



COMMITTEE FOR A CONSTRUCTIVE TOMORROW

TESTIMONY

Statement in opposition of the Virginia Clean Economy Act

Before the
Virginia House Labor and Commerce Committee

Craig Rucker

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Madam Chair Byron, Ranking Member Sullivan, and Members of the Committee:

My name is Craig Rucker. I am president of the Committee For A Constructive Tomorrow (CFACT). I have resided in Berryville, VA, for 28 years.

CFACT is a non-profit organization based in Washington, D.C., and founded in 1985 with the purpose of promoting safe, free market technological solutions to address environmental and energy concerns. CFACT has an extensive scientific and policy advisory board, has attended nearly every United Nations climate change summit, sponsors a national college student outreach program (Collegians For a Constructive Tomorrow), and participates in the public policy world on multiple fronts. We also have thousands of citizen supporters in the state of Virginia.

Since the time the Virginia Clean Economy Act (VCEA) was enacted in 2020, CFACT has been a vocal critic of the policies underlying this ill-conceived, poorly crafted legislation. The VCEA was founded upon highly questionable scientific claims. It was rammed through the Virginia legislature without adequate consideration of its economic costs and demonstrable harm to Virginia's forests and farmland.

CFACT is not a partisan organization, but it is vitally interested in the facts and science underlying energy policy in America, and it is our view that the VCEA is founded on a fundamentally flawed perspective regarding climate change. For that reason, we have published numerous articles by our contributors which describe and reveal the pernicious effects of this legislation.

Among others, these authors and articles include the following: "[Destroying Virginia's Environment to Save It](#)" by Paul Driessen; "[Energy Via Legislative Diktat in Virginia](#)" by Charles Battig; "[Virginia's Latest Folly - Offshore Wind Power](#)" by Dr. David Wojick; "[CFACT Makes It Official: The Virginia Clean Economy Act is a Disaster](#)" by Collister Johnson; and "[Virginia's Massive Mistake](#)" written by myself. I have submitted copies of these articles for the record.

The VCEA is indeed a disaster. I will speak to two areas where we maintain that the VCEA constitutes a public policy nightmare.

Removing Oversight of the State Corporation Commission (SCC)

The SCC has been embodied in the Virginia Constitution since 1902. One of its most important duties is regulating the public utilities which supply electricity to Virginia consumers. Because Virginia's primary electric utilities -- Dominion Energy and Appalachian Power -- are regulated monopolies, they are entitled to a statutory return on equity, plus reasonable expenses. This

monopoly power is supposed to be kept in check through the oversight of the SCC, which maintains electricity rates, in lieu of competition, at levels which are “in the public interest.”

For the first time in Virginia history, the VCEA completely removes any meaningful SCC oversight authority by declaring that all solar and wind projects required to meet the mandated Renewable Portfolio Standard are, by legislative fiat, deemed to be “in the public interest.” Therefore, instead of having the ability to opine on the relative merits of competing electrical generation modes -- coal, petroleum, natural gas, nuclear, wind, solar, biomass, and so forth -- the SCC is presented with a fait accompli. All wind and solar projects are “in the public interest.” Thus, the SCC is left with choosing the least bad method of fulfilling the only two generation options made available to it: solar, which is the most unreliable of all generation modes, and offshore wind, which is the most expensive.

The abrogation by the Legislature of the duties and judgment of the one body constitutionally required to oversee of Virginia's electric utilities is truly one of the most unfortunate aspects of the VCEA.

Destruction of Forests and Farmland

As shown by the state-wide map of proposed solar projects prepared by the Suburban Virginia Republican Coalition, there are 440 solar projects in 70 counties pending governmental and regulatory approval. If all these projects are constructed, they would cover an area of 778 square miles, equal to 330,00 football fields, 35 times the size of New York City, larger than Albemarle County, and 1.5 times the size of Loudoun County. They are not being constructed on land zoned for industrial or commercial use. Rather, in most cases the developers have chosen to seek special use permits from counties to site them on land zoned and master planned for agricultural and forest use.

The reason why is simple. Rural forest and farmland are abundant and cheap. But this kind of land is zoned that way for a reason -- to preserve the rural atmosphere of the counties for the benefit of their citizens. Industrial facilities should be placed in or near other industrial and commercial zones.

Solar factories require the clear cutting and topsoil removal of most of the acres of the proposed factory. And each acre will be covered with approximately 300 solar panels, weighing a total of over 5 tons. Most of these solar panels are made in China. At the end of their useful life, they must be removed -- another extensive undertaking being that they contain toxic chemicals, such as cancer-causing cadmium. We have seen from recently constructed solar factories, like the massive, 6,000-acre Fawn Lake facility in Spotsylvania County, that it is unclear whether the developers

have provided an adequate escrow fund to finance the removal of the panels at the end of their useful life. If not, Spotsylvania County and Virginia are facing a potential superfund cleanup site.

The VCEA also removes the Department of Environmental Quality (DEQ) from effective oversight of solar facilities. The law contains the so-called “permit by rule,” which exempts from DEQ regulation solar projects less than 100 megawatts in size, approximately 90% of the total. This means that the DEQ is effectively neutered from regulating the stream siltation and soil erosion which have been documented in many of the solar projects constructed to date.

In summary, Madam Chair, this record clearly establishes that the VCEA is bad for consumers, bad for the environment, and based on fundamentally flawed public policy. We respectfully request that those facts are taken into consideration for all future deliberations.

Articles for Reference:

Destroying Virginia's Environment To Save It

By Paul Driessen

Mere weeks after Governor Ralph Northam signed a partisan "Clean Economy Act" that had been rushed through the state legislature, Dominion Energy Virginia announced it would reach "net zero" greenhouse gas emissions by 2050. To do so, the utility company will raise family, business, hospital and school electricity bills by 3% every year for the next ten years – as they and state and local governments struggle to climb out of the financial holes created by the ongoing Coronavirus lockdown.

Just as bad, renewable energy mandates and commitments from the new law and Dominion's "integrated resource plan" will have monumental adverse impacts on Virginia and world environmental values. In reality, Virginia's new "clean" economy exists only in fantasy land.

The infamous Vietnam era quotation, "We had to destroy the village in order to save it," may or may not have been uttered by an anonymous US Army major. It may have been misquoted, revised, apocryphal or just invented. But it quickly morphed into an anti-war mantra.

For Virginia, it could reemerge as "we had to destroy our environment in order to save it." (The same will be true for any state that travels this make-believe "clean, green, renewable, sustainable" energy path.)

Supposedly to reduce emissions of plant-fertilizing carbon dioxide, Dominion Energy plans to expand the state's offshore wind, onshore solar and battery storage capacity by some 24,000 megawatts of new (pseudo)renewable energy by 2035 and far more after that. It will retain just 9,700 MW of existing natural gas generation, and only through 2045, build no new gas-fired units, and retire 6,200 megawatts of coal-fired generation. The company also intends to keep its four existing nuclear units operating.

To "replace" some of its abundant, reliable, affordable fossil fuel electricity, Dominion intends to build at least 31,400 megawatts of expensive, unreliable solar capacity by 2045. Dominion estimates that would require a land area some 25% larger than Fairfax County, west of Washington, DC.

Fairfax County is 391 square miles (250,220 acres). It has more than 23,000 acres (36 square miles) of parks. That means Dominion Energy's new solar facilities alone will blanket 490 square miles – 313,000 acres – of what are now beautiful croplands, scenic areas and habitats, teeming with wildlife.

That's nearly half the land area of Rhode Island. It's eight times the District of Columbia – and nearly 14 times more land than all Fairfax County parks combined. All will be blanketed by

imported solar panels, plus more land for access roads and new transmission lines. Just for Dominion. Just for solar.

And those solar panels will actually generate electricity maybe 20-25% of the year, once you factor in the nighttime hours, cloudy days, and wintertime, early day and late afternoon to evening times when the sun is not shining brightly enough to generate more than a tiny smidgeon of electricity.

Dominion and other Virginia utility companies also plan to import and install over 400 monstrous 850-foot-tall offshore wind turbines – and tens of thousands of half-ton battery packs, to provide backup power for at least a few hours or days when the sun isn't shining and the wind isn't blowing. They will supposedly prevent the economy from shutting down even more completely during each such outage than it has during the Corona lockdown.

Most of these solar panels, wind turbines and batteries – or their components (or the metals and minerals required to manufacture those components) – will likely come from China or from Chinese-owned operations in Africa, Asia and Latin America ... under mining, air and water pollution, workplace safety, fair wage, child labor, mined land reclamation, manufacturing and other laws and standards that would get US companies unmasked, vilified, sued, fined and shut down in a heartbeat.

However, those laws and regulations do not apply to most of the companies and operations that will supply the supposedly “clean-tech” technologies that will soon blight Virginia landscapes.

Thus far, no one has produced even a rough estimate of how much concrete, steel, aluminum, copper, lithium, cobalt, silica, rare earth metals and countless other materials will be needed. All of them will require gigantic heavy equipment and prodigious amounts of fossil fuels to blast and haul away billions of tons of rocky overburden; extract, crush and process tens of millions of tons of ores, using explosives, acids, toxic chemicals and other means to refine the ores; smelt concentrates into metals; manufacture all the millions of tons of components; and haul, assemble and install the panels, turbines, batteries and transmission lines, setting them on top of tens of thousands of tons of cement and rebar.

No one has tallied up the oil, natural gas and coal fuel requirements for doing all this “Virginia Clean Economy” work. Nor the greenhouse gases and actual pollutants that will be emitted in the process.

Nothing about this is clean, green, renewable or sustainable. But neither Dominion Energy nor Virginia government officials have said anything about any of this, nor about which countries will host the mining and other activities, under what environmental and human rights standards.

When will we get a full accounting? Just because all of this will happen far beyond Virginia's borders, does not mean that we can ignore the global environmental impacts. Or that we can ignore the health, safety and well-being of children and parents in those distant mines, processing

plants and factories. This is the perfect time to observe the environmentalist creed: think globally, act locally. Will that be done?

Will Dominion and Virginia require that all these raw materials and wind, solar and battery components be *responsibly sourced*? Will it require independently verified certifications that none of them involve child labor, and all are produced in compliance with US and Virginia laws, regulations and ethical codes for workplace safety, fair wages, air and water pollution, wildlife preservation and mined lands reclamation? Will they tally up all the fossils consumed, and pollutants emitted, in the process?

Science journalist, businessman and parliamentarian Matt Ridley says wind turbines need some 200 times more raw materials per megawatt of power than modern combined-cycle gas turbines. It's probably much the same for solar panels. Add in the backup batteries, and the environmental and human health impacts become absolutely mindboggling in their scale.

If you ignore all the land and wildlife impacts from installing the wind turbines, solar panels, batteries and transmission lines – you could perhaps call this “clean energy” and a “clean economy” *within Virginia's borders*. But beyond those borders? A compelling case could be made that the world would be far better off if we just built modern combined-cycle gas turbines (or nuclear power plants) to generate electricity in the first place – and avoided all the monumental human and ecological impacts of pseudo-renewable energy.

And when it is time to select sites for these 490 square miles of industrial solar facilities, will Virginia, its county and local governments, its citizens, environmentalist groups and courts apply the same rigorous standards, laws and regulations – for scenic views, habitats, wildlife and threatened or endangered species – as they do for pipelines, drilling, fracking, coal and gas power plants, and other projects? Will they apply the same standards for 100-foot-tall transmission lines as they do for buried-out-of-sight pipelines?

Virginia's Clean Economy Act will likely plunge every project and every jurisdiction into questions of race, poverty and environmental justice. Dominion Energy and other electric utilities will have to charge means-tested rates (even as rates climb 3% per year) and exempt low-income customers from some charges. They will have to submit construction plans to environmental justice councils – even as the utility companies and EJ councils ignore the rampant injustices inflicted on the children and parents who are slaving away in Chinese, African and Latin American mines, processing plants and factories.

Talk about breaking new ground. It will be interesting to see how Governor Ralph Northam, Attorney General Mark Herring, Senate Majority Leader Dick Saslaw, House Speaker Eileen Filler-Corn, and other Virginia government, utility and industry officials handle all these fascinating issues.

Energy Via Legislative Diktat In Virginia

By Charles Battig

For those enamored by the clean electric-car, smoke-and-mirrors “emission elsewhere scheme” comes the recently enacted “Virginia Clean Economy Act”, which includes one of the largest energy storage targets in the country at 2.4 GW by 2035, and prompts state regulators to craft a carbon dioxide cap and trade program that meets the objectives of the Regional Greenhouse Gas Initiative (RGGI).

The act, which requires Virginia’s electric utilities and competitive suppliers to generate electricity from 100% renewable energy by 2050, passed on the same day that Dominion Energy, the state’s largest utility, announced its goal of achieving net-zero emissions by 2050.

Carbon dioxide has been deemed a pollutant via legislative diktat. Accordingly, embedded in this legislation is language which prevents the Virginia State Corporation Commission from approving “any investor-owned utility to own, operate, or construct any electric generating unit that emits carbon as a byproduct of combusting fuel to generate electricity” until the state legislature has had a chance to review a report from the Air Pollution Control Board. Embedded in the act are escape clauses allowing fossil fuel energy just in case the 100 per cent carbon-free dream mandate fails in the real world. In keeping with current virtuous political correctness and emotional zeitgeist, the bill also requires utilities and the commission to consider the social cost of carbon when reviewing the need for a new generation facility.

However, Dominion Virginia Power now says it may need to import energy from pollution intensive sources out-of-state, even though nuclear power is part of the permitted energy mix. The price tag for this legislated decree wrought via politically virtuous green posturing, environmental sloganeering, and pandering to climate activists now comes to light. Get ready for acres of environmentally destructive solar panel installations which will fail to meet energy demand in the midst of winter, while decimating native habitat, and leaching toxic chemicals into the soil. Look to the new Warren Buffet solar project in Arizona as the template for yet another taxpayer billion dollar boondoggle promising pollution free energy (when the sun shines), and reliance on giga-battery installations when it does not.

Trust that the air-conditioner comes on during a summer lull in ocean breezes when those European-built, experimental off-shore wind turbines produce little electricity. Trust that the Atlantic hurricane season does not cause them to shut down in a self-preservation safety mode just when you need electric power. Trust that servicing those giga-windmills in a most hostile saltwater corrosive environment does not take them off-line too often. Trust that those envisioned giga-battery storage complexes for when the sun doesn’t shine, and the wind doesn’t not blow can actually be built. Trust that the tons of rare earth minerals needed to build such batteries can be sourced, and that such battery installations do not become ticking fire and explosion environmental disaster bombs. In England that risk to a small town has been compared to a small nuclear bomb. Safe disposal of the toxic-laden, worn out solar panels is largely ignored.

Whatever these outcomes, Dominion can pass on these costs to their captive consumers. The State Corporation Commission has estimated ratepayers could see “at least a \$23 per month” increase on their bills by 2027-2030...stress on the “at least.”

Virginia seems to be vying with California for the title of creator of the most destructive and unreliable energy policy at the highest cost to its citizens and industry by embracing radical environmentalism, and rejecting objective science. However, the realities of a Corona virus economy have finally put the brakes on California’s green dreams. California Gov. Gavin Newsom has proposed budget cuts include canceling billions of dollars in climate change spending. Meanwhile, Virginia’s green plans appear unchanged.

“Out of sight, out of mind,” pollution is now the law of the land, and “just-like-that” (thank you Forest Gump) by legislative fiat we Virginians are all carbon free at the expense of pollution elsewhere. Never mind that there will be no measurable effect on the climate. As is usual, there is no definition of how the climate change will be measured; it usually falls back to changes in atmospheric temperature. Even the details of how, where, and when such temperature measurements will be made is open-ended.

Releasing the recent film “Planet of the Humans” liberal film maker Michael Moore has upset the green lobby with such comments as: “most energy consumers don’t realize the complex ways that so-called renewable energy has been developed with a co-dependency on non-renewables,” and “The only reason we had been force fed the story ‘climate change plus renewables equals we’re saved’ is because billionaires, bankers and corporations profit from it.” Warren Buffet said it about wind power in 2014: “For example, on wind energy, we get a tax credit if we build a lot of wind farms. That’s the only reason to build them. They don’t make sense without the tax credit.” His afore-mentioned Arizona solar project would seem to fall into that same category, as does Virginia’s new legislation with hand-outs galore.

Lost in this green crusade is the fact that carbon dioxide is an essential trace gas upon which plants depend for life. Each one of us exhales carbon dioxide at an approximate four percent concentration with each breath, as we are carbon-based life forms. Do not embarrass these legislators by asking how much the climate will be saved by this “Clean Economy Act”, however it might be measured against an atmospheric carbon dioxide concentration of 400ppm.

Get ready for needlessly increased energy costs for local governments and the public in this era of the Corona virus. Natural gas and petroleum are at record low prices, yet Virginia’s new energy plan has promised increased energy costs. For local governments no problem, just increase property taxes and property assessments. Those out of work are just out of luck.

By the target date of 2045, the authors of this legislation (including the Virginia governor and legislators who foisted this on the public) will probably (hopefully?) be out of office and forgotten, and have no fear of facing recriminations. Not so lucky will be the children and grandchildren of the future facing an uncertain, but expensive, Virginia energy environment.

Virginia's Latest Folly – Offshore Wind Power

By David Wojick

As reported in an earlier article, Virginia's green electric power plan calls for 5,000 MW of offshore wind generating capacity to be built in the next decade or so. This is a huge amount given that the worldwide total is just around 15,000 MW. We are talking about something like 800 giant windmills, embedded in the ocean floor and sticking hundreds of feet into the air above the water. They will be on the order of one and a half times taller than the Washington Monument, which is really tall.

Two features make this offshore wind plan a folly — too little wind and too much wind. Let's look at too little wind first.

The proposed site is around 30 miles offshore of the giant Norfolk naval complex. Sites are usually much closer in than this, but maybe the Navy told them to keep their distance. Or perhaps they are out beyond the very busy shipping lanes. Every ship from Central and South America, or the southeast U.S., headed for ports from Baltimore north to Canada, passes through this area. This in itself is a concern but not one we are looking at now.

The problem is that this area frequently gets periods of a week or more when the wind is too low to generate any power. These are winds of 10 mph or less. Normal wind turbines require sustained wind of 33 mph or more to generate full power. Some new models with giant blades can do full power at just 23 mph. But neither generates much of anything at 10 mph. It is not a matter of no wind; low wind is enough.

Weather records for Norfolk show just such an event last year, with the low wind period being August 17-23. The wind never measured over 10 mph for the entire 7 days.

To make matters worse, when these low wind periods occur in summer they often include very high temperatures. In the event cited above the high temperatures were in the upper 80's and low 90's. Away from the ocean, temperatures were even higher. Both Richmond and Washington DC saw high temperatures in the mid to upper 90's for most of this week long period.

These high temperatures create the greatest need for electricity, called peak demand. Combining peak demand with no wind power means this huge, expensive wind facility does nothing when electricity is most needed. Some other form of power generation will have to be standing by to do what the 5,000 MW of useless offshore wind power cannot do.

There is no provision for this duplication of generating capacity in the Virginia plan. If it is not there when needed, then a prolonged blackout is the only option.

Week long periods of no generation low wind occur fairly often in the Norfolk area, perhaps once every few years. In a hot summer they may occur more than once. But there are also many shorter periods of low wind, with a high need for electricity, that occur more frequently. Then too there

are no doubt longer periods of low wind that occur less frequently. At the one in fifty year frequency we might get a month or more of low wind. I see no evidence that these possibilities have been addressed in the Virginia plan.

On the high wind side we have hurricanes.

This area could be called hurricane alley because many storms turn north in the Caribbean and run up the American coast. Southern Virginia and northern North Carolina actually stick out into this flow. That is where these tall towers will be.

Category five hurricanes have sustained winds over 156 mph with gusts that can exceed 200 mph. To date no offshore wind towers have been designed to withstand these sorts of winds. Most have been built in Europe where hurricanes do not occur. The force of the wind is a function of the square of the wind speed, so a 160 mph wind is four times as destructive as an 80 mph wind.

In fact the US Energy Department recently announced a new research program to look into whether a hurricane proof design is even possible. Here's how DOE puts it:

"Although hurricanes and the damage they can cause remain difficult to predict, with current R&D, the Energy Department is taking steps to alleviate potential risks to offshore wind systems that will eventually be deployed in the southeastern and mid-Atlantic regions."

DOE puts a positive spin on it but it seems clear that we are in no position to build massive hurricane proof offshore wind facilities today. DOE says "eventually" and even that may be wishful thinking.

One thing certain is that if Virginia goes ahead, in effect playing chicken with cat 5 storms, these hundreds of towers will have to be far stronger than standard European designs. Stronger means more expensive. The standard cost is around \$1.5 million per MW, which would be \$7.5 billion in Virginia's case. If hurricane proofing doubles the cost that puts a monstrous \$15 billion at risk of destruction.

Conclusion: The Virginia plan is calling for a massive and incredibly expensive offshore wind generating facility, at high risk of failure, that will produce no power whatever when it is needed most.

Surely this is folly.

CFACT Makes it Official: The Virginia Clean Economy Act is a Disaster

By Collister Johnson

Over the last two weeks, four experienced CFACT analysts – David Wojick, Paul Driessen, Charles Battig, and myself – have reviewed the Virginia Clean Economy Act (VCEA), passed in April of this year, and commented both on the legal framework it provides for electric energy production in the Commonwealth and also on the required mandates it imposes on Dominion Energy, the regulated monopoly authorized by law to provide electric energy for Virginia.

The reason for this enhanced attention to the VCEA is that it is one of the first pieces of energy legislation in the US, formulated by a Democratic controlled Legislature and signed by a Democrat Governor, Ralph Northam, which purports to provide electricity under a mandate of “net zero” carbon dioxide “emission” by 2050. In other words, it is legislation crafted by “green” activists to fulfill their belief that the release of manmade CO₂ during the production of energy should be cut to zero.

This radical philosophy, which is embodied perfectly in the “Green New Deal”, is a doctrine fervently embraced by the far-left wing of the environmental movement.

What kind of electric energy world would this philosophy, when put into actual practice, impose on Virginia consumers? What would it cost? What would it do to the Virginia countryside? Would it be reliable? How would the State Corporation Commission – the body which historically has been responsible for regulating Dominion’s electricity monopoly – implement the novel directives contained in the VCEA?

The answers to these questions – confirmed by the veteran observers noted above – are shocking and appalling. Never before in Virginia’s history has there been a legislative mandate of such sweeping and radical proportions for electrical generation.

CFACT’s comprehensive analysis confirms that the VCEA will result in:

- a massive increase in the yearly electricity bill for the average Virginia family of \$500 per year, a 40% increase over levels without the VCEA;
- a blighting of the Virginia landscape with *hundreds of thousands* of acres of new solar panel farms and high-tension transmission lines;
- over \$30 *billion* in increased capital costs for electrical infrastructure, which does not even include the new engineering expense embedded in such novel distribution facilities; and
- a blend of electricity sources which will severely undermine the reliability of electricity production, especially when (spoiler alert) the sun doesn’t shine and the wind doesn’t blow.

So radical are these mandates that, for the first time in history, the State Corporation Commission has effectively been entirely stripped of its authority to regulate electricity generation in Virginia, thereby jettisoning the SCC's historical responsibility to assure Virginians of both the lowest possible cost of electricity coupled with the highest reliability.

The CFACT analysis also discovered a number of other dangerous consequences which will be levied on the average Virginia family by the VCEA:

- The increase in average annual electricity prices extracted from Virginia electricity rate payers will amount to an additional \$2,250,000,000 annually in order to finance the pipe dreams of the eco-left;
- The construction of massive offshore wind facilities that will require significantly elevated levels of cement, steel, and rare earth metals because they will lie in the path of Atlantic hurricanes. Just think of the damage inflicted by Hurricane Sandy on New York City, and then imagine what would have happened to the VA offshore wind farms, which would have been located directly in its path. And to make matters worse, the wind farms will be subject to the annual "Bermuda High", which sits off the VA coast for weeks at a time during the summer, meaning that no wind will be activating the turbine blades, and thus no electricity will be generated for the air conditioners of Virginians who will be broiling in the summer heat. Because wind is so unreliable, **every** similar wind farm in the United States requires backup generation capability powered by diesel or natural gas, an expense not even included in the Dominion plan.

And don't forget – because Dominion is a regulated monopoly – every expense which it incurs as a result of the VCEA will be paid for, one way or the other, by VA ratepayers, in order to assure that Dominion shareholders earn a legally required return on capital.

As CFACT analyst Paul Driessen points out, the VCEA requires – like the famous quote from the Vietnam war – that the Virginia countryside must be destroyed in order to save it. The new solar fields coerced by the VCEA will blanket 490 square miles of Virginia farm and forest land – an area nearly half the size of the State of Rhode Island and eight times the size of the District of Columbia – in order to generate the solar power required by the VCEA.

In addition, Dominion will need to construct four massive interstate transmission lines at a cost of \$8.4 **billion** to carry electricity from these solar fields to consumers. Let's just see what the county zoning commissions – much less the voters – of each impacted county have to say about the placement of these transmission lines and solar fields in their backyards. Better yet, let's just see what the voters have to say to the politicians who voted for the VCEA when they come up for re-election. As one of the CFACT analysts concluded, "There is nothing clean, green, renewable or sustainable about the VCEA".

And then the question becomes: All of this cost, unreliability, and environmental degradation is required exactly for **what?** Certainly not cheaper or more reliable energy.

As I pointed out in my previous article on this subject:

The VCEA has absolutely zero positive impact on climate, and a devastating negative impact on the environment. Under the VCEA, Virginia will not have cleaner air, purer water, or a more beautiful countryside. Fifteen years from now, not a single Virginian will be able to feel, touch, or smell any difference or improvement in the environment resulting from the VCEA. But they will be able to see a landscape ruined by solar panel eyesores and ugly transmission towers.

In summary, the VCEA will result in:

- an annual additional electricity cost of \$500 per household.
- an additional \$30 billion in capital cost for electrical infrastructure.
- the ruination of hundreds of thousands of acres of Virginia countryside and wildlife habitat by solar farms, electric transmission line, and ugly towers.
- the degradation of electrical system reliability, such that there will be no capability of power restoration, to quote Dominion, “in the event of a large-scale blackout”.

In short, for the Virginia consumer, it is all pocketbook pain, and no climate gain.

By embracing radical environmentalism, Virginia seems to be vying with California for the title of the creator of the most destructive and unreliable energy policy at the highest cost to its citizens in the country. When these consequences become known to Virginia voters – and they will – the VCEA may ultimately become known as the “Political Career-Ending Energy Act of 2019”.

Predictably, Virginia politicians who voted for this catastrophic piece of legislation will try to blame Dominion Energy for its disastrous consequences.

Good luck with that. Virginia voters are smart enough to see through that smokescreen.

Are you listening Governor Ralph Northam, Senate Majority Leader Dick Daskaw, Attorney General Mark Herring, and House Speaker Eileen Filler-Corn?

Virginia's Massive Mistake

By Craig Rucker

Want to increase the cost of electricity with no benefit to anyone but investors? Wind power is for you!

Europeans wasted vast sums on wind farms, wreaking havoc on the ability of the businesses to be competitive, driving people into energy poverty, with no decrease in emissions (if that's your thing).

Now those turbines are aging past their useful life and have to be replaced. Wind turbines can't be recycled.

All that waste and redistribution sound like just the thing to the people running the Commonwealth of Virginia.

David Wojick lays out the sorry details at CFACT.org:

Virginia's green electric power plan calls for 5,000 MW of offshore wind generating capacity to be built in the next decade or so. This is a huge amount given that the worldwide total is just around 15,000 MW. We are talking about something like 800 giant windmills, embedded in the ocean floor and sticking hundreds of feet into the air above the water. They will be on the order of one and a half times taller than the Washington Monument, which is really tall.

One thing Virginia has that Europe does not? Hurricanes:

One thing that is certain is that if Virginia goes ahead, in effect playing chicken with cat 5 storms, these hundreds of towers will have to be far stronger than standard European designs. Stronger means more expensive. The standard cost is around \$1.5 million per MW, which would be \$7.5 billion in Virginia's case. If hurricane proofing doubles the cost that puts a monstrous \$15 billion at risk of destruction.

Offshore wind farms carry a massive environmental footprint, raise costs for rate and taxpayers, do not reduce emissions, and benefit no one, but the people cashing in on government subsidies and mandates.

As a Virginian myself, I say stop this folly before it's too late!

Craig Rucker Biography:



Craig Rucker is a co-founder of CFACT and currently serves as its president.

For over 30 years, Craig has provided expertise to a wide range of government, academic, media, and industry forums. His organization, the Committee For A Constructive Tomorrow, boasts a large grassroots membership base, features over 50 scientific and academic experts, and is widely heralded as a leader in the free market think tank community in Washington, D.C. In addition to being a frequent guest on radio talk shows, Rucker has also written extensively and appeared in such media

outlets as CNN, BBC, USA Today, *The New York Times*, Russia Today, the *Wall Street Journal*, and *The Washington Post*, among many others.

Rucker was a co-producer of the award-winning film *Climate Hustle*, which was the #1 box-office film in America during its one-night showing in 2016. He also has primary responsibility for building CFACT's Collegians program on more than 50 campuses across the U.S., spearheads the creation of model demonstration eco-projects in impoverished villages in Latin America and Africa, and has led delegations to some 20 major United Nations conferences, including those in Copenhagen, Istanbul, Kyoto, Bonn, Marrakesh, Rio de Janeiro, and Warsaw, to name a few. Rucker has a wife and four sons, and currently resides in Virginia's Shenandoah Valley.