



November 20, 2023

To whom it may concern:

The following comments are submitted on behalf of Virginians for Safe Technology and Children's Health Defense Virginia Chapter (CHDVA) and are in regards to Dominion Energy Virginia's application for a 2023 Biennial Review of the company's rates, terms and conditions, Case Number PUR-2023-00101. We are commenting specifically on the proposed rate increase and proposed fee for opt-out meters.

Virginians for Safe Technology is a grassroots consumer advocacy organization whose mission is to promote the protection of current and future Virginians' rights to safe and responsible technology. The mission of CHDVA is to restore and protect the health of children by eliminating exposures to environmental toxins, holding responsible parties accountable, and establishing safeguards to prevent future harm to children's health. Collectively, we have more than 5,000 supporters across the state, many of whom are customers of Dominion Energy.

We strongly oppose the proposed rate increase of \$7.58 to \$9.05. Dominion Energy customers are already paying some of the highest rates in the country for their energy. According to a June 2023 article in the publication, *The Atlantic*, "In the past decade and a half, the general assembly passed a series of Dominion bills that gradually neutered the SCC, freed the utility's rates from regulation, and allowed Dominion to overcharge Virginians (the term of art is overearn) by about \$2 billion—by one reckoning, \$3 billion—on their electric bills. Overearnings were supposed to trigger refunds to customers, but instead big profits went to corporate executives (Thomas Farrell, who led Dominion for 15 years and died the day after he stepped down in 2021, averaged \$14 million a year in compensation), to shareholders, and to the purchase of other companies. As for Dominion's customers, their refunds amounted to less than a third of the company's excess earnings." ¹

In addition, despite Dominion's contentions that smart meters save customers money, the opposite is true. According to testimonials given by nationally renowned RFR (radio frequency radiation) expert and Professional Electrical Engineer, Mr. William Bathgate, during a Michigan House Energy Committee hearing in 2018², the high voltage transients that are being produced by the smart meter's internal switch mode power supply (SMPS) are creating at least a 10% additional cost to the customer, and as high as 24%. The increase in cost is due to this extra voltage - called conducted emissions or dirty electricity (DE) - from the SMPS that isn't used by the customer, but must be paid for. These conducted emissions could be mitigated with a \$2.00

¹ *The Atlantic*, "How Virginia took on Dominion Energy", June 13, 2023.

<https://www.theatlantic.com/ideas/archive/2023/06/plutocrat-vs-monopoly/674319/>

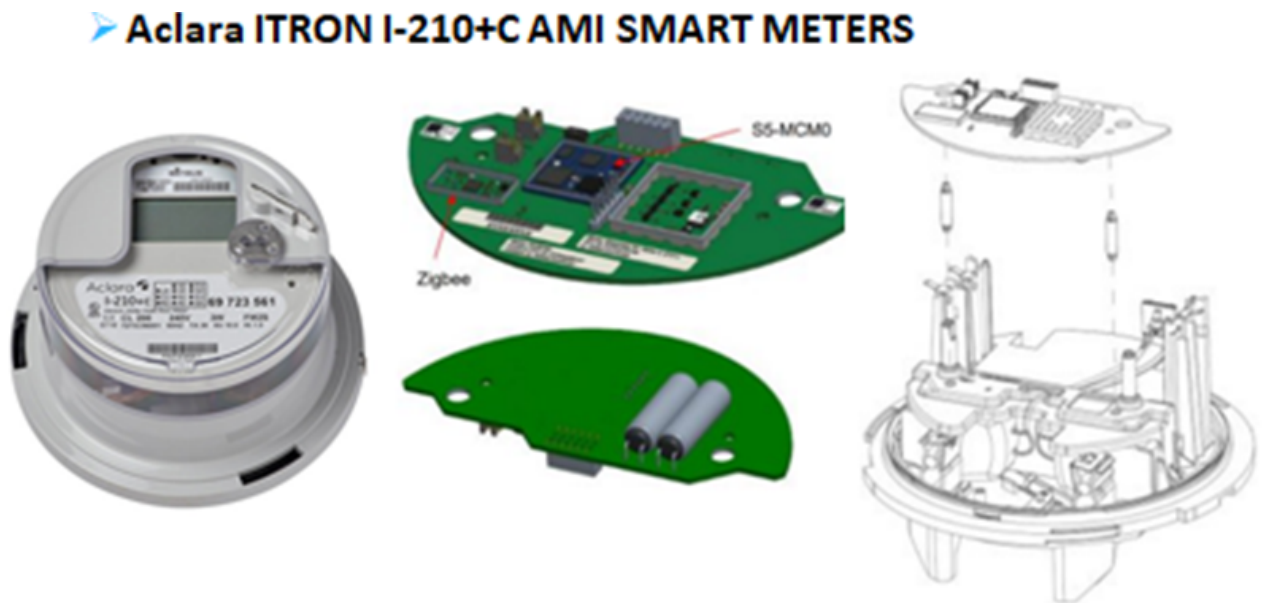
² Michigan House Energy Committee Hearing 2/13/2018, <https://www.youtube.com/watch?v=xvaGntYM9WA> at the 1:00 minute mark.

filter, which would eliminate the dangerous emissions from conducting throughout customers' homes, and reduce the cost of their monthly electricity bill significantly.

While we oppose the proposed rate increase for all customers based on the fact we're already being overcharged, our greater concern centers on the proposed monthly fee that would be imposed on customers who have an opt-out meter for the following reasons:

Dominion's Opt-Out Meters Communicate

Dominion Energy uses the Aclara I-210+c meter for its opt-out program. Below is a picture of the internal components of the opt-out meter, including the two communicating chips shown in the center of the picture with the red arrows:



<https://manuals.plus/aclara/i-210c-smart-electricity-meter-manual.pdf>

Based on this image and information provided in the Aclara manual, the opt-out meter is capable of communicating since Dominion is putting them in with both communication chips installed.

Dominion Energy's website language regarding its opt-out meter reads:

"We offer a Non-Communicating Meter Option (Opt-Out) for customers who do not wish to have a fully functional smart meter installed at their home. **The Non-Communicating meters are digital meters with no communications or data storage features**" and

"The following requirements apply to the Interim Non-Communicating Meter (Residential Opt Out) Option. The Non-Communicating meters are Advanced Metering Infrastructure ("AMI") or Smart Meters with **both the two-way communications and data storage features disabled**; the only recording features retained are the minimum needed for monthly billing."

Dominion has also explicitly stated to elected officials that the two communicating chips are *removed* from the installed opt-out meters, so they cannot inadvertently transmit: In a December 13, 2022 meeting between the SCC, Dominion Energy, and Delegate LaRock, he was told by Dominion that the non-communicating digital meters received by opt-out customers are purchased without the communication chips in them (not just deactivated, but no communication chip capability in the future), thus they require a manual meter-reading.

At an October 3rd, 2023 Board of Supervisors meeting in Gloucester County, Dominion representatives presented to officials an opened sample opt-out meter demonstrating that the communicating chips were removed.³

To add to the confusion, Dominion is also on record as saying the chips are present but deactivated. Considering the lack of consistency, it is not clear what type of meter customers who receive an opt-out are getting.

In early November, we worked with Professional Electrical Engineer and Building Biologist William Bathgate, to test both the AMI smart meters and opt-out meters installed on residences in various parts of Virginia. Of relevance to this petition, his testing revealed Dominion's opt-out meter (Aclara I-210+c™) communicates using RFR. Please see the video found [at this link](#) for an example.⁴

Why is Dominion contending it needs to cover the cost of manually reading opt-out meters when they have been documented to be communicating? We urge the SCC to undertake independent testing of Dominion's opt-out meters to further investigate the communicating capability of these meters. The communicating status of these meters is critically important to know for customers who have electrical medical implants, or who suffer from electrohypersensitivity (EHS)⁵ or electromagnetic sensitivity (EMS).⁶ These individuals rely on utility opt-out meter information to be accurate to make informed decisions on how best to avoid injurious or potentially fatal radiofrequency radiation (RFR) exposures.

Also, it is prohibited to levy surcharges on the disabled, including EMS individuals, for any public program that is required to be modified in order for them to use the program safely. The opt-out program is provisioned as an access accommodation for the disabled or EMS customer so they can receive their electric utility service in a safe manner. EMS and other disabled customers are protected from being charged these additional fees under the Americans with Disabilities Act, *Title II, section 28 CFR 35.130(f)*.

Customers Will Incur and Are Already Incurring Extra Costs with Opt-Out Meters

- 1) The Cost of a Meter to Measure RFR

³ Gloucester County Board of Supervisors Meeting, October 3rd 2023
<https://pub-gloucestervera.escribemeetings.com/Players/ISIStandAlonePlayer.aspx?Id=1fe578e5-f296-4395-93c9-34ea6f66707b> @ 1 hr 33 minute mark

⁴<https://www.dropbox.com/scl/fo/utdhuf68lrpfz37e3kgix/h?preview=DE+OptOutMeter+Still+Radiating+-+F+airfaxVA+-+11-10-2023-BlurredMeterNumber.mp4&rkey=mq3p9mi6dk1je44gwymox8geh&dl=0>

⁵ <https://mdsafetech.org/science/es-science/>

⁶ <https://emfsafetynetwork.org/safety-precautions/electrical-sensitivity/>

We believe it is a reasonable assumption that if several opt-out meters are communicating, that others are as well; and that if they are not yet communicating they most likely will begin to do so after a power outage and/or a software push update without customer knowledge. Customers concerned that their opt-out meters are already communicating, or will be in the future, will be forced to purchase an RFR survey meter, typically at a cost of \$300 to \$400, to periodically test their opt-out meters to verify its transmitting status.

2) The Cost to Mitigate Dirty Electricity

In addition to the costs of buying an RFR survey meter to determine whether their meters are communicating, opt-out customers who want to protect themselves are burdened with the costs associated with mitigating the DE. In order to mitigate the DE, consumers must buy expensive DE filters like the [Sine Tamer and the Inline DNA Filter](#) that range from \$1,760- \$3,916 and the Super Duty Power Perfect Energy Management Filter [here](#) for \$1,695.

3) The Cost to Mitigate RFR

Those individuals who are concerned with RFR exposure, or are EMS or disabled may find it necessary to take additional steps to protect their health and their family by relocating the meter off their home. The cost to move an electrical meter off a home ranges anywhere from \$8,000 to \$13,000 or more depending on the distance the meter is moved. Additionally, an opt-out communicating meter cover that redirects or absorbs some of the RFR away from the home can range anywhere \$100- \$700 depending on the amount of RFR that is attenuated.

4) The Cost to Mitigate the Risk of Fire

Smart meters, including opt-out meters, are known to be a fire risk. Meters may catch on fire at the meter box from internal overheating or fires can start inside the home from RF heating on fixed electrical wiring which breaks down the PVC Romex wiring insulation leading to fire causation.⁷ They also do not have any grounding or surge protection. As mentioned above, the cost to move an electrical meter off a home ranges anywhere from \$8,000 to \$13,000 or more depending on the distance the meter is moved.

Another fairly common fire risk associated with smart meters is the lack of meter base socket inspection by the customer. This is stated in the Aclara manufacturer manual for the Meter Installation Procedure as follows: “**Inspect the socket for serviceability. Make plans to replace it if one or more jaws show signs of age or corrosion**”.⁸ The homeowner is expected to know, without being informed by Dominion, that they are responsible for internal meter inspections of sockets and jaws and if one or more show signs of corrosion due to the age of the meter base, it needs to be replaced. The cost of the meter base replacement is approximately \$4,000.

⁷ *The Discovery and Science of Smart Meter Fires (2021)* found online at <https://virginiansforsafetech.org/wp-content/uploads/2023/03/2021-The-Discovery-and-Science-of-Smart-Meter-Fires-print.pdf>

⁸ Aclara I-210+c manufacturer manual <https://www.manualslib.com/manual/3043893/Hubbell-Aclara-Rf-Electric-I-210Plusc.html?page=69#manual>

This risk was acknowledged by Dominion representatives [during a presentation](#) to the Gloucester County Board of Supervisors on October 3, 2023 when they stated:

“I have never gone on a fire call that the meter was the cause of the fire. Every time we’ve gone on a fire call it’s been at the meter base, it’s because the connections behind the meter were bad and that is the responsibility of the homeowner because they install the meter base. The only thing we own is the meter that goes in it.”

And:

“There is a line side and a load side. The line side, just like the name says, all the lines that go to a home and the meter that’s Dominion’s part. The meter base, which we can provide to the customer, and the lines behind the meter and the panel box and all the wiring in the house is the customer’s responsibility.”

In a personal communication at the same meeting, a Dominion representative explained that fires at the meter box can occur when the jaws are corroded and cannot hold the meter properly in place, which can result in sparking, and in turn leads to a fire.

Unfortunately, to the best of our knowledge, Dominion has not informed its customers of this potential fire risk. It should be noted that changing the meter base or moving the meter off the house does not mitigate the fire risk of RF heating on fixed electrical wiring.

Concluding Comments

We strongly urge the SCC to deny Dominion’s petitions to raise customer’s base rates and charge a monthly fee for the opt-out meter option. Here is a summation of the reasons:

1. The cost of fully mitigating RFR, DE, and fire hazard risks are tens of thousands of dollars and these risks are all being subrogated to the customer without any compensation
2. If the customer is going to absorb all the risks associated with the opt-out meter, we should have *much lower* rates, not higher, as there is an inverse relationship between price and the degree of risk taken when entering into any business contract.
3. We are currently being overcharged for our electricity usage because the power companies don’t filter out DE. Customers have to pay approximately 10% to 24% more for that dirty electricity riding on the power circuits that they don’t use.
4. DE needs to be filtered out/reduced by Dominion to lower monthly bills and protect customers' health.
5. Opt-out meters communicate, or can easily begin to communicate after a software push or power outage.
6. No surcharge is justified when an opt-out meter can still communicate and the customer is not getting the meter he or she expected when they signed the opt-out form.

7. The American with Disabilities Act (ADA) for the disabled, or for those that are EMS, is not being recognized to use nondiscriminatory treatment by levying monthly surcharges, and can result in prohibitive practices if they were forced to pay these fees.
8. The opt-out program is ambiguous and not being executed in a consistent manner.
9. Individuals are being punitively denied opt-outs due to false accusations of Dominion regarding payment history.
10. Fire hazard risks are not being sufficiently mitigated to protect consumers and their property from unnecessary injury and property loss.
11. It's almost impossible for an electric utility customer to fully protect themselves from the dangers imposed by an opt-out smart meter

Recommendations

- Our primary recommendation is for the SCC to undertake independent testing of Dominion's opt-out meters to conclusively determine their real time communication status.
- The SCC should request that the Virginia General Assembly pass legislation to codify an opt-out program that ensures customers will be provided with a meter incapable of transmitting data . Until these actions occur, the SCC should not approve opt-out fees.
- After the independent investigation, if it is found that Dominion has not removed the two antenna chips, the SCC should establish and impose a monetary fine and require immediate retrofitting of all opt-out meters across the state to ensure that all opt-out meters have the two chips removed.
- The SCC should establish a hotline for consumers to report when their opt-out meter is communicating. For each opt-out meter that is reported and confirmed to be communicating by the SCC, the SCC should establish and impose a penalty to be paid by Dominion and directed to a fund that will cover the RFR mitigation for disabled or EMS customers who cannot afford the equipment to reduce the RFR and dirty electricity in their homes.
- Require Dominion to make immediate improvements to its opt-out program by only allowing the use of opt-out meter options that have no communicating capability. These options include analog meters, meters with an ethernet connection, or a meter model that has the communicating chip *removed* - not just deactivated.
- As outlined above, consumers are incurring significant costs to mitigate RFR exposure, increased dirty electricity and fire risks. In the case of dirty electricity, there is a meter modification that the SCC could require Dominion to implement that would save consumers thousands of dollars. This would involve the addition of a \$2.00 filter part that would significantly reduce or eliminate the dirty electricity that occurs when a smart meter is installed.

- In the interim, the SCC should codify the opt-out program to eliminate the inconsistency in what the utility customer receives, and permit the re-installation of an electromechanical analog utility meter until the fire hazards that are associated with the use of electricity are fully mitigated. The safety of life and property should not be jeopardized solely for the sake of corporate profit and guaranteed return on investment. The AMI smart meter must be redesigned to mitigate these fire hazard risks associated with the use of electricity, and until that happens, utility customers must be given other options and not forced to accept those subrogated risks.

Thank you for the opportunity to comment.

Sincerely,

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