcharge customers without providing rebates as long as it invested the funds in infrastructure improvements like undergrounding power lines or building renewable power generation.[172] The law ensured that these capital expenditures would be presumed to be reasonable, prudent and in the public interest.[173] This could prevent the SCC from requiring Dominion to issue rebates to customers that were overcharged.[174] Both the SCC and the Attorney General's office warned that the legislation would not protect consumers.[175]

Dominion's dominant role in fracked gas infrastructure

Dominion's sprawling network of natural gas infrastructure promotes the expansion of fracking. The company plays a major and growing role in transporting, processing and storing natural gas. Dominion's CEO Farrell trumpeted that shale would promote energy independence and turn the United States into an "arsenal of energy."[176] The company has invested heavily in gas infrastructure to connect its facilities to fracked gas in the shale formations of Ohio, Pennsylvania and West Virginia.[177] Dominion's Wexpro subsidiaries even operated nearly 1,400 gas wells in Colorado, Utah and Wyoming — the majority of which rely on fracking — that produced about 15 trillion cubic feet of gas a month and supplied nearly two-thirds of the gas for its Questar Gas utility company for customers in the Rocky Mountains.[178]

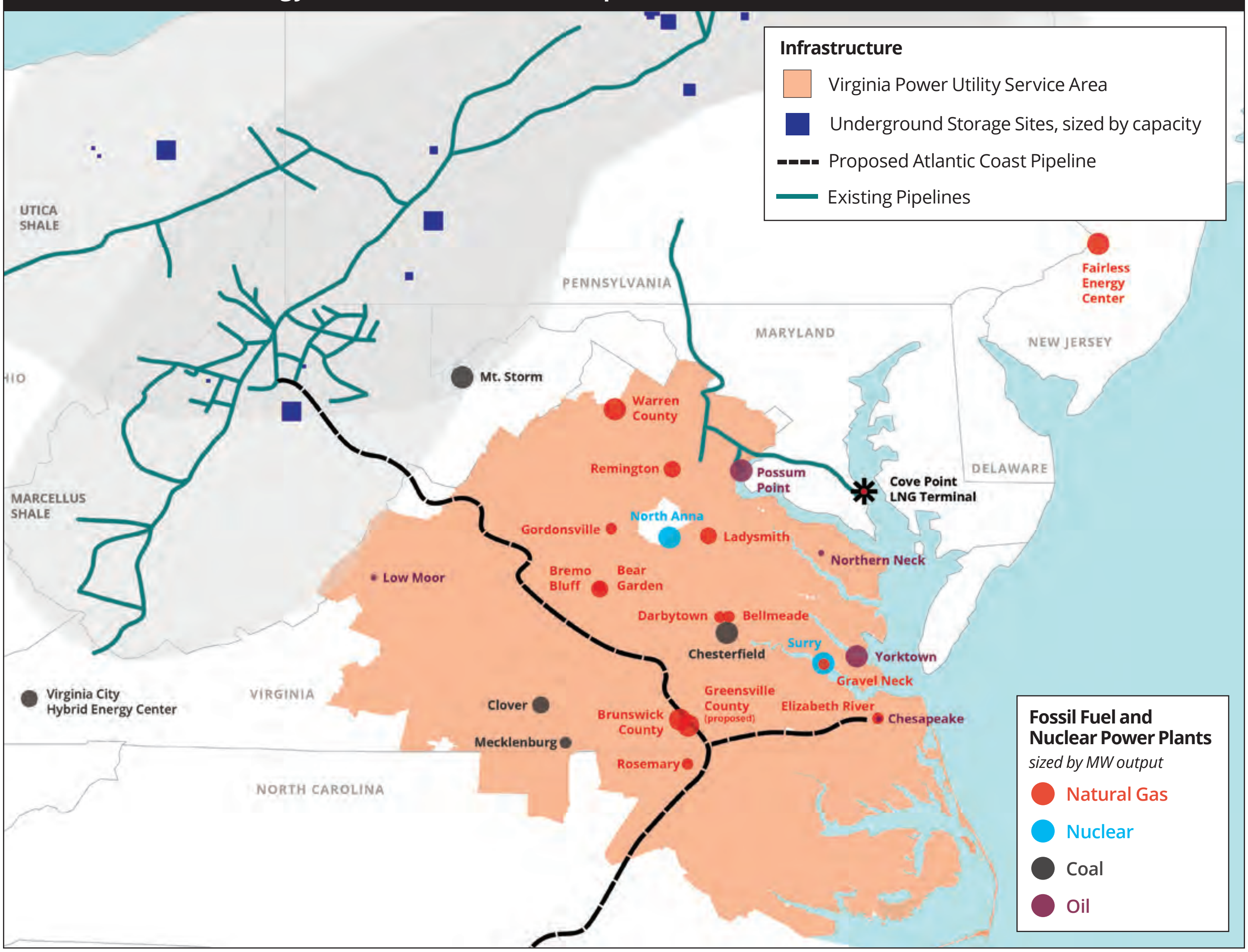
Promoting natural gas entrenches decades more fracking, contributes to the climate crisis and results in billions of dollars being spent on fossil fuel infrastructure. Pipelines and export terminals have both significant investment and long-term sales contracts that prevent a shift to real renewable energy solutions because energy companies lock themselves — and their customers — into these fossil fuel assets.[179]

The fracking industry has fragmented forests, produced massive volumes of toxic wastes and caused earthquakes.[180] And oil and gas operations have become the second greatest global source of the potent greenhouse gas methane, threatening the climate and the planet.[181] The reckless fracking for oil and gas also has caused thousands of leaks, spills and discharges.[182]

Dominion is strengthening and expanding its gas infrastructure footprint. Its "energy and economic security" investments rely on fracked gas, including the Atlantic Coast Pipeline and the Cove Point, Maryland export terminal (see Map 2 below and sidebar on page 15).[183] In 2017, Dominion planned to invest $8.3 billion more over the next five years to upgrade and expand its gas pipeline and infrastructure network.[184]

Dominion's pipelines, storage facilities, processing plants and export terminals are operated by Dominion Energy and a handful of subsidiaries and controlled affiliates. Much of Dominion's gas infrastructure — including the Cove Point gas export terminal — is operated by Dominion Energy Midstream, a limited partnership controlled by Dominion.[185] Its Questar subsidiary operates pipelines and storage in the Rocky Mountains.[186] Dominion formed the $1.5 billion Blue Racer joint venture with Caiman Energy in 2012, which gathered, processed and marketed natural gas and liquids for the fracking industry in the Marcellus and Utica shale formations (in late 2018, Dominion announced it was selling its stake in Blue Racer).[187]

MAP 2 • Dominion Energy's Gas Infrastructure Footprint • VIRGINIA REGION



SOURCE: Department of Energy, Energy Information Administration and Homeland Infrastructure Foundation.

Dominion's gas infrastructure footprint

Pipeline network: Dominion and its subsidiaries and affiliates own or hold stakes in nearly 19,000 miles of interstate pipelines. In 2017, Dominion Energy operated 14,800 miles of interstate gas pipelines and gathering lines (collecting gas from drilling operations) and an additional 51,800 miles of distribution lines (utility gas lines to customers), primarily in Maryland, New York, Ohio, Pennsylvania, Virginia and West Virginia.[188] The gathering lines collect and market fracked gas from wells in Ohio, Pennsylvania and West Virginia.[189]

Dominion and its affiliates also held a 50 percent stake in the Iroquois Pipeline, a 416-mile pipeline running from the New York-Canada border to Hunts Point in the Bronx.[190] Dominion Midstream owns the 2,200-mile interstate Questar pipeline network in Colorado, Utah and Wyoming.[191] Dominion Midstream also operates the nearly 1,500-mile Dominion Energy Carolina Gas (known as DECG) pipeline connecting the pipeline systems of Georgia and South Carolina and delivers to gas utilities, industrial users, power plants and others.[192]

Dominion had six additional pipeline projects planned by the end of 2017.[193] These include the controversial and highly publicized Atlantic Coast Pipeline but also the Sweden Valley Pipeline project to connect Pennsylvania and Ohio to the Tennessee Gas Pipeline, and the Charleston project connecting eastern South Carolina with the Transcontinental Gas pipeline.[194]

Compressor stations: Dominion pushes gas through these pipes via 171 compressor stations with more than 1 million horsepower.[195] Compressor stations pressurize natural gas to transport it through pipelines.[196] These include a compressor station in Frederick County, Maryland that was built in 2014 and expanded in 2016.[197] The Atlantic Coast Pipeline would also include several new or expanded compressor stations, including a 53,500-horsepower station in Buckingham County, Virginia.[198] These noisy and disruptive facilities are significant emitters of harmful air pollutants, which can travel up to 10 miles before settling to the ground.[199] These releases can damage respiratory, reproductive and neurological systems and more.[200]

Natural gas storage and processing: Dominion also controls one of the biggest networks of natural gas storage. Dominion and its affiliates can store about 1 trillion cubic feet of natural gas at 20 underground facilities as well as providing storage for nearly 4.8 million gallons of natural gas liquids (NGLs) like propane and butane in New York, Ohio, Pennsylvania and West Virginia.[201] The company also operates processing facilities that buy fracked gas and remove the NGLs from what is known as "wet gas."[202] These operations can process 270 million cubic feet of gas daily — about as much as 1,200 Pennsylvania wells produce every day — primarily at Dominion's biggest facility, Hastings in West Virginia.[203] Gas storage facilities (like other infrastructure) can leak tremendous volumes of methane that contribute to climate change — and accidents can release dangerous amounts of gas. In 2015, the Southern California Gas utility's Aliso Canyon gas storage facility was the site of the worst methane leak in U.S. history, releasing 90,000 metric tonnes of gas that displaced 8,000 families.[204]

Dominion has downplayed the public opposition to its aggressive gas infrastructure expansion. This infrastructure threatens ecosystems, imperils drinking water supplies and poses real safety risks to nearby residents.[205] Dominion admits that accidental fires, explosions or leaks from its gas pipelines or processing operations could cause deaths or injuries and damage the environment.[206]

But the company seems disdainful of public participation in the debate over fossil fuel infrastructure. Its senior energy policy director said that regulators considering fossil fuel infrastructure projects "are being bombarded by general citizenry, by elected officials who have asked to insert themselves into the process."[207] And it has suggested that Dominion critics really are aiming at the working families employed by the company, with a spokesperson saying that "when Dominion is being attacked, Virginians — hard-working Virginians — are being attacked."[208]

The detested Atlantic Coast Pipeline

Dominion's most contentious gas infrastructure project has been the Atlantic Coast Pipeline (ACP), which has ignited fervent resistance in frontline communities in North Carolina, Virginia and West Virginia. Dominion is the largest stakeholder in the ACP and is building and will operate the pipeline.[209] The ACP is designed to carry fracked gas from the Marcellus and Utica shale basins to supply power plants across the Southeast.[210] It will be the largest pipeline construction project ever undertaken in the central Appalachians and Dominion's biggest pipeline project ever.[211]

The $5 billion, nearly 600-mile ACP will deliver about 1.5 billion cubic feet of natural gas daily.[212] The large-scale pipeline will cross nearly 30 counties and municipal jurisdictions from West Virginia through Virginia into North Carolina, and also includes separate pipelines in West Virginia and Pennsylvania to connect to five interstate pipelines.[213] Dominion's 2018 merger with SCANA could ultimately extend the ACP further into southern markets.[214] As with many of its infrastructure projects, customers of Dominion and its ACP partners will ultimately pay about $4.9 billion (96 percent) of the ACP's cost.[215]

Despite widespread opposition, Dominion planned to begin constructing the pipeline in 2018 and estimates it will be completed in 2019.[216] The FERC approved the ACP in October 2017, which allowed Dominion to begin construction and gave it the authority to use eminent domain to seize land along the pipeline's route.[217] Although the Virginia DEQ had approval authority for the projects' more than 700 stream and river crossings, it largely deferred to the federal review that had already approved the route.[218] The DEQ gave partial approval in December 2017 but continued to review stormwater management, erosion control and other concerns in 2018.[219] If the review languishes, the FERC could overrule state regulators and allow construction to begin.[220] Dominion has claimed that public efforts to delay or derail the project "will cost consumers and businesses hundreds of millions of dollars in higher energy costs."[221]

In the summer of 2018, a federal appeals court invalidated two ACP permits because they failed to protect endangered species and compromised the Blue Ridge Parkway.[222] The FERC immediately ordered Dominion to halt construction along the entire pipeline route, but noted that there was "no reason to believe" that the agencies could not "ultimately issue a new right of way grant" that would satisfy the court.[223]

Dominion promotes the pipeline as an economic boon to the region, but the local economic costs would likely exceed any dispersed economic benefits. The Southern Environmental Law Center found that Dominion's economic projections likely overestimated the benefits, relied on unverified data and failed to consider some economic costs.[224] If the pipeline disrupts and reduces tourism by only 10 percent, it could cost over 1,000 tourism jobs and $21 million in payroll earnings in Virginia alone.[225] For example, the Wintergreen Resort expects a 40 percent decline in tourist revenue because of the pipeline.[226] Local jurisdictions would lose tax revenue from declining property values near the pipeline that could be as high as 30 percent and residential and commercial developments that could be blocked or diminished by the pipeline.[227]

The potential perils of pipeline construction

The construction poses substantial environmental and safety risks. The construction will cut a 150-foot wide path through the landscape that will threaten wetlands and water systems, disrupt vulnerable geologic areas, cross federal forest and parkland, and imperil efforts to protect endangered and threatened species.[228] The water systems around the pipeline route — aquifers, residential wells and the headwaters of important river systems — could be significantly impacted by construction-related pollution and disturbances that would impact downstream drinking water sources.[229] Dominion's pipeline engineering manager admitted that landowners had some "legitimate concerns."[230]

The construction requires heavy equipment to excavate deep trenches through rocky terrain that would compact soil, blast bedrock, cross streams and clear forests, wetlands and riparian areas.[231] In West Virginia, the pipeline would cross the highest mountains along the route, requiring steeper grades than other comparably large pipelines.[232] This includes removing mountaintops along 38 miles of the route and lowering some peaks by 60 feet to accommodate the pipeline.[233] The pipeline would also cut through karst limestone geologic formations that are highly porous and susceptible to sinkholes. The Blue Ridge karst deposits are one of the most unstable geologic formations in the eastern United States, posing both environmental and safety risks.[234]

The ACP will pose safety and health hazards

Even after the pipeline is completed, the unlucky landowners along its path must accept living with the constant risk of accidents, leaks and explosions. In 2008, the Transco pipeline exploded in Appomattox County, Virginia and destroyed two homes and injured five people.[235] Between 2002 and April 2018 there were over 10,000 pipeline leaks, spills, ruptures and explosions, resulting in over 200 fatalities and at least 860 injuries and causing nearly $793 million in property damage.[236]

Newer pipelines built since 2010 are five times more likely to have problems than older pipelines, possibly because the rush to complete pipelines during the fracking boom encouraged corner-cutting during construction.[237] For example, the National Transportation Safety Board determined that a poorly constructed pipeline built in 2011 led to an explosion that destroyed two New York City buildings in 2014, injuring 50 people and resulting in eight deaths.[238] In 2018, a recently constructed gas pipeline exploded in a fiery blaze in Marshall County, West Virginia.[239]

Cove Point export terminal threatens community and the environment

Dominion's Cove Point is a liquefied natural gas (LNG) terminal that exports LNG to the global market. Super-cooling natural gas converts it to a liquid that takes up 600 times less volume, making it possible to load onto tankers; when it is unloaded, it is heated to return it to a gas.[254] The export push was designed to offload domestic fracked gas overseas to sop up the U.S. gas glut driven by the fracking boom.[255]

Cove Point was originally built to import LNG after the 1970s oil crisis.[256] Dominion bought and expanded Cove Point in 2002.[257] The expansion doubled the storage capacity and added a second pipeline to connect to the national pipeline system and included new or upgraded compressor stations in Pennsylvania, Virginia and West Virginia.[258]

When the fracking boom made imports obsolete, Cove Point was retrofitted to export natural gas.[259] It props up the fracking industry since it is by far the closest existing export facility to the Marcellus and Utica shale basins, creating new demand to absorb excess fracked gas.[260] In 2014, the FERC approved Dominion's plan to build a $4.1 billion liquefaction facility to convert natural gas into LNG for exports and export 770 million cubic feet of LNG every day.[261] It takes two big gas turbines to generate the energy to chill the natural gas, increasing air emissions.[262] Dominion estimated that 85 ships will load LNG at the terminal annually.[263]

COVE POINT LNG EXPORT TERMINAL, MARYLAND

Dominion's aggressive use of eminent domain

Dominion has used the power of eminent domain to seize private land to build controversial power infrastructure projects, especially the Atlantic Coast Pipeline and several electric transmission lines. The government can seize private property for public purposes (like roadways or parklands) under eminent domain with "just compensation."[240]

Theoretically, private firms cannot use eminent domain for private purposes, but regulated utilities have both private and quasi-public roles.[241] Virginia considers electric and gas utility infrastructure as public services that allow companies to use eminent domain to secure rights-of-way for pipeline and power line routes.[242] Once the FERC approves a gas pipeline, companies can use eminent domain to seize land.[243]

But these projects often have only tangential public benefits; instead, they primarily benefit Dominion. The ACP would largely serve non-Virginia customers, and some of Dominion's electric lines power specific corporate complexes.[244] Many communities may sacrifice property but never receive access to the natural gas or electricity.[245]

Dominion has bullied landowners to surrender their property for their pipeline and power line routes. Dominion admits that it can and would acquire rights-of-way from landowners "by condemnation, if necessary."[246] Many landowners on the ACP route reported that they received threatening letters saying that if they blocked surveyors from their property, Dominion would pursue legal action using eminent domain.[247] Dominion planned to file suit against nearly 200 Virginia landowners to pursue the ACP route.[248] Many of its suits were withdrawn, but by the end of 2017 Dominion remained involved in approximately 30 eminent domain cases, half of which were in Virginia.[249]

Dominion's electricity transmission projects can have similar impacts on private property, the environment and historical sites, and two recent projects have drawn substantial opposition. Dominion's proposed Haymarket line was designed largely to provide power to a new Amazon data center, but it would have run through land that is owned and inhabited by the descendants of a former slave who have lived there for more than a century.[250] Dominion was prepared to use eminent domain to seize their land to secure a cheaper route.[251] Dominion contended that blocking the line would "harm the county's growth prospects or, worse, jeopardize reliable electric service."[252] The community challenged Dominion's plans, and the company ultimately agreed to reroute the power line, putting large stretches underground in 2018.[253]

Community groups opposed the expansion that would increase air pollution, harm wetlands, threaten marine life, damage the Chesapeake Bay, infringe on open spaces and farms, and pose catastrophic risks in the event of an explosion.[264] Cove Point threatens over 830 people living within about a mile of the facility with the risk of accidents from explosive fuels and chemicals.[265] LNG can burn and explode at certain LNG-to-oxygen mixtures, and accidents can and do happen.[266] In 1979, a fire at Cove Point killed a worker.[267] In 2014, a pipeline explosion at a Washington state LNG terminal sent shrapnel flying into a 14.6 million gallon storage tank, causing it to leak.[268] The accident injured five workers, forced the evacuation of a thousand residents within a two-mile radius and caused $72 million in property damage.[269]

One scientist presented evidence that the expansion of Cove Point could release more toxic pollutants than allowed under state law, a charge that Dominion denied.[270] Emissions have already risen dramatically for many pollutants even before the export operations began. Between 2011 and 2016, Cove Point's carbon dioxide emissions rose by 26.7 percent to 174,500 metric tonnes.[271] Other pollutants rose more steeply. Sulfur dioxide emissions more than tripled, particulate matter emissions rose 34.6 percent, and nitrogen oxides emissions rose 5.9 percent from 2011 to 2014, the latest data available.[272] Despite local opposition and the inherent explosion dangers associated with the volatile LNG, Cove Point's export facility went into operation in April 2018.[273]

Dominion's power plant risks: climate change, coal ash, fracking and more

Dominion's power plants generate a lot of energy and a lot of pollution. And while the company is slowly shedding dirty coal-fired power plants, it is building more gas-fired power plants (see Table 2). Dominion claims that gas-fired plants have "significantly improved environmental performance."[274] But shifting to natural gas cannot prevent catastrophic climate change. Gas power plants emit greenhouse gases, and the leaks of the potent greenhouse gas methane from gas pipelines and other infrastructure pose significant and growing climate threats.

TABLE 2 • Dominion Energy's Power Plant Portfolio

Fuel Source	Virginia Power			Total Dominion		
	Generators/ Facilities	Capacity (Megawatts)	Percent of capacity	Generators/ Facilities	Capacity (Megawatts)	Percent of capacity
Natural Gas	15	7,589	38.1%	17	9,297	37.1%
Coal	6	4,402	22.1%	6	4,402	17.6%
Oil	8	2,157	10.8%	8	2,157	8.6%
All Fossil Fuel	***29***	***14,148***	***71.0%***	***31***	***15,856***	***63.3%***
Nuclear	2	3,348	16.8%	3	5,349	21.4%
Hydro	4	2,126	10.7%	4	2,126	8.5%
Biomass	4	236	1.2%	4	236	0.9%
Solar	3	56	0.3%	45	1,168	4.7%
Wind				2	282	1.1%
Other	1	11	0.1%	2	26	0.1%
Total Power Plant Complexes	**35†**	**19,925**		**83†**	**25,043**	

† Total power plant complexes represent different power plant sites; total is not a sum of facilities because some power plants have multiple generators with different fuels. Dominion reports 91 generation facilities (43 for Virginia Power) because 5 Virginia Power complexes have multiple generators with different fuels (Chesterfield has 1 coal and 1 gas generators; Darbytown has 1 gas and 1 oil; Gravel Neck has 1 oil and 1 gas; Mt. Storm has 1 coal and 1 generator using various fuels; Possum Point has 1 gas and 1 oil; and Yorktown has 2 oil and 2 coal generators).

SOURCE: Dominion Energy 2017 Securities and Exchange Commission 10-K filing.

Dominion's total climate emissions from its fleet of power plants have been rising steadily[275] — even as some of the company's coal plants have been shut down or converted to gas, oil or wood-burning. Coal remains a cornerstone of Dominion's power production — its newest coal-fired plant was built in 2012 and is at least 80 percent fueled by coal.[276] Moreover, the air and climate emissions from the company's gas-fired power plants are rising dramatically as more gas plants come online. Dominion's shift to gas aligns all of its business segments: it can store, process and deliver gas to its power plants from its infrastructure.

Dominion stated that "sustainable solutions should strive to balance the interdependent goals of environmental stewardship and economic effects."[277] But Dominion's environmental record demonstrates that the company is far from balanced. Its climate emissions are rising, especially at its growing gas-fired power plants, and many of its power plants have had a history of environmental violations. At the same time, Dominion's paltry investments in clean renewable power have lagged far, far behind its investments in fossil-fueled energy, increasing the harm to the climate and nearby communities.

Powering Dominion's polluting plants

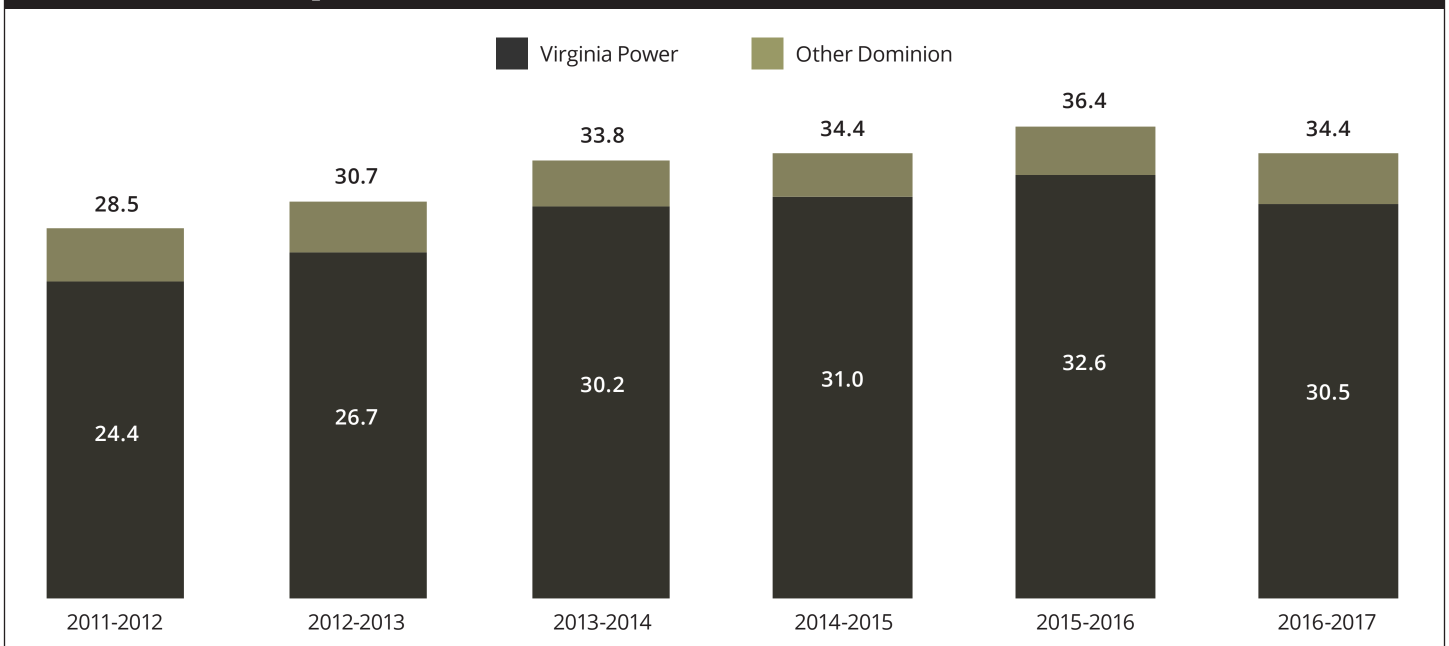
Dominion is one of the biggest electric power companies in the country. The company operates coal, gas, oil, nuclear, hydroelectric, biofuel, solar and wind facilities, but in 2017 about two-thirds of the power capacity (63.3 percent) came from natural gas, coal and oil-fired fossil fuel plants, and only 5.8 percent came from wind and solar.[278] Dominion's 2018 purchase of SCANA brings even more gas and coal plants into its portfolio.[279]

Some of Dominion's plants are merchant power facilities that sell electricity to the grid, primarily in the Northeast, Midwest, New England and California, but the bulk of its plants are operated by its Virginia Power electric utility.[280] About 80 percent of Dominion's electric capacity was from its Virginia Power plants, and these plants were even more dependent on fossil fuels (71.0 percent) and had a smaller portion of wind and solar (0.3 percent).[281]

Dominion's power plants are emitting an increasing amount of greenhouse gases. The company's carbon dioxide emissions from its current power plant holdings have been trending upward, according to U.S. Environmental Protection Agency (EPA) data. From the 2011/2012 period to 2016/2017, Dominion's carbon dioxide emissions rose 21 percent (see Figure 1).[282] Virginia Power's carbon emissions rose 25 percent over the same period, to 30.5 million metric tonnes.

Despite the imperative of climate change, Dominion has invested little in solar and wind power. In 2014, Dominion CEO Farrell referred to wind and solar as

FIG. 1 • Dominion's CO_2 Emissions From Current Power Plants • IN MILLIONS OF METRIC TONNES



SOURCE: Food & Water Watch analysis of EPA Air Markets Program data; total Dominion emissions includes Dominion Merchant and Virginia power coal, gas, oil and biomass plants; adjusted for 50% ownership stake in one coal plant.

"niche players" in the energy market.[283] Solar makes up less than 5 percent of Dominion's capacity, and much of that (nearly 70 percent) is outside Virginia; only 0.3 percent of Virginia Power's capacity came from solar facilities.[284] Wind power makes up about 1 percent of Dominion's total capacity, none of it in Virginia.[285] Dominion has committed to building two 6 megawatt Virginia offshore wind facilities, a super small-scale facility that would be dwarfed by the 1,588 megawatt gas plant under construction in Greensville County.[286]

Most of Dominion's solar power is far away or dedicated to serve technology titans. Nearly half (43 percent) of the company's solar capacity is in California and Utah.[287] More than one-fifth of Dominion's solar power was built solely to serve Amazon.[288] It also has agreed to invest in solar power for Microsoft and Facebook.[289] Dominion admitted that it would continue to add solar capacity, but only "so long as customers, investors, policymakers and regulators continue to demand cleaner energy."[290]

Dominion's continued coal reliance and toxic legacy of coal ash ponds

Although Dominion has shifted slightly away from coal, the dirtiest fossil fuel continues to be a key portion of its power portfolio. Coal continues to provide one-fifth of the company's power capacity, and the SCANA purchase added four new coal-fired plants.[291] Dominion is especially committed to coal in Virginia. All six of Dominion's coal-fired power plants are Virginia Power plants, with five in Virginia and one in West Virginia.[292] The company's newest coal-fired power plant went online in 2012, a very recent coal commitment.[293] In 2017, coal still made up 22 percent of Virginia Power's power capacity.[294]

Coal-fired power plants emit hazardous air pollutants like mercury, particulate matter, sulfur dioxide and nitrogen oxides that threaten human health.[295] Between 2012 and 2016, Dominion's coal-fired plants annually emitted about 10 million pounds of particulate matter and 24 million pounds of nitrogen oxides.[296]

Virginia Power has been burning coal for decades, generating mountains of coal ash waste; the potentially toxic unburned coal residue can contain trace elements of arsenic, boron, cadmium, chromium, copper, iron, lead, manganese, mercury and selenium.[297] Its six operating coal-fired plants still produce coal ash that is stored in eight impoundment ponds.[298] Virginia Power may produce about 3 million tons of coal ash annually.[299] This coal ash piles up, and Dominion has often buried it on site, in unlined pits, where the toxic chemicals can leach into the surrounding area.[300] By 2017, Dominion had at least 30 million tons of coal ash in ponds across Virginia.[301]

Studies have documented that toxic contaminants such as arsenic, boron and selenium leach from coal ash ponds into groundwater and local waterways and often exceed EPA safe drinking water standards throughout the southeastern United States.[302] The EPA found that the chemicals in coal ash can leak into water supplies and pose "high risks" of causing excess cancer risk from arsenic, boron, cadmium, cobalt, lead and selenium and that coal ash ponds are much more likely to leak these chemicals than landfills.[303] By 2010, the EPA had identified 24 cases of proven damages from coal ash impoundment leaks, and 39 potential cases.[304] Coal ash facilities are frequently located near communities of color and lower-income areas; the EPA estimated that 1.5 million people of color live near coal ash ponds.[305]

Dominion's coal ash ponds could pose similar risks. Environmental testing has found that Dominion's coal ash ponds have leaked potentially toxic coal residues into nearby water bodies.[306] A malfunctioning ash pond at its Chesterfield plant spilled coal ash slurry into the James River for three months in 2005.[307] Dominion has nearly 1 million tons of coal ash stored near the Elizabeth River plant that has been contaminating the river with arsenic.[308] The company's Possum Point coal ash ponds have been leaking a decade after the facility stopped burning coal, and 2016 testing found dangerous levels of toxic contaminants in nearby private wells.[309] In 2017, Dominion's coal ash ponds at the Chesapeake power plant were under investigation for alleged Clean Water Act violations.[310]

Disastrous accidents can amplify the risks of living near coal ash ponds. In 2014, a Duke Energy coal ash pond impoundment breached, pouring between 30 million and 39 million gallons of coal ash slurry that polluted 70 miles of the Dan River.[311] It was the third largest coal ash spill in the United States and posed risks to drinking water supplies and aquatic life.[312] It took Duke almost a week to seal the pipe that leaked the coal ash.[313] Samples revealed elevated levels of a laundry list of toxic chemicals in both the water and the riverbed.[314] Duke ultimately agreed to pay a total of $102 million in fines and restitution.[315] After the spill, Duke University researchers studied the unlined coal ash ponds across the Southeast including Virginia and found high levels of dangerous pollutants leaching from the ponds.[316]

DOMINION COAL ASH PONDS IN FAUQUIER COUNTY, VIRGINIA

Despite the known risks, Dominion has seemed reluctant to clean up these hazardous sites. Virginia directed the company to evaluate 11 of its mostly unlined coal ash ponds in the Chesapeake Bay watershed, but Dominion's study recommended that all but the smallest ponds be capped in place — essentially maintaining the coal ash ponds.[317] Dominion highlighted that removing the coal ash would be many times more expensive than cap-in-place.[318]

Dominion only intended to monitor and manage groundwater contamination from the coal ash ponds for 10 to 30 years, even though chemicals such as selenium can leach from coal ash over hundreds of years.[319] In April 2017, Virginia enacted a year-long moratorium on Dominion's cap-in-place plans at the company's plants.[320] Sen. Scott A. Surovell, who sponsored the bill, said "the coal ash bill was the first piece of legislation Dominion opposed that passed in recent memory."[321]

Dominion's fracked gas future means more pollution

Natural gas makes up an increasing portion of Dominion's power generation. In 2017, it had 17 gas-fired power plants (14 in Virginia) that provided 37.1 percent of its total capacity.[322] The SCANA purchase added two more gas-fired plants.[323] And the company is planning to build even more gas plants, with nearly 3,000 megawatts in development.[324]

Dominion is falsely promoting its shift to gas as part of a plan to reduce climate emissions. In 2018, Dominion stated that it would "continue to rely more heavily on lower-carbon-emitting sources such as natural gas" instead of wind and solar.[325] But more gas plants would increase the climate-destroying emissions both from the plants and from the widespread methane leaks from connecting infrastructure, meaning that natural gas cannot be considered a low-carbon fuel.[326]

But emissions just from Dominion's natural gas plants nearly tripled between 2008/2009 and 2016/2017, to 16.1 million metric tonnes.[327] As Dominion opens more gas plants, these emissions will continue to rise. Additionally, methane emissions from gas power plants alone may be considerably higher than thought. A 2017 study found that gas-fired power plants released more than 20 times more methane than the facilities estimated,[328] and the greenhouse gas footprint of natural gas is actually worse than for coal and oil because methane traps more heat in the atmosphere.[329]

Although natural gas-fired plants release fewer air pollutants than coal- or oil-fired plants, they are major nitrogen oxide (NO_x) emitters, contribute to ground-level ozone and smog, and threaten the environment and human health.[330] Dominion's gas plants released about 1 million pounds of particulate matter annually between 2008 and 2014, the latest data available.[331] Over the past decade, Dominion's gas plant NO_x emissions rose 72 percent to 6.4 million pounds in 2017.[332] Ground-level ozone creates smog when it mixes with particulate matter, which itself has been linked to various cancers.[333] Prolonged exposure to smog has been connected to premature deaths in adults and to low birthweight in babies.[334]

One of Dominion's plants currently under construction reinforces depressingly common environmental injustice. Fossil-fueled power plants have long exemplified the disparate pollution burden facing socially and economically disadvantaged communities. Many studies have found that power plants are disproportionately located in communities of color and lower-income areas.[335]

Dominion is building a $1.3 billion, 1,588 megawatt gas-fired power plant in predominantly African-American Greensville County, Virginia.[336] The plant will be about four miles from another major Dominion gas plant and will be the largest gas-fired power plant of its type in the United States.[337] African Americans make up three-fifths of the population in Greensville County, where typical households earn about $40,000 annually (40 percent below the statewide earnings) and 18 percent of the population lives below the federal poverty line.[338]

Dominion's history of environmental violations and accidents

Dominion's power plants have been significant polluters, and the company has amassed millions of dollars in settlements with the EPA over alleged violations of the Clean Air Act. In 2016, Virginia released more pollution per square mile than most other states, releasing 39 million pounds in 2016.[339] Three Dominion plants were among the 10 largest polluters and were responsible for 11 percent of pollution in Virginia.[340]

Dominion settled a raft of Clean Air Act complaints against three coal-fired power plants (two in the Midwest and one in Massachusetts) for $3.4 million in fines and $10 million in environmental improvement projects in 2013.[341] It settled a similar case against eight power plants in Virginia and West Virginia in 2003 by agreeing to pay a $5.3 million penalty and to invest $1.2 billion in environmental upgrades, and by pledging to reduce emissions by 70 percent over a decade.[342]

In 2005, Dominion settled a separate pollution complaint against one of the Massachusetts coal plants by agreeing to reduce pollution over a two-year period by switching to low-sulfur coal.[343] Dominion finally agreed to shutter the coal plant by 2014 and to invest another $275,000 in environmental mitigation to settle a lawsuit over alleged repeated violations of the Clean Air Act.[344] Dominion also agreed to close one of the dirtiest plants in the Chicago area rather than address an EPA Clean Air Act complaint.[345]

KEWAUNEE NUCLEAR GENERATING STATION, WISCONSIN

Dominion's plants have also had a series of industrial accidents, threatening nearby residents, communities and workers. In 2016, Dominion spilled 13,500 gallons of oil into a waterfowl sanctuary and the Potomac River near Washington, D.C.[346] In 2013, Dominion's recently opened West Virginia natural gas processor had a deafening explosion and large fire.[347] In 2006, a transformer in Chesterfield County exploded, setting fire to 1,500 gallons of mineral oil.[348] But the most troubling safety concerns occurred at some of the company's nuclear plants.

Dominion's troubling nuclear experiment

Nearly 40 percent of Dominion's electricity is produced at its nuclear reactors, which the company touts as "safe, reliable and carbon-free."[349] Dominion operates four reactors in Virginia (at Surry and North Anna) and two reactors in Connecticut (Millstone).[350] Dominion has justified efforts to extend these nuclear licenses because the plants provide "carbon-free generation."[351] Dominion wants to extend the two Virginia nuclear licenses until 2060 and 2053.[352] But the company's operation of these nuclear reactors raises troubling safety issues.

Nuclear energy is neither clean nor safe. Nuclear energy facilities have had dozens of dangerous accidents, including catastrophic meltdowns in Chernobyl and Fukushima.[353] Processing nuclear material creates vast quantities of radioactive waste, which operators do not have the resources to store safely.[354] In May 2017, a shuttered Washington state facility, which for decades had "temporarily" stored nuclear waste, experienced a major breach that could have released radiation into the environment.[355]

Dominion bought the now-shuttered Wisconsin Kewaunee nuclear plant in 2005.[356] Although the plant had been shut down for months for repairs prior to the sale, Dominion planned to keep the plant operational for another 20 years.[357] But the plant continued to have problems. In 2006, Kewaunee was one of 10 nuclear plants that were found to be leaking the radioactive hydrogen isotope tritium.[358] A water sample taken from below the plant found the cancer-causing isotope at over five times the EPA maximum drinking water standard, but Dominion downplayed the risk, suggesting that even if you drank that tritium-tainted water, it would be the same radiation exposure as "eating one banana."[359]

That same year, Dominion shut down the plant and issued an alert after a series of mechanical failures in a cooling system revealed that the plant's automatic shutdown system failed and the reactor had to be manually taken offline.[360] In 2007, federal regulators downgraded the plant's performance over the cooling failure incident, making it one of only six reactors facing the higher scrutiny in the prior decade.[361] In 2009, the facility ran out of nuclear waste storage space inside the plant and began to bury the waste in casks on the grounds of the complex, close to the Lake Michigan shoreline.[362] In 2013, Dominion agreed to pay a $70,000 fine for the serious violation of falsifying records about failing to conduct fire drills.[363] Dominion permanently shut down the Kewaunee facility in 2013 and began decommissioning — a process that the company expects will continue until 2073.[364]

The North Anna reactors have had safety issues for years. In 2011, the state's largest earthquake in a century struck Virginia and seemed to exceed the plant's specifications.[365] The earthquake disrupted the reactor's offsite power connection, forcing it to rely on backup emergency generators, but one of those generators had to be shut down during the emergency because it was leaking coolant.[366] Subsequent reassessment by the Nuclear Regulatory Commission (NRC) found that a massive earthquake would be considerably more likely to cause nuclear core damage at North Anna than was estimated 20 years earlier.[367]

There have been other safety issues. In 2017, a water leak brought a reactor offline.[368] North Anna had problems with improperly installed cooling systems in 2008 that forced one of the reactors to close.[369] Transformer malfunctions kept the reactor inoperable for days.[370] Another North Anna reactor was closed in 2009 following an episode culminating in a 15 gallon-per-minute leak from the reactor purification system, which the NRC classified as "unusual."[371] In 1987, a tube carrying contaminated water ruptured, spilling 500 gallons per minute along with a small amount of radioactive gas; two years later, another similar rupture leaked a smaller amount of radioactive water.[372]

Conclusion and recommendations

Dominion has long flexed its political muscle to establish an energy and utility regulatory landscape that protects its profits while threatening the environment and raising utility prices for Virginia residents. Dominion is promoting fracked gas and investing in gas pipelines and power plants that will lock Virginia into a fossil fuel future for decades. Dominion's coal and gas plants continue to pose environmental risks to communities near these facilities as well as communities living near coal ash ponds and pipelines. The company's greenhouse gas emissions have been rising steadily even as it slowly sheds its coal-fired power plants.

Dominion is currently the biggest obstacle to Virginia's needed transition to a clean energy future. Virginia must rapidly shift to real renewable electricity generation to replace the existing fossil-fueled power plants. This means building new solar, wind and geothermal generating capacity and decommissioning the dirty fossil fuel plants. In 2017, solar power was 2 percent of Dominion's Virginia capacity, and the company had built no wind power in the Commonwealth.[373]

Virginia's clean energy potential is literally untapped. But it has the potential to generate enough wind and solar power to completely replace polluting power plants with zero-emissions electricity. According to the U.S. Department of Energy, Virginia has nearly 98,000 megawatts of potential wind and solar energy capacity — nearly five times Dominion's Virginia Power subsidiary's total capacity today.[374] Virginia and the nation must rapidly invest in the shift to 100 percent clean, renewable energy to prevent climate catastrophe.

Virginia must curb Dominion's outsized control over energy and utility policy and chart a new course that protects the environment, climate and residents. Food & Water Watch recommends:

- **Virginia and the nation must rapidly shift to 100 percent clean, renewable energy:** Virginia should establish ambitious programs for deploying existing renewable energy and energy efficiency technologies in order to slash fossil fuel demand to reach 100 percent clean, renewable energy within a few decades, as well as modernizing electrical grids to cater to distributed renewable power generation and aggressive energy conservation policies, including large investments in public transport and widespread deployment of other energy-saving solutions. These investments must provide a just transition for fossil fuel workers to find comparable, meaningful employment in nearby renewable energy and energy efficiency manufacturing, installation and maintenance.
- **Virginia must restore independent oversight of electric utilities:** The Virginia legislature must

restore the independent regulatory authority of the State Corporation Commission and give new direction to promote the rapid shift to clean, renewable energy, including policies to facilitate the installation of rooftop solar by residents and communities as well as encourage development of offshore wind power.

- **Virginia and the nation should halt fossil fuel infrastructure:** Virginia should halt all pending and proposed gas pipelines including the Atlantic Coast Pipeline and the Mountain Valley Pipeline.
- **Virginia and the nation should halt the construction of the proposed natural gas plants and any new fossil fuel plants:** Virginia should require Dominion and other power companies to replace the aging and polluting fossil fuel-fired plants with clean, renewable wind, solar and geothermal power plants.
- **Virginia and the nation must ban fracking:** Virginia should immediately ban fracking and all associated activities, such as sand mining and waste disposal that support fracking, and fully investigate claims of environmental contamination from drilling and fracking.
- **Virginia must enact campaign finance, political gift and conflict-of-interest reforms:** Virginia allows unlimited campaign contributions and gifts to legislators and allows legislators to vote on measures that potentially affect their financial investments. Dominion's generous campaign donations and gifts to politicians and officials, as well as to politicians with investments in Dominion, creates the impression that legislative and regulatory favors are for sale in Virginia. The Virginia legislature must enact comprehensive good government reforms to eliminate the influence that special interest money has on the political process in Richmond.

Appendix Table 1: Virginia House of Delegates Utility Regulation Votes and Dominion Campaign Contributions

Member of Virginia House of Delegates	District	Party	Dominion PAC/Indiv. Contributions 1998 to mid-2018	Percent Pro-Dominion Votes*	Weakened Rate Freeze Reversal (Pro-Dominion vote = Y, SB 966, 2018)[1]	Coal Ash Bill (Pro-Dominion vote = N, SB 1398, 2017)[2]	Rate Freeze (Pro-Dominion vote = Y, SB 1349, 2015)[3]	Re-Regulation (Pro-Dominion vote = Y, HB 3068, 2007)[4]	Original Deregulation (Pro-Dominion vote = Y, SB 1269, 1999)[5]
Terry G. Kilgore	1	R	$196,641	100%	Y	N	Y	Y	Y
Jennifer D. Carroll Foy	2	D	$0	0%	N				
James W. (Will) Morefield	3	R	$11,000	100%	Y	N	Y		
Todd E. Pillion	4	R	$4,600	67%	Y	Y	Y		
Israel D. O'Quinn	5	R	$7,750	67%	Y	Y	Y		
Jeffrey L. Campbell	6	R	$4,000	67%	NV	N	Y		
L. Nick Rush	7	R	$13,004	67%	Y	Y	Y		
Gregory D. Habeeb	8	R	$13,500	67%	Y	Y	Y		
Charles D. Poindexter	9	R	$12,921	33%	N	Y	Y		
Gwendolyn W. (Wendy) Gooditis	10	D	$0	0%	N				
Sam Rasoul	11	D	$11	0%	N	Y	N		
Chris L. Hurst	12	D	$12	0%	N				
Danica A. Roem	13	D	$13	0%	N				
Daniel W. Marshall, III	14	R	$20,250	75%	Y	Y	Y	Y	
C. Todd Gilbert	15	R	$21,600	75%	Y	Y	Y	Y	
Leslie R. (Les) Adams	16	R	$2,500	33%	N	Y	Y		
Christopher T. Head	17	R	$10,500	67%	Y	Y	Y		
Michael J. Webert	18	R	$6,000	33%	Y	Y	N		
Terry L. Austin	19	R	$3,750	67%	Y	Y	Y		
Richard P. Bell	20	R	$10,000	0%	N	Y	N		
Kelly K. Convirs-Fowler	21	D	$21	0%	N				
Kathy J. Byron	22	R	$27,000	60%	Y	Y	N	Y	Y
T. Scott Garrett	23	R	$8,000	67%	Y	Y	Y		
Benjamin L. Cline	24	R	$13,750	50%	N	Y	Y	Y	
R. Steven Landes	25	R	$23,950	40%	N	Y	N	Y	Y
Tony O. Wilt	26	R	$7,000	0%	N	Y	N		
Roxann L. Robinson	27	R	$8,000	67%	Y	Y	Y		
Robert M. (Bob) Thomas, Jr.	28	R	$28	0%	N				
Christopher E. Collins	29	R	$1,500	50%	Y	Y			
Nicholas J. (Nick) Freitas	30	R	$1,500	0%	N	Y			
Elizabeth R. Guzman	31	D	$0	0%	N				
David A. Reid	32	D	$500	100%	Y				
David A. LaRock	33	R	$3,500	33%	N	Y	Y		
Kathleen J. Murphy	34	D	$2,500	67%	Y	Y	Y		
Mark L. Keam	35	D	$9,750	0%	N	Y	N		
Kenneth R. Plum	36	D	$80,900	80%	Y	Y	Y	Y	Y
David L. Bulova	37	D	$12,250	75%	Y	Y	Y	Y	
Kaye Kory	38	D	$7,250	33%	Y	Y	N		
Vivian E. Watts	39	D	$19,750	80%	Y	Y	Y	Y	Y
Timothy D. Hugo	40	R	$71,769	75%	Y	Y	Y	Y	
Eileen Filler-Corn	41	D	$15,000	67%	Y	Y	Y		
Kathy KL Tran	42	D	$0	0%	N				
Mark D. Sickles	43	D	$62,000	75%	Y	Y	Y	Y	
Paul E. Krizek	44	D	$2,330	50%	Y	Y			
Mark H. Levine	45	D	$45	50%	Y	NV			
Charniele L. Herring	46	D	$41,850	67%	Y	Y	Y		
Patrick A. Hope	47	D	$10,500	33%	Y	Y	N		
Richard C. (Rip) Sullivan, Jr.	48	D	$48	33%	Y	Y	N		
Alfonso H. Lopez	49	D	$6,250	0%	N	Y	N		
Lee J. Carter	50	D	$0	0%	N				
Hala S. Ayala	51	D	$0	0%	N				
Luke E. Torian	52	D	$14,500	67%	Y	Y	Y		
Marcus B. Simon	53	D	$3,000	33%	Y	Y	N		
Robert D. Orrock, Sr.	54	R	$18,750	80%	Y	Y	Y	Y	Y
Hyland F. (Buddy) Fowler, Jr.	55	R	$3,605	67%	Y	Y	Y		
John J. McGuire, III	56	R	$2,500	100%	Y				
David J. Toscano	57	D	$33,769	50%	N	Y	Y	Y	
Robert B. Bell	58	R	$16,600	75%	Y	Y	Y	Y	
C. Matthew Fariss	59	R	$6,500	33%	Abst.	Y	Y		
James E. Edmunds, II	60	R	$7,750	67%	Y	Y	Y		

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Appendix Table 1: Virginia House of Delegates Utility Regulation Votes and Dominion Campaign Contributions (continued)

Member of Virginia House of Delegates	District	Party	Dominion PAC/Indiv. Contributions 1998 to mid-2018	Percent Pro-Dominion Votes*	Weakened Rate Freeze Reversal (Pro-Dominion vote = Y, SB 966, 2018)[1]	Coal Ash Bill (Pro-Dominion vote = N, SB 1398, 2017)[2]	Rate Freeze (Pro-Dominion vote = Y, SB 1349, 2015)[3]	Re-Regulation (Pro-Dominion vote = Y, HB 3068, 2007)[4]	Original Deregulation (Pro-Dominion vote = Y, SB 1269, 1999)[5]
Thomas C. Wright, Jr.	61	R	$3,250	25%	N	Y	Y	N	
Riley E. Ingram	62	R	$19,403	80%	Y	Y	Y	Y	Y
Lashrecse D. Aird	63	D	$3,000	50%	Y[a]	Y			
Emily M. Brewer	64	R	$1,250	100%	Y				
R. Lee Ware	65	R	$29,000	40%	N	Y	N	Y	Y
M. Kirkland Cox	66	R	$148,721	80%	Y	Y	Y	Y	Y
Karrie K. Delaney	67	D	$500	100%	Y				
Dawn M. Adams	68	D	$68	0%	N				
Betsy B. Carr	69	D	$10,750	0%	N	Y	N		
Delores L. McQuinn	70	D	$15,250	33%	NV[b]	Y	Y		
Jeffrey M. Bourne	71	D	$1,750	50%	Y	Y			
Schuyler T. VanValkenburg	72	D	$0	100%	Y				
Debra H. Rodman	73	D	$0	50%	N		Y		
Lamont Bagby	74	D	$5,250	50%	Y	Y			
Roslyn C. Tyler	75	D	$20,000	75%	Y	Y	Y	Y	
S. Chris Jones	76	R	$81,242	40%	Abst.	Abst.	Abst.	Y	Y
C. E. (Cliff) Hayes, Jr.	77	D	$2,000	50%	Y	Y			
James A. (Jay) Leftwich, Jr.	78	R	$4,000	0%	Abst.	Y	Abst.		
Stephen E. Heretick	79	D	$1,000	50%	Y	Y			
Matthew James	80	D	$12,750	67%	Y	Y	Y		
Barry D. Knight	81	R	$21,250	67%	Y	Y	Y		
Jason S. Miyares	82	R	$3,250	50%	Y	Y			
Christopher P. Stolle	83	R	$12,000	67%	Y	Y	Y		
Glenn R. Davis, Jr.	84	R	$5,000	67%	Y	Y	Y		
Cheryl B. Turpin	85	D	$85	0%	N				
Jennifer B. Boysko	86	D	$7,584	50%	Y	Y			
John J. Bell	87	D	$4,250	50%	Y	Y			
Mark L. Cole	88	R	$11,295	75%	Y	Y	Y	Y	
Jerrauld C. (Jay) Jones	89	D	$1,375	100%	Y				
Joseph C. Lindsey	90	D	$6,800	67%	Y	Y	Y		
Gordon C. Helsel, Jr.	91	R	$2,766	67%	Y	Y	Y		
Jeion A. Ward	92	D	$27,000	50%	Y	Y	Y	NV	
Michael P. Mullin	93	D	$2,500	0%	N	Y			
David E. Yancey	94	R	$23,648	67%	Y	Y	Y		
Marcia S. (Cia) Price	95	D	$1,500	50%	Y	Y			
Brenda L. Pogge	96	R	$12,350	33%	N	Y	Y		
Christopher K. Peace	97	R	$17,100	50%	Y	Y	N	Y	
M. Keith Hodges	98	R	$4,500	67%	Y	Y	Y		
Margaret B. Ransone	99	R	$12,000	67%	Y	Y	Y		
Robert S. Bloxom, Jr.	100	R	$2,000	67%	Y	Y	Y		

SOURCE: Food & Water Watch analysis of National Institute of Money and Politics data from 1998 to mid-2018 and includes Dominion and affiliates political action committee (PAC) and Dominion employee campaign contributions; legislation and votes from Virginia's Legislative Information System.

* Percent pro-Dominion vote calculation based on pro-Dominion recorded votes as a share of votes cast on these five key utility measures. Abstentions and non-voting did not count as pro-Dominion votes.

Y = Yea; N = Nay; NV = Not Voting; Abst. = Abstain

1 SB 966 House passage, February 26, 2018

2 SB 1398 House passage, April 5, 2017

3 SB 1349 House passage, February 12, 2015

4 HB 3068 House adoption vote #2, April 4, 2007

5 SB 1269 House adoption vote #2, February 24, 1999

a accidentally voted yea, intended to vote nay

b recorded as not-voting, intended to vote yea

Appendix Table 2: Selected Virginia State Senate Utility Regulation Votes and Dominion Campaign Contributions

Member of Virginia State Senate	District	Party	Dominion PAC/Indiv. Contributions 1998 to mid-2018	Percent Pro-Dominion Votes*	Weakened Rate Freeze Reversal (Pro-Dominion vote = Y, SB 966, 2018)[1]	Coal Ash Bill (Pro-Dominion vote = N, SB 1398, 2017)[2]	Rate Freeze (Pro-Dominion vote = Y, SB 1349, 2015)[3]	Re-Regulation (Pro-Dominion vote = Y, HB 3068, 2007)[4]	Original Deregulation (Pro-Dominion vote = Y, SB 1269, 1999)[5]
T. Montgomery "Monty" Mason	1	D	$1,500	67%	Y	Y	Y[a]		
Mamie E. Locke	2	D	$33,500	75%	Y	Y	Y	Y	
Thomas K. Norment, Jr.[†]	3	R	$115,540	100%	Y	N	Y	Y	Y
Ryan T. McDougle	4	R	$43,250	100%	Y	N	Y	Y	
Lionell Spruill, Sr.	5	D	$32,545	80%	Y	Y	Y[a]	Y[a]	Y[a]
Lynwood W. Lewis, Jr.	6	D	$16,500	75%	Y	Y	Y	Y[a]	
Frank W. Wagner [‡ ††]	7	R	$91,685	100%	Y	N	Y	Y	
William R. DeSteph, Jr.	8	R	$2,500	67%	Y	Y	Y[a]		
Jennifer L. McClellan	9	D	$53,174	50%	N	Y	Y[a]	Y[a]	
Glen H. Sturtevant, Jr.	10	R	$7,016	50%	Y	Y			
Amanda F. Chase[**]	11	R	$3,550	0%	N	Y			
Siobhan S. Dunnavant	12	R	$5,625	50%	Y	Y			
Richard H. Black	13	R	$6,250	75%	N	N	Y		Y[a]
John A. Cosgrove, Jr.	14	R	$16,150	75%	Y	Y	Y	Y[a]	
Frank M. Ruff, Jr.	15	R	$21,675	100%	Y	N	Y	Y	Y[a]
Rosalyn R. Dance	16	D	$21,692	75%	Y	Y	Y	Y[a]	
Bryce E. Reeves	17	R	$18,075	100%	Y	N	Y		
L. Louise Lucas	18	D	$26,950	60%	Y	Y	NV	Y	Y
David R. Suetterlein	19	R	$0	50%	N	N			
William M. Stanley, Jr.	20	R	$16,750	33%	N	Y	Y		
John S. Edwards	21	D	$29,318	60%	Y	Y	N	Y	Y
Mark J. Peake	22	R	$1,000	0%	N	Y			
Stephen D. Newman	23	R	$20,500	60%	N	N	N	Y	Y
Emmett W. Hanger, Jr.	24	R	$22,250	80%	Y	Y	Y	Y	Y
R. Creigh Deeds	25	D	$110,300	20%	N	Y	N	Y	N[a]
Mark D. Obenshain	26	R	$69,250	100%	Y	N	Y	Y	
Jill Holtzman Vogel	27	R	$37,025	33%	N[b]	Y	Y		
Richard H. Stuart	28	R	$18,750	33%	N	Y	Y		
Jeremy S. McPike	29	D	$0	0%	N	Y			
Adam P. Ebbin	30	D	$18,380	25%	N	Y	N	Y[a]	
Barbara A. Favola	31	D	$7,750	67%	Y	Y	Y		
Janet D. Howell	32	D	$46,000	80%	Y	Y	Y	Y	Y
Jennifer T. Wexton	33	D	$3,000	0%	N	Y	N		
J. Chapman Petersen	34	D	$20,019	0%	N	Y	N		
Richard L. Saslaw	35	D	$274,250	80%	Y	Y	Y	Y	Y
Scott A. Surovell[**]	36	D	$8,072	33%	Y	Y	N[a]		
David W. Marsden	37	D	$19,500	75%	Y	Y	Y	Y[a]	
A. Benton Chafin, Jr.	38	R	$8,500	100%	Y	N	Y		
George L. Barker	39	D	$15,227	67%	Y	Y	Y		
Charles W. Carrico, Sr.	40	R	$19,200	100%	Y	N	Y	Y[a]	

SOURCE: Food & Water Watch analysis of National Institute of Money and Politics data from 1998 to mid-2018 and includes Dominion and affiliates political action committee (PAC) and Dominion employee campaign contributions; legislation and votes from Virginia's Legislative Information System.

* Percent pro-Dominion vote calculation based on pro-Dominion recorded votes as a share of votes cast on these five key utility measures. Abstentions and non-voting did not count as pro-Dominion votes.

Y = Yea; N = Nay; NV = Not Voting; Abst. = Abstain

1 SB 966 Senate passage, February 28, 2018

2 SB 1398 Senate passage, February 7, 2017

3 SB 1349 Senate passage, February 6, 2015 and SB 1349 House passage, February 12, 2015

4 HB 3068 Senate passage, April 4, 2007 and HB 3068 House adoption vote #2, April 4, 2007

5 SB 1269 Senate passage, February 25, 1999 and SB 1269 House adoption vote #2, February 24, 1999

a vote cast while Senator was in House of Delegates

b accidentally voted nay, intended to vote yea

† Patron of 1999 SB 1269

‡ Patron of 2015 SB 1349

** Patron of 2017 SB 1398

†† Patron of 2018 SB 966

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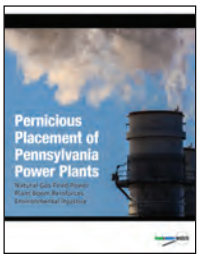
Another Petrochemical Sacrifice Zone:

Proposed Appalachian Gas "Cluster" Would Pollute Region and Entrench Fossil Fuel and Plastics Infrastructure for Decades

The proposed Appalachian storage complex may be a profit bonanza for industry, but it is a pollution pitfall for communities and ecosystems in the area. Converting the region into the second largest concentration of plastics and chemical manufacturing outside the highly polluted Gulf Coast will compound the Tri-State area's already substantial exposure to industrial toxic emissions, while increasing plastic materials that largely end up polluting the earth's oceans.



Pernicious Placement of Pennsylvania Power Plants:

Natural Gas-Fired Power Plant Boom Reinforces Environmental Injustice

Power plants have long been disproportionately located near disadvantaged communities. Now, energy companies in Pennsylvania have begun building natural gas-fired power plants that will reinforce the historic environmental injustice of the state's existing fossil fuel-fired power plants. The surge in power plant construction locks in reliance on dirty fossil fuels, encourages more destructive fracking and contributes to increased climate pollution.

Paying to Pollute: The Environmental Injustice of Pollution Trading

Free market environmental policies are fundamentally changing America's approach to pollution control. Market-based pollution credit schemes are undermining successful environmental laws like the Clean Air Act and the Clean Water Act by allowing industries to pay for the right to dump contaminants into our waterways and air. The health and environment of communities surrounding these pollution sources pay the price for these free market environmental policies. All too often, these are lower-income neighborhoods and communities of color.

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