COMMONWEALTH OF VIRGINIA
STATE CORPORATION COMMISSION

COMMONWEALTH OF VIRGINIA, *ex rel.*

STATE CORPORATION COMMISSION **CASE NO. PUR-2023-00227**

***Ex Parte*: In the matter of establishing energy efficiency savings targets for Virginia Electric and Power Company pursuant to Code §§ 56-596.2 B 3 and 56-596.2:2**

REPORT OF D. MATHIAS ROUSSY, JR., HEARING EXAMINER

November 12, 2024

The Code of Virginia ("Code") directs certain electric utilities, including Virginia Electric and Power Company ("Dominion" or "Company") to implement energy efficiency programs[1] for, and funded by, the Company's ratepayers.[2] The Code also directs the State Corporation Commission ("Commission") to establish two sets of energy efficiency savings targets for Dominion, which are at issue in this Commission proceeding.

The first set of energy efficiency savings targets is for calendar years 2026, 2027, and 2028, for Dominion's overall customer base. Whether Dominion achieves these targets will determine whether the Company will be awarded a ratemaking bonus and whether the Commission has the authority to approve carbon-emitting generation resources that are economic.[3] Dominion has reported energy efficiency savings of 1.23% and 1.4% for 2022 and 2023, respectively. For 2026 through 2028, Dominion proposes savings targets of 2.10%, 2.41%, and 2.73%, which the Company calculated by increasing actual 2023 savings of certain programs by 10% annually. Case participants have recommended or presented savings targets as high as 6.25%, 7.50%, and 8.75%, using different methodologies. Based on the record, I recommend savings targets of 3.00%, 4.00%, and 5.00%.

The second set of energy efficiency targets at issue in this proceeding is specifically for Dominion's low-income, elderly, disabled, and veteran customers beginning in 2025. For 2025 through 2028, Dominion proposes savings targets of 24,468 megawatt-hours ("MWh") to 32,566 MWh for these customers, which the Company calculated by increasing actual 2023 savings of certain low-income and age-qualifying programs by 10% annually. Case participants have recommended savings targets as high as 301,556 MWh. Based on the record, I recommend savings targets of 39,400, 47,900, and 63,900 MWh for 2025, 2026, and 2027, respectively.

For either set of energy efficiency targets at issue in this case, the Commission could weigh the evidence differently to establish targets higher or lower than recommended herein.

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[1] These programs are separate from similar programs that may be implemented by government agencies and funded by taxpayers.
[2] The Code allows some large energy users to opt out of paying for Dominion's energy efficiency programs if such customers implement energy efficiency measures at their own expense.
[3] Achievement of these targets does not affect the Commission's authority to approve carbon-emitting generation needed for reliability.

PROCEDURAL HISTORY

On January 5, 2024, the Commission entered an Order Establishing Proceeding ("Consolidated Procedural Order") that docketed this proceeding for the purpose of establishing annual energy efficiency savings targets pursuant to Code § 56-596.2 for Dominion and Appalachian Power Company ("APCo") for the period 2026 through 2028, and pursuant to Code § 56-596.2:2 for Dominion. The Consolidated Procedural Order, among other things, directed APCo and Dominion to file proposed energy savings targets on or before March 12, 2024; directed APCo and Dominion to provide notice of their filings; provided opportunities for interested persons to request a hearing and/or submit comments; and directed the Commission's Staff ("Staff") to investigate the utilities' filings and to file a report summarizing the results of Staff's investigation.

On February 2, 2024, Dominion filed a Motion to Modify Procedural Schedule and For Expedited Consideration. On February 14, 2024, the Commission issued an Order Granting Motion that modified the procedural schedule. Among other modifications, the Order Granting Motion extended, to June 12, 2024, the date by which Dominion and APCo were to file proposed energy efficiency savings targets.

On February 28, 2024, Dominion filed proof of notice, as directed by the Consolidated Procedural Order.

On June 12, 2024, Dominion filed its proposed energy efficiency savings targets report ("Target Proposal") and APCo filed a separate petition. Dominion attached to its Target Proposal[4] a report entitled Virginia Energy Efficiency Potential Study 2024 to 2033 ("2024 Potential Study")[5] prepared for the Company by DNV Energy Insights ("DNV").

On July 2, 2024, Appalachian Voices filed a motion requesting a hearing in this matter and procedural modifications. On July 11, 2024, APCo filed a response. On July 19, 2024, Appalachian Voices filed a reply.

On July 26, 2024, the Commission issued an Order Granting Motion and Bifurcating Case ("Bifurcating Order") that established Case No. PUR-2024-00134 to receive testimony and evidence regarding establishing energy efficiency savings targets for APCo, but maintained Case No. PUR-2023-00227 for the purpose of establishing such targets for Dominion.

Also on July 26, 2024, the Commission issued an Order in Case No. PUR-2023-00227 ("Bifurcated Procedural Order") that set an evidentiary hearing to convene on October 15, 2024; modified the procedural schedule and established dates for filing testimonies; directed further notice by Dominion; and appointed a Hearing Examiner to conduct all further proceedings in this matter on behalf of the Commission, including filing a report containing the Hearing Examiner's findings and recommendations.

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[4] Ex. 2. *See also* Ex. 15 (corrections).

[5] Ex. 3; Tr. at 80-81 (Jackson) (corrections).

On August 7, 2024, Dominion filed proof of notice, as directed by the Bifurcated Procedural Order.[6]

Notices of participation were filed by Appalachian Voices; Sierra Club; Virginia Energy Efficiency Council ("VAEEC"); and the Office of the Attorney General, Division of Consumer Counsel ("Consumer Counsel").

On October 15, 2024, the public hearing was conducted, as scheduled, in the Commission's courtroom, for the receipt of evidence from the case participants and four public witnesses.[7] Vishwa B. Link, Esquire, Jontille D. Ray, Esquire, Briana M. Jackson, Esquire, and Lisa R. Crabtree, Esquire, appeared on behalf of Dominion. Cale Jaffe, Esquire, appeared on behalf of VAEEC. Nathaniel Benforado, Esquire, and Emma Clancy, Esquire, represented Appalachian Voices.[8] Evan Diamond Johns, Esquire, and Dorothy E. Jaffe, Esquire, represented Sierra Club.[9] John E. Farmer, Jr., appeared on behalf of Consumer Counsel. Kiva Bland Pierce, Esquire, Anna Dimitri, Esquire, and Mike Zielinski, Esquire, represented Staff.

PUBLIC COMMENTS

Approximately 70 public comments were submitted. Many included identical sentences expressing some combination of, among other things, support for cost-effective energy efficiency over new fossil-fueled power plants, support for the Commission to meet the Virginia Clean Economy Act ("VCEA")[10] targets, consternation about Dominion's ranking among other States with energy efficiency targets, and interest in energy efficiency program participation. Others expressed concern about affordability and high bills. Some of the more detailed public comments are summarized below.

The American Council for an Energy-Efficient Economy ("ACEEE") called for the Commission to set "more ambitious but realistic targets" and reject Dominion's proposal.[11] When establishing new targets under the Code, which are based on total savings, ACEEE recommended the Commission factor in appropriate levels of annual incremental savings growth. According to scorecards ACEEE produces every three years,[12] Dominion has ranked poorly in terms of savings as a percentage of sales. ACEEE highlighted laws enacted in Illinois and Michigan that set targets much higher than Dominion has achieved. ACEEE contrasted targets set in 17 other States that are at least 1% of net incremental savings based on the prior year's sales with the approximately 0.5% to 0.7% incremental savings embedded in Dominion's proposed targets. ACEEE thinks Dominion should be required to achieve at least the average of

[6] Proofs of notice, as required by the Consolidated Procedural Order and the Bifurcated Procedural Order, were collectively admitted as Exhibit 1.
[7] On October 17, 2024, Dominion submitted late-filed Exhibit 15 to correct for a mathematical error in calculating its proposed Code § 56-596.2 targets.
[8] On September 17, 2024, Appalachian Voices filed a Motion for Admission *Pro Hac Vice* of Emma Clancy, which was completed on October 1, 2024. A Hearing Examiner's Ruling issued on October 2, 2024, granted this motion.
[9] On August 16, 2024, Sierra Club also filed a Motion for Admission *Pro Hac Vice* of Dorothy E. Jaffe, which was granted by a Hearing Examiner's Ruling issued on August 22, 2024.
[10] 2020 Va. Acts chs. 1193, 1194.
[11] Forest Bradley-Wright submitted comments on behalf of ACEEE.
[12] ACEEE's 2023 scorecard report, which was discussed by some party witnesses, was admitted as Exhibit 6.

the targets from the 17 other States. ACEEE believes there is still much available efficiency to capture if policymakers set high expectations. ACEEE recommended targets of 3.8%, 5.4%, and 7.0%, for 2026, 2027, and 2028, respectively. ACEEE also asserted that increasing Dominion's percentage of revenue spent on energy efficiency programs from the 2021 level of 0.73% could lead to higher energy efficiency savings.

ACEEE also recommended setting higher Code § 56-596.2:2 targets than proposed by Dominion. ACEEE found Dominion's rebuttal approach of setting these targets by seemingly ignoring every such customer who has not yet participated in energy efficiency programs strange.

ACEEE recommended that Dominion seek out program opportunities for additional savings by: (1) increasing customer participation in programs; (2) leveraging federal funding from the Infrastructure Investment and Jobs Act[13] and the Inflation Reduction Act[14]; and (3) leveraging the functionalities of advanced metering infrastructure. ACEEE indicated that Dominion's poor historical performance on energy savings should not serve as an excuse for future poor performance.

The Apartment and Office Building Association of Metropolitan Washington ("AOBA") offered observations about the methodology in Dominion's Target Proposal compared to methodologies in Maryland and the District of Columbia for programs AOBA indicated are similar. AOBA also requested that the Commission require Dominion to include measures that optimize already installed-systems (*i.e.*, retro-commissioning) and measures that are not defined within a conventional Technical Resource Manual (*e.g.*, custom measures). According to AOBA, these programs exist today but are not addressed in the 2024 Potential Study attached to Dominion's Target Proposal. AOBA views declining potential savings from lighting as motivation for Dominion to expand other types of programs.

AOBA asserted that the cost estimates in the 2024 Potential Study cannot be verified. AOBA requested that the Commission require Dominion to revise this report to include: (1) baseline measure costs and the sources for these costs; and (2) proposed measure costs and the sources for these costs.

AOBA recommended that Dominion include an analysis of program effectiveness if commercial buildings were funded at a proportion equal to the amount of savings generated. AOBA represented that the 2024 Potential Study indicates that commercial buildings generate 80-90% of the expected savings, but receive 60-65% of the total project funding.

AOBA also recommended that Dominion revise its report to include cost effectiveness based on: (i) summer peak savings; and (ii) projected rate structures for building type(s). AOBA expects that adding this analysis would increase projected savings goals while decreasing overall program cost to Dominion's users. While AOBA is unclear whether Dominion's analysis estimates participant cost savings based on the current rate structures, AOBA indicated that cost savings at the rate structure level improve measure cost-effectiveness.

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[13] Infrastructure Investment and Jobs Act, Pub. L. No. 117-58, 135 Stat. 429 (2021).

[14] Inflation Reduction Act of 2022, Pub. L. No. 117-169, 136 Stat. 1818 (2022).

Chesapeake Climate Action Network ("CCAN")[15] endorsed the targets proposed by Appalachian Voices. CCAN asserted that Dominion has consistently ranked low in ACEEE's triennial scorecard. Data from the scorecard report demonstrates to CCAN that Dominion has not yet realized achievable savings. CCAN disagreed that Dominion's energy efficiency savings are plateauing and asserted that poor historical performance signals significant room to grow and does not justify low future targets. Like ACEEE, CCAN pointed to Dominion spending 0.73% of revenue in 2021, compared to a national average of 2.23%, as an indication that Dominion could increase short-term investment to achieve higher savings.

CCAN also took issue with the adequacy of Dominion's marketing efforts. For Dominion's demand-side management programs, CCAN provided survey figures indicating higher levels of customer interest than levels of awareness. CCAN believes there is an opportunity for Dominion to enhance participation through effective marketing, and highlighted a successful 2023 marketing effort by Dominion for the residential virtual audit program. CCAN also believes that Dominion's failure to tailor programs to address low-income renters has caused Dominion to miss out on potential energy savings and overburdened customers to miss out on cost savings. CCAN believes this effort should begin with a base analysis of barriers to program participation for such customers.

CCAN took issue with Dominion's calculation using identical residential end-use intensities for all single-family households, including low-income households.

The Nature Conservancy[16] also endorsed the targets proposed by Appalachian Voices. The Nature Conservancy favors ambitious and achievable targets that move Dominion towards matching some of the highest targets in the country. The Nature Conservancy highlighted the relationship between incremental savings and total savings. At Dominion's proposed pace of incremental savings, the Company would not reach an equivalent of a 2% incremental savings target until after 2050, according to the Nature Conservancy's calculations. The Nature Conservancy stressed the importance of energy efficiency to meeting net zero-carbon power sector goals.

The Nature Conservancy believes Dominion has a long way to go to reach its full potential for energy efficiency. The Nature Conservancy cited, among other things, survey figures cited by CCAN, indicating higher levels of customer interest than levels of awareness. The Nature Conservancy also believes that the dominance of Dominion's efficient products marketplace program in terms of Dominion's program participation and savings suggests other programs have room for growth. A successful 2023 marketing effort by Dominion for the residential virtual audit program, and recent adjustments to two other programs, makes the Nature Conservancy expect similar results could be achieved in other programs.

The Nature Conservancy recommended Code § 56-596.2:2 targets be set high enough to justify spending 15% of energy efficiency program costs, so the relevant customers "receive reasonable, feasible energy savings for the costs allocated to their programs." The Nature Conservancy indicated that Dominion's income and age-qualifying programs ($285/MWh saved)

[15] Victoria Higgins submitted comments on behalf of CCAN.
[16] Lena Lewis submitted comments on behalf of the Nature Conservancy.

currently cost 15 times more than other residential programs ($19/MWh saved) and 80% more than the national average ($158/MWh).

New Virginia Majority highlighted various concerns about energy affordability, including for renters and low-income communities. New Virginia Majority recommended the Commission set high, achievable energy efficiency targets for 2026-2028 that result in increasing amounts of energy bill savings for customers year-after-year. New Virginia Majority pointed to respondent testimony about other States' targets and Dominion's investment in customer-facing energy efficiency programs compared to other utilities.

SUMMARY OF THE RECORD

Public Witnesses

Four public witnesses offered telephonic testimony at the public hearing.

Kevin Carey testified on behalf of AOBA. He highlighted parts of AOBA's written comments, which are summarized above.[17]

Carmen Bingham testified on behalf of the Virginia Poverty Law Center. She identified various energy efficiency legislation enacted between 2009 through 2020. She believes energy efficiency targets, rather than spending directives, put a focus on the effective and efficient design, implementation, and management of energy efficiency programs that will save the maximum amount of energy for customers. She asserted that utility-sponsored programs are not cost-effectively managed and implemented and recommended that the data reported by utilities on their programs needs to be better scrutinized and may reveal patterns of inefficiencies when evaluated along with the energy efficiency programs of peer utilities that are meeting state-mandated standards. She endorsed the targets proposed by Appalachian Voices for Code § 56-596.2. For income and age-qualified customers, she endorsed Sierra Club's testimony and recommended the Commission establish either: (i) a minimum target of 2% savings of annual retail sales; or (ii) a minimum target of 11% of all residential energy efficiency programs.[18]

Lena Lewis testified on behalf of the Nature Conservancy. She highlighted parts of the Nature Conservancy's written comments, which are summarized above.[19]

Mark Kresowik testified on behalf of ACEEE. He described energy efficiency as one of the most important resources the Commonwealth has, when it comes to reducing energy demand and meeting electric reliability needs. He described energy efficiency as a critical low-cost resource to meet accelerated demand from data centers, while maintaining affordability and reliability. He asserted that Dominion's proposed targets are too weak and confirmed that ACEEE's proposed targets under Code § 56-596.2 are consistent with those proposed by

[17] Tr. at 11-15 (Carey).
[18] Tr. at 16-24 (Bingham).
[19] Tr. at 26-30 (Lewis).

Appalachian Voices. He testified that the ACEEE scorecard reports attempt to present the data it reports on an apples-to-apples basis.[20]

Dominion – Target Proposal

Dominion identified the following witnesses to support its Target Proposal:

David F. Walker, Director of Strategic Customer Programs for Dominion's Power Delivery group; **Rachel L. Hagerman**, Senior Energy Market Analyst in Dominion's Corporate Strategic Planning and Fuel Management organization; **Miriam L. Goldberg, Ph.D**, Executive Strategy Advisor for DNV; and **Terry M. Fry**, Executive Vice President, Global Energy Strategy, for Cadmus.

Mr. Walker sponsored or co-sponsored the following sections of the Target Proposal: Executive Summary, I (Introduction), II.2, III.2-3, and V (Conclusion).[21]

The Target Proposal's Executive Summary identified the following proposed targets, as corrected, on a net basis.[22]

Year	Proposed Target (megawatt-hours)	Code § 56-596.2 Proposed Target (% of 2019 sales)	Code § 56-596.2:2 Proposed Target (% of 2019 sales)
2025			0.036%
2026	1,431,246	2.10%	0.039%
2027	1,641,857	2.41%	0.043%
2028	1,864,485	2.73%	0.048%

For customer-facing portfolio energy efficiency programs, Dominion's proposal assumes a 10% annual increase in cumulative persistent savings, starting from 2023 actual savings. Dominion applies the same 10% growth rate to income and age qualifying programs. For voltage optimization savings, Dominion uses the most recent forecasted voltage optimization projections. For qualifying large general service opt-out customers' savings, Dominion uses actual savings and projected savings based on historic opt-out incremental savings.[23] While the proposed savings targets for both the overall portfolio and the income and age qualifying programs are slightly less than corresponding projections from the 2024 Potential Study attached to the Target Proposal, Dominion reiterated that realistic achievement has tended to be somewhat

[20] Tr. at 32-37 (Kresowik).

[21] Ex. 4.

[22] Ex. 2 (Target Proposal) at iv; Ex. 15 (correcting the MWh figures and Code § 56-596.2 proposed targets). Because at the time of the Target Proposal's filing the Commission had not yet determined whether savings would be calculated on a "gross" or "net" basis, the Target Proposal also presented the proposed targets on a gross basis. *Id.* at iii, n.2. However, as discussed by Staff witness Ricketts, the Commission subsequently determined that the targets will be calculated on a net basis.

[23] Ex. 2 (Target Proposal) at iii. Qualifying large general service opt-out customers refers to customers that, pursuant to the Code and associated Commission regulations, are exempted from paying for, and participating in, Dominion's energy efficiency programs to the extent such large general service customers can implement such programs at their own expense. *See* Code § 56-585.1 A 5 c; 20 VAC 5-350-10.

lower than potential estimates. Dominion described its proposed targets as "feasible but healthily challenging."[24]

The Target Proposal's Executive Summary indicated Dominion's proposed targets are based on, and informed by, language that was in Code § 56-596.2 B 3 until July 1, 2024. Based on this statutory language, Dominion asserted that the Commission is required to evaluate whether the savings targets can be attained or successfully accomplished through cost-effective programs and measures.[25]

The Executive Summary asserted that the following factors are guidance by the principles of feasibility and achievability and must be considered in establishing the savings targets:[26]

(1) Legislative and regulatory requirements in the Commonwealth, including that the Code excludes from demand-side management ("DSM") program participation non-jurisdictional customers, which tend to have a comparatively higher savings potential;
(2) Experience from historical programs, which Dominion indicates includes low avoided energy and capacity costs that lead to lower savings potential and a more challenging environment to: (i) demonstrate cost effectiveness; and (ii) incentivize customer participation in energy efficiency programs. Dominion also indicated that from 2019 to 2023, data shows a year-over-year increase in total savings in the Company's customer-facing energy efficiency programs have averaged approximately 10%, with overall growth rates similar to those for the income and age qualifying savings program;
(3) Availability and achievability of programmatic energy efficiency savings in the market; and
(4) Dominion's actual experience.

The Executive Summary indicated that Dominion and DNV (on behalf of Dominion) have conducted potential studies to estimate programmatic energy efficiency savings that are theoretically achievable. These studies, which are calibrated with actual results achieved, have shown declining savings potential. The most recent study, the 2024 Potential Study, was calibrated to 2023 actual performance to avoid the worst of the period disrupted by the effects of COVID-19 pandemic. While Dominion is optimistic that conditions will continue to improve, the Company is unclear how well future performance will align with this one year of observation and remains cautious in considering the 2024 Potential Study results.[27]

According to the Target Proposal's Introduction, a legislative amendment to Code § 56-596.2 enacted in 2024, which uses 2019 jurisdictional retail sales as the targets baseline,

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[24] Ex. 2 (Target Proposal) at iv.
[25] *Id.* at ii. As discussed below, the 2024 General Assembly Session enacted amendments to the statute, effective July 1, 2024. 2024 Va. Acts chs. 794, 818.
[26] Ex. 2 (Target Proposal) at ii. As for historical experience, Dominion has been offering energy efficiency programs to customers since 2009. More than 40 programs are currently available to customers across all segments. *Id.* at 5.
[27] *Id.* at ii-iii.

shows a clear intention by the General Assembly to supersede the language in Code § 56-596.2:2, which indicates the Commission establishes the appropriate retail sales baseline.[28]

From the Target Proposal, Mr. Walker also sponsored the following table that, according to the Company, provides a historic overview of the changing regulatory eligibility requirements landscape and its impact on customers' limited awareness of the rapidly changing legislative framework.[29]

	Exemption Law	**Customers Affected**
Prior to 2018	Virginia Code § 56-585.1 A 5	1) Exempt: Large General Service (LGS) Customers > 10 MW 2) Opt-out: LGS customers > 500 kW to 10 MW
July 1, 2018 – June 30, 2020	Grid Transformation and Security Act	Automatic exemption for any non-residential customers with demand range over 500 kW; no opt-out process
July 1, 2020 - present	Virginia Clean Economy Act	Non-residential customers with demand threshold of 1 MW or more can opt-out of paying riders associated with energy efficiency programs

Ms. Hagerman co-sponsored the following sections of the Target Proposal: Executive Summary, I (Introduction), II.5-6, III.3.iii-iv, III.6, IV, and V (Conclusion).[30]

Section III.3.iii of the Target Proposal provides the following table, which Dominion indicated shows current annual forecasted energy savings associated with the voltage optimization program.[31]

[28] *Id*. at 2 (referencing 2024 Va. Acts chs. 794, 818).
[29] Ex. 2 (Target Proposal) at 5.
[30] Ex. 4.
[31] Ex. 2 (Target Proposal) at 7. The Target Proposal indicates that, due to technical, software, and supply chain hurdles, the timeline for this program has shifted since Case Nos. PUR-2021-00127 and PUR-2021-00247. *Id*.

Year	Voltage Optimization (MWh)	% of 2019 Jurisdictional Retail Sales
2024	5,879	0.009%
2025	69,066	0.101%
2026	157,522	0.231%
2027	245,976	0.361%
2028	334,342	0.490%
2029	422,884	0.620%
2030	511,342	0.749%

For opt-out energy efficiency savings, Section III.3.iv of the Target Proposal provided the following table, which Dominion indicated shows: (i) actual savings for 2022 and 2023; and (ii) Dominion's projections for 2024 through 2030 based on historic opt-out incremental savings.[32]

Year	Opt-Outs (MWh)	% of 2019 Jurisdictional Retail Sales
2022	58,754	0.0861%
2023	59,855	0.0877%
2024	60,955	0.0893%
2025	62,055	0.0909%
2026	63,155	0.0926%
2027	64,256	0.0942%
2028	65,356	0.0958%
2029	66,456	0.0974%
2030	67,556	0.0990%

Section III.6 of the Target Proposal discussed the consideration of relative targets, stating, among other things, as follows:

> By establishing percentage targets relative to 2019 retail jurisdictional sales (a known value), the … Code effectively established both absolute and relative targets, respectively. The Company notes that the … Code specifies annual targets that accumulate and require net annual increases to first compensate for retiring persistent savings from prior implementation phases and then include *additional* savings associated with year-to-year increases in cumulative savings targets. This construct of cumulative savings is not equivalent to the sum of

[32] *Id*. at 8.

newly installed savings in a specific performance period (*e.g.*, 2026-2028), nor is it comparable to target frameworks in other [S]tates.[33]

Ms. Hagerman co-sponsored a table showing Dominion's calculations and proposed savings targets for 2026-2028, using net savings for customer-facing energy efficiency programs.[34] That table, as corrected by the Company, is shown below.[35]

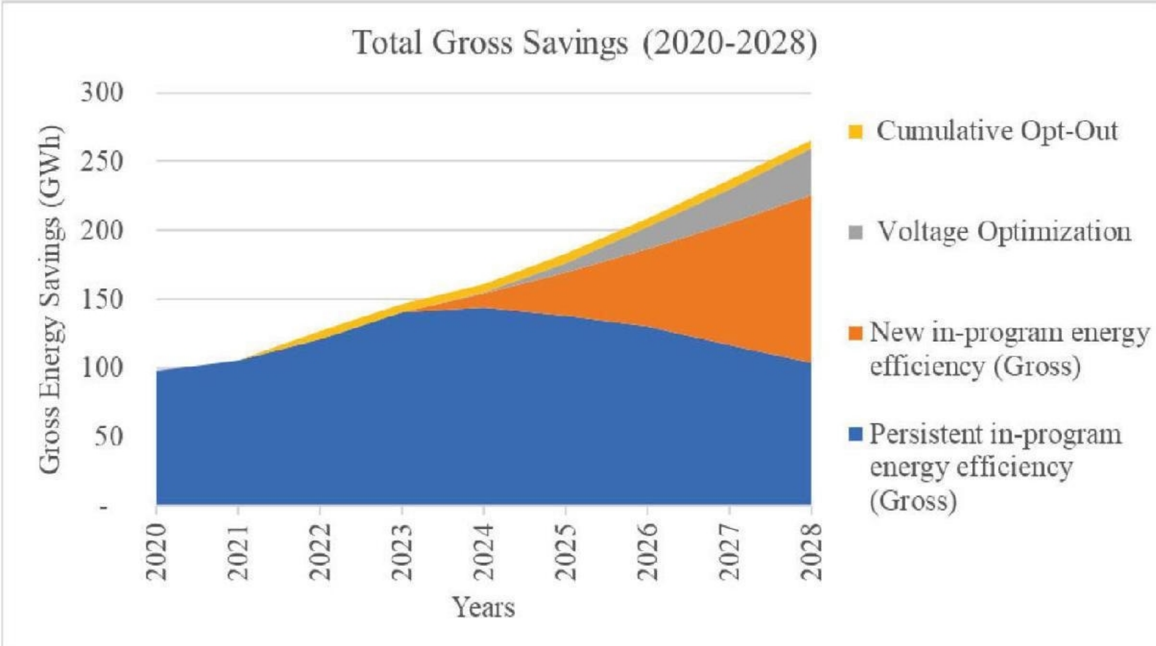
	Component by Segment					Proposed Targets (Total)		
	IAQ Subtotal (MWh)	Non-IAQ EE Subtotal (MWh)	EE Portfolio Total (MWh)	Voltage Optimization (MWh)	Opt-out (MWh)	DSM Proposed Target (MWh)	DSM Proposed Target (% of 2019 sales)	IAQ Proposed Target (% of 2019 Sales)
2025	24,468							0.036%
2026	26,914	1,183,654	1,210,568	157,522	63,155	1,431,246	2.10%	0.039%
2027	29,606	1,302,019	1,331,625	245,976	64,256	1,641,857	2.41%	0.043%
2028	32,566	1,432,221	1,464,788	334,342	65,356	1,864,485	2.73%	0.048%

Dominion described its proposals for the portfolio overall and for the income and age qualifying programs as slightly less than the corresponding projections of achievable potential from the 2024 Potential Study. Additionally, Dominion noted that it does not collect demographic data from customers that would allow the Company to determine sales specific to income and age qualifying customers. Consequently, Dominion indicated it has no basis to determine, with any precision, the savings target floor set by Code § 56-596.2:2.[36]

Ms. Hagerman co-sponsored the figure below,[37] which shows the following components of the proposed targets, in MWh:[38]

1. Customer-facing energy efficiency portfolio total:
    a. Persistent gross savings from in-program energy efficiency installations through 2023; and
    b. New gross savings from in-program energy efficiency installations beginning in 2024, to meet proposed 10% annual growth in energy efficiency savings for the total.
2. Voltage optimization, as proposed.
3. Projected opt-out savings, as proposed.

[33] *Id*. at 16 (emphasis in original).
[34] *Id*. at 18.
[35] Ex. 15 at 3.
[36] Ex. 2 (Target Proposal) at 17.
[37] *Id*. at 19.
[38] *Id*. at 18.



According to Dominion, the above figure illustrates key aspects of feasible savings in the target period. First, new savings must compensate for declining persistent savings from prior installations before they can build to higher total savings in a given year. Starting in 2024, roughly half of the new energy efficiency portfolio savings each year goes to making up for retirements from installations in 2023 and earlier. Second, the proposed targets require continued growth in customer-facing energy efficiency comparable to that of recent years, despite declining potential, loss of persistent savings, and a lack of market expansion opportunities. Third, a substantial portion of the feasible savings each year is determined by previously installed energy efficiency (as of 2023) and opt-out savings, over which Dominion has no control going forward.[39]

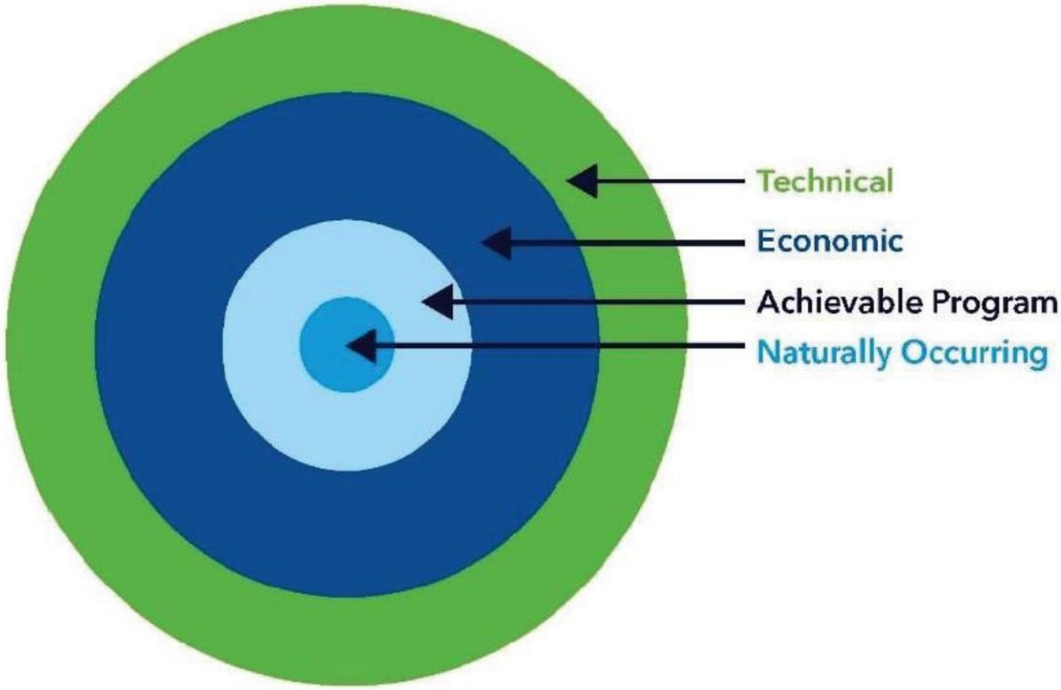
Dr. Goldberg sponsored the 2024 Potential Study (attached to the Target Proposal) and Sections II.3-4, III.3.i-ii, and III.4 of the Target Proposal. She also co-sponsored the following sections of the Target Proposal: Executive Summary, II.5-6, III.3.iii-iv, III.5, III.6, IV, and V.[40]

Market studies conducted by Dominion and DNV in 2014, 2018, and 2020 estimated the following three basic types of energy efficiency potential:

- Technical potential: The complete penetration of all measures analyzed in applications where they were deemed technically feasible from an engineering perspective;
- Economic potential: The technical potential of those energy efficiency measures that are cost-effective compared to supply-side alternatives; and
- Achievable program potential: The amount of savings that would occur in response to specific program funding, marketing, and measure incentive levels. In these studies, the Company looked at the potential available under two funding scenarios – 50% incentives and 75% incentives.[41]

[39] *Id*. at 18-19.
[40] Ex. 4.
[41] Ex. 2 (Target Proposal) at 8-9.

The 2024 Potential Study used the following graphic to illustrate the conceptual relationship among energy efficiency potential definitions:[42]



The 2024 Potential Study results include, among other things, estimates of the magnitude of future potential savings on an annual basis, estimates of the costs associated with achieving such savings, and calculations of the cost-effectiveness of measures based on the savings and cost estimates from a total resource cost ("TRC") perspective[43] assuming PJM market price estimates.[44] The Target Proposal summarized this information, for both the 50% and 75% funding levels.[45] Dr. Goldberg considers the circumstances of this analysis to be somewhat idealized.[46] The Target Proposal contrasted the achievable potential results estimated in the 2024 Potential Study and the prior DNV/Dominion studies with higher results from DNV's potential studies in other States. The Target Proposal attributed the lower results for Dominion to the Company's low avoided costs and Virginia's exclusion of non-jurisdictional customers.[47] The

[42] Ex. 3 (corrected 2024 Potential Study) at 17.

[43] The TRC is a "benefit-cost test that compares the value of avoided energy production and power plant construction to the costs of energy efficiency measures and the program activities necessary to deliver them. The values of both energy savings and peak-demand reductions are incorporated in the TRC test." Ex. 3 (corrected 2024 Potential Study) at vii. *See also* Ex. 3 (2024 Potential Study) at Appendices, p. A-9 (equations for TRC benefits and costs).

[44] Ex. 2 (Target Proposal) at 8. The 2024 Potential Study indicated that Dominion considered all measures with a TRC greater than 1 to have economic potential. *Id.* at 45. Dr. Goldberg testified that the 2024 Potential Study included low-income measures with a TRC score of at least 0.75 as achievable potential. But she acknowledged that the 2024 Potential Study did not document the lower 0.75 threshold and the study could have been clearer on this point. Tr. at 235, 269-70 (Goldberg).

[45] Ex. 2 (Target Proposal) at 9-13.

[46] Tr. at 87-88 (Goldberg) (testifying that this analysis assumes, for example, that all programs would launch at the start of the next year and, rather than ramping up, would be fully operable instantly).

[47] Ex. 2 (Target Proposal) at 14-15. *See, e.g.,* Ex. 3 (corrected 2024 Potential Study) at 68-70.

Target Proposal primarily attributed a declining shift in available potential energy savings across the series of Dominion/DNV studies to the rapid transformation of the lighting market to LEDs.[48]

Dr. Goldberg sponsored the following table showing historical cumulative persistent savings in Dominion's customer-facing energy efficiency programs, which has averaged an approximately 10% year-over-year increase from 2019 through 2023.[49]

Year	2019 Jurisdictional Retail Sales (MWh)	Total Savings (MWh) - Gross	Total Savings % of 2019 Jurisdictional Retail Sales (Gross)	Year-over-year % change in Grand Total (MWh) (Gross)	Total (MWh) - Net	Total Savings % of 2019 Jurisdictional Retail Sales (Net)	Year-over-year % change in Total (MWh) (Net)
2019	68,231,360	933,129	1.37%	12%	674,264	0.99%	12%
2020	68,231,360	983,140	1.44%	5%	716,649	1.05%	6%
2021	68,231,360	1,057,526	1.55%	8%	723,531	1.06%	1%
2022	68,231,360	1,268,843	1.86%	20%	837,387	1.23%	16%
2023	68,231,360	1,463,553	2.14%	15%	969,386	1.42%	16%

She sponsored a similar historical table for income and age qualifying program historic performance, which shows growth rates that she indicated are similar to the overall portfolio.[50]

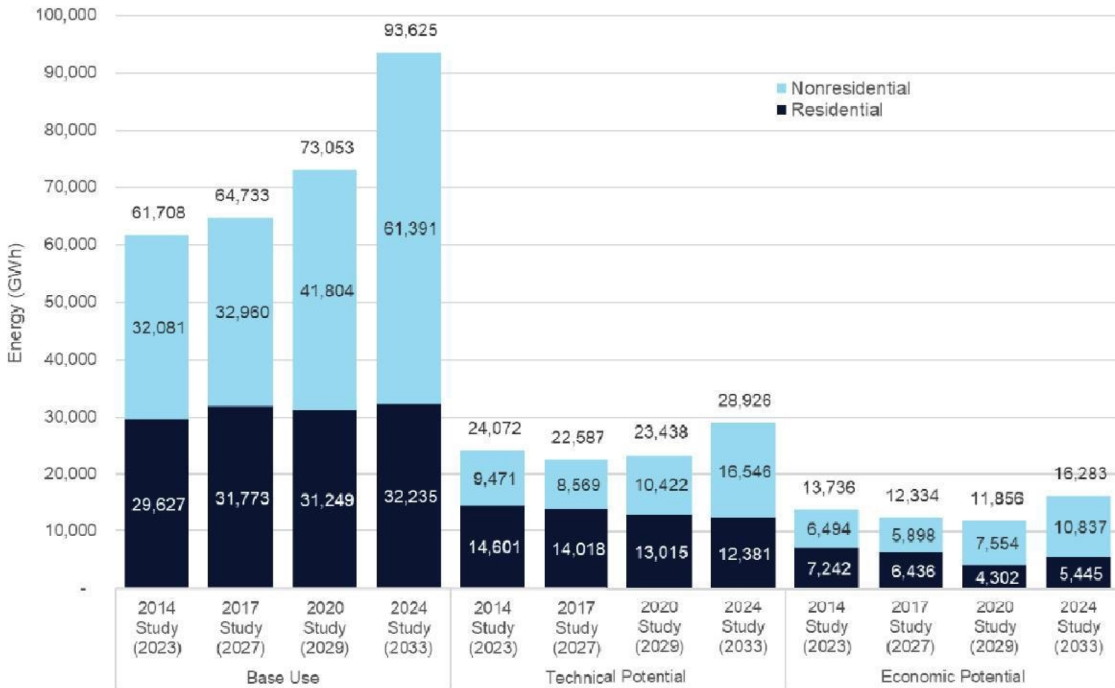
Year	2019 Jurisdictional Retail Sales (MWh)	Total Savings (MWh) (Gross)	Total Savings as % of 2019 Retail Juris. Sales (Gross)	Year-over-Year Percentage Change in Total Incremental Savings (Gross)	Total Savings (MWh) (Net)	Total Savings as % of 2019 Retail Juris. Sales (Net)	Year-over-Year Percentage Change in Total Savings (Net)
2019	68,231,360	20,720	0.030%	4%	14,621	0.021%	6%
2020	68,231,360	21,839	0.032%	5%	15,796	0.023%	8%
2021	68,231,360	22,510	0.033%	3%	16,359	0.024%	4%
2022	68,231,360	25,286	0.037%	12%	18,579	0.027%	14%
2023	68,231,360	30,024	0.044%	19%	22,370	0.033%	20%

[48] Ex. 2 (Target Proposal) at 15. "LEDs" are lighting products that use light-emitting diodes.
[49] *Id*. at 6.
[50] *Id*. at 6-7.

The 2024 Potential Study identified various data used in the study, including residential and commercial energy use surveys, residential and commercial saturation study data, and residential conditional demand analysis. In addition to data collected for the 2024 Potential Study, the study identified secondary sources for data, including Dominion's evaluation, measurement, and verification ("EM&V") results, Dominion's energy standard tracking engineering protocols manual, the professional judgment of DNV, and various sources that are not specific to Dominion's service territory.[51] Much of the data used was provided with the study.[52]

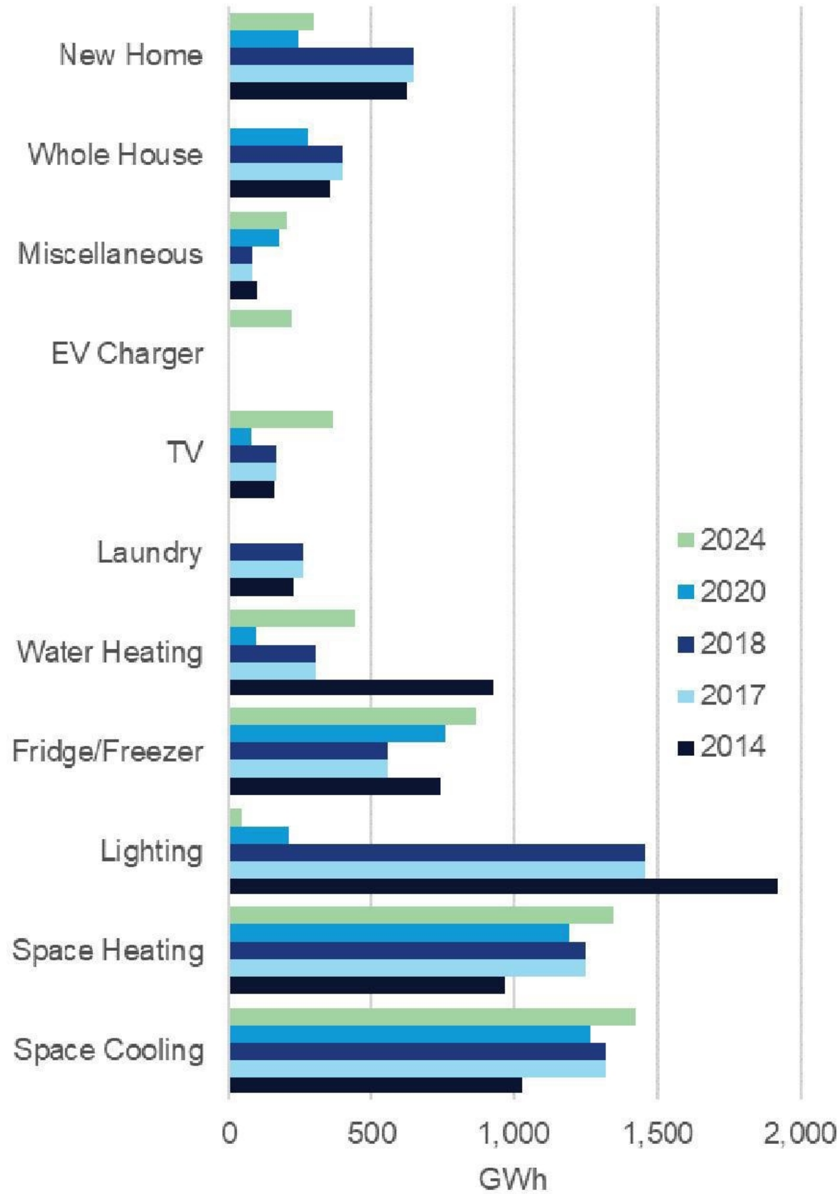
The 2024 Potential Study detailed the analytical approach used to calculate energy efficiency potential. Much of this process was accomplished through a spreadsheet-based model developed by DNV.[53] Dr. Goldberg described the Potential Study analysis as a separate analysis from Target Proposal's calculation of Dominion's proposed targets. She indicated that the Potential Study "provides a reference point for … an upper range of what might be realistic" that can serve as a check on the reasonableness of targets.[54]

The 2024 Potential Study indicated that a comparison of its results to the Dominion/DNV studies in 2020, 2017, and 2014 is confounded by multiple factors, including the inclusion of large industrial customers in 2024, but not prior years, and statutory changes regarding the customers who are exempted or can opt-out.[55] However, the 2024 Potential Study provided figures that allow such comparisons, including the following.[56]



[51] Ex. 3 (corrected 2024 Potential Study) at 9-14. In this context, saturation refers to the percentage of households that have a particular end use. *See, e.g., id.* at 23-24.
[52] *See, e.g., id.* at Appendices C through H. Output files are also provided. *Id.* at Appendix I.
[53] *See, e.g., id.* at 19-21. *See id.* at Appendix A, p. A-17 to A-20 (describing the model).
[54] Tr. at 88-89 (Goldberg).
[55] Ex. 3 (corrected 2024 Potential Study) at 63.
[56] *Id.* at 65. *See also id.* at 79.

The 2024 Target Proposal emphasized the declining lighting potential due to transformation of the lighting market,[57] illustrated in the figure below for residential economic potential.[58]



Dr. Goldberg acknowledged that the 2024 Potential Study includes estimates of low-income households in Dominion's service territory, totaling 44% of Dominion's customers. She testified that these estimates were not intended to be precise; rather they were intended to recognize different usage levels and different efficiency characteristics by housing type.[59]

[57] *Id*. at 65.
[58] *Id*. at 66. *See also id*. at 67-68.
[59] Tr. at 89-90 (Goldberg).

Dr. Goldberg did not attempt to model the impact of the Inflation Reduction Act in the future, due to uncertainties. She testified that it remains unclear how the associated programs will be administered, whether they will be connected with Dominion's programs (or isolated from them), and the extent to which customers will participate in such programs.[60]

Terry Fry sponsored or co-sponsored the following sections of the Target Proposal: Executive Summary, II.1, III.1, III.5, and III.6.[61]

According to Sections II.1 and III.1 of the Target Proposal, Dominion considered targets set by other States, but due to differences between Virginia and other States, the Company does not believe other States' targets are reasonable guides for Dominion.[62]

While Dominion's modeling calibrated potential studies to actual historic performance of Dominion's programs or to program plans, estimated savings potential is often not achieved for two reasons, according to part of the Target Proposal co-sponsored by Mr. Fry. First, new programs are necessarily calibrated to program plans, which are typically based on actual program design vendor experience in other jurisdictions that does not fully translate to Virginia. Second, savings opportunities shrink over time as standards and market practices move to higher energy efficiency levels.[63]

The Target Proposal also focused on two historical anomalies affecting projections based on historic performance: loss of lighting measures and the pandemic's disruption of program activity. While lighting has accounted for over 65% of Dominion's annual new gross program savings through 2022, the Target Proposal indicated that retiring persistent savings must be replaced by new savings primarily from end uses other than lighting in 2026 or future years before any other new savings would contribute to increased targets in that year. This is because the federal Energy Independence and Security Act[64] induced changes to baseline efficiencies. Dominion indicated that the pandemic has had a lingering impact on customers, supply chains, the economic environment, and on demand-side management participation and performance. Dominion also indicated that because the Company's customer-facing energy efficiency program is comprehensive, the lack of major gaps or opportunities for large expansion into additional market segments increasingly challenges continued growth in total savings.[65]

Staff

Staff offered the testimony of **Amanda A. Ricketts,** a Public Utility Regulation ("PUR") Analyst in the Commission's PUR Division.

[60] Tr. at 92-93 (Goldberg).
[61] Ex. 4.
[62] Ex. 2 (Target Proposal) at 3-4.
[63] *Id.* at 15.
[64] Energy Independence and Security Act of 2007, Pub. L. No. 110-140, 121 Stat. 1492 (2007).
[65] Ex. 2 (Target Proposal) at 15-16.

Ms Ricketts' testimony focused on net, rather than gross, savings. She recognized that, after Dominion filed its Target Proposal, the Commission's *2023 DSM Order*[66] determined that the statutory savings target would be evaluated on a net basis. As defined by prior Dominion filings, "gross savings" are "[t]he change in energy consumption and/or demand that results directly from program-related actions taken by participants in an efficiency program, regardless of why they participated." In contrast, "net savings" are "[c]hanges in energy use that are attributable to a particular [energy efficiency] program. These changes may implicitly or explicitly include the effects of free ridership, spillover, and induced market effects."[67]

She identified other relevant Commission precedent, including the *2019 DSM Order*'s finding that more rigorous EM&V was necessary to ensure that the relevant programs are, in actual practice, the proximate cause of a verifiable reduction in energy usage.[68] She also identified, among other things, the *2021 EM&V Order*'s finding "that deemed input values meet the measured and verified standard for determining compliance with the energy saving requirements of the VCEA."[69]

Ms. Ricketts recognized that the *2023 DSM Order* found, based on the 2022 EM&V Report,[70] that Dominion did not meet the established target for calendar year 2022 (*i.e.*, 1.25% of 2019 retail sales) on a net basis.[71] She identified Dominion's actual and projected savings from the 2021 EM&V Report;[72] the 2022 EM&V Report, and the 2023 EM&V Report,[73] as summarized below.[74]

Dominion's Projected and Achieved Savings, on a Net Basis (*actual reported savings identified with an asterisk)

Target	2021 EM&V Report	2022 EM&V Report	2023 EM&V Report
2022 – 1.25%	1.69%	*1.23%	*1.23%
2023 – 2.50%	2.3%	1.8%	*1.4%
2024 – 3.75%	2.9%	2.3%	1.8%
2025 – 5.00%	3.5%	2.8%	2.2%

[66] *Application of Virginia Electric and Power Company, For approval of its 2023 DSM Update pursuant to § 56-585.1 A 5 of the Code of Virginia*, Case No. PUR-2023-00217, Final Order (July 26, 2024) ("2023 DSM Case" or "*2023 DSM Order*", as applicable).
[67] Ex. 10 (Ricketts) at 7-8.
[68] *Id.* at 9 (citing *Petition of Virginia Electric and Power Company, For approval of its 2019 DSM Update pursuant to § 56-585.1 A 5 of the Code of Virginia*, Case No. PUR-2019-00201, 2020 S.C.C. Ann. Rep. 368, 375, Final Order (July 30, 2020) ("*2019 DSM Order*")).
[69] Ex. 10 (Ricketts) at 9 (citing *Commonwealth of Virginia, ex rel., State Corporation Commission, Ex Parte: In the matter of baseline determination, methodologies for evaluation, measurement, and verification of existing demand-side management programs, and the consideration of a standardized presentation of summary data for Virginia Electric and Power Company*, Case No. PUR-2020-00156, 2021 S.C.C. Ann. Rep. 260, 264, Final Order (Oct. 27, 2021) ("*2021 EM&V Order*")).
[70] This is the report filed in Case No. PUR-2021-00247. Ex. 10 (Ricketts) at 2.
[71] *Id.* at 9-10 (citing *2023 DSM Order* at 16).
[72] This is the report filed in Case No. PUR-2020-00274. Ex. 10 (Ricketts) at 2.
[73] This is the report filed in Case No. PUR-2022-00210. Ex. 10 (Ricketts) at 2-3. The public version of this report was admitted as Exhibit 11 in the instant case.
[74] Ex. 10 (Ricketts) at 11-13.

Ms. Ricketts testified that while there are not currently statutory savings targets for energy efficiency programs designed to serve low-income, elderly, disabled, or military veteran customers, Code § 56-596.2:2 directs the Commission to develop such targets beginning in 2025.[75]

Ms. Ricketts discussed the Target Proposal's methodology used to develop Dominion's proposed savings targets for 2026 (2.10%), 2027 (2.41%), and 2028 (2.73%).[76] As described by Ms. Ricketts, Dominion took the historical cumulative persistent savings of its customer-facing programs through 2023, as a percentage of 2019 sales, to determine cumulative persistent savings.[77] Dominion applied the 10% average annual incremental change to adjust the 2023 reported savings and estimate savings for 2024 through 2028. Ms. Ricketts detailed Dominion's incorporation of voltage optimization savings into its estimates, as well as savings associated with the large general service customer opt-out.[78]

While Ms. Ricketts confirmed that the current version of Code § 56-596.2 B 3, as amended effective July 1, 2024, does not mention feasibility or achievability, Staff believes these are among the factors the Commission should consider when setting targets under the statute.[79] Ms. Ricketts concluded that it is possible, based on the information provided by the Company, that Dominion's proposed targets are feasible.[80] However, she also identified alternative scenarios for setting targets that Staff believes could also be found feasible.[81] Staff's alternatives, which are combinations of two different annual incremental savings amounts and two different energy savings starting points, are described and shown below.[82]

Scenario A1: 0.17% annual incremental savings, 2.2% energy savings starting point
Scenario B1: 1.25% annual incremental savings, 2.2% energy savings starting point
Scenario A2: 0.17% annual incremental savings, 5.0% energy savings starting point
Scenario B2: 1.25% annual incremental savings, 5.0% energy savings starting point

		A1	B1	A2	B2
Starting Point	2025	2.20%	2.20%	5.00%	5.00%
Targets	2026	2.37%	3.45%	5.17%	6.25%
	2027	2.54%	4.70%	5.34%	7.50%
	2028	2.71%	5.95%	5.51%	8.75%

[75] *Id.* at 13.
[76] *Id.* at 14-18. Dominion's proposed 2026 target is below a projection in the 2023 EM&V Report because the latter assumes 100% of vendor-projection participation while the former was calculated based on verified historic results. *Id.* at 25. The proposed targets shown above are the corrected values presented in late-filed Exhibit 15.
[77] Ex. 10 (Ricketts) at 15. *See also* Tr. at 193 (Ricketts) (agreeing that Dominion's proposed targets were calculated based on achieved savings reported in the 2023 EM&V Report).
[78] Ex. 10 (Ricketts) at 15-16.
[79] Tr. at 194-95 (Ricketts). Staff thinks other factors the Commission could consider include the relationship between Code § 56-596.2 and provisions of Code § 56-585.1 A 5 c. Tr. at 195-97 (Ricketts).
[80] Ex. 10 (Ricketts) at 28. Ms. Ricketts was referring to Dominion's original proposed target figures, which were slightly lower than the corrected figures provided in late-filed Exhibit 15.
[81] Ex. 10 (Ricketts) at 28. Ms. Ricketts cited a dictionary definition of "feasible" as meaning "capable of being done or carried out." *Id.*
[82] *Id.* at 29-31.

Ms. Ricketts described Scenario A1 as consistent with the Target Proposal's targets and based on Dominion's projected achievement toward the existing targets.[83] The A1 targets are based on Dominion's projected 2.2% net energy savings in 2025 and the annual incremental savings between 2022 and 2023, as reported in the 2023 EM&V Report.[84] She indicated that Scenario B1, which uses the same 2.2% savings starting point as A1, would continue to encourage relatively significant improvements in energy efficiency savings by incorporating a continuation of the 1.25% annual incremental amount reflected in the Code for 2022 through 2025.[85]

In Ms. Ricketts' view, Scenario A2 attempts to balance the existing statutory guidance and actual performance to date by using the 2025 statutory target 5.0% as the baseline, then increasing the savings target based on the annual incremental savings reported in the 2023 EM&V Report. She described Scenario B2 as an ambitious status quo approach, in that it uses the 5.0% 2025 statutory target and the 1.25% statutory increment for 2022 through 2025.[86] Ms. Ricketts acknowledged that Appalachian Voices' proposed targets fall between Staff Scenarios B1 and A2 (2026-2027) or between Staff Scenarios A2 and B2 (2028).[87]

For Dominion's proposed Code § 56-596.2:2 savings targets, which range between 0.033% and 0.048%,[88] Dominion took the historical cumulative persistent savings of such programs through 2023 as a percentage of 2019 jurisdictional retail sales to determine the cumulative persistent savings.[89] For consistency, Dominion applied the same 10% growth rate used for other energy efficiency programs to also calculate the projected total savings associated with income and age qualified programs.[90] Ms. Ricketts emphasized that the 2019 baseline for Dominion's calculations was the 2019 average annual energy jurisdictional retail sales for all customers, rather than sales specific to low-income, elderly, disabled, or military veteran customers. She recognized the Target Proposal's explanation that Dominion does not collect data specific to the customers identified by Code § 56-596.2:2.[91] She also provided a discovery response from the Company indicating that such data collection efforts would require Dominion to:[92]

- modify its systems and intake information from customers on an ongoing and proactive basis;
- implement additional controls to limit viewing of income information by employees;
- manage the income information through particular applications so that the income information could be deleted upon customer request;
- maintain special controls to protect the information and applications; and
- implement processes to consistently reassess income levels.

[83] *Id.* at 30.
[84] *Id.* at 28, 30; Ex. 11.
[85] Ex. 10 (Ricketts) at 30-31.
[86] *Id.* at 32.
[87] Tr. at 201-202 (Ricketts).
[88] Ex. 10 (Ricketts) at 21.
[89] *Id.* at 19.
[90] *Id.* at 16, 19.
[91] *Id.* at 20-22.
[92] *Id.* at 22.

Ms. Ricketts testified that if the Commission determines that the potential exists and it is reasonably achievable for such targets to be calculated specifically for the customers identified by Code § 56-596.2:2, Staff identified some options for establishing targets at a minimum of 1% of the average annual energy retail sales by such customers.[93] She recognized that, similar to Dominion's proposal, Staff's alternative options are based on 2019 average annual energy jurisdictional retail sales for all customers, due to the lack of data for the customers identified by Code § 56-596.2:2.[94]

Staff's alternatives for setting targets under Code § 56-596.2:2 are described and shown below.[95]

Scenario C1: 0.005% annual incremental savings, 0.037% energy savings starting point
Scenario D1: 1.25% annual incremental savings, 0.037% energy savings starting point

	C1	D1
Starting Point	0.037%	0.037%
2025	0.042%	1.287%
2026	0.047%	2.537%
2027	0.052%	3.787%
2028	0.057%	5.037%

For both Scenarios C1 and D1, Staff used the starting point of 0.037% of Dominion's 2019 average annual energy jurisdictional retail sales, which the Company expects to achieve in 2024. Scenario C1 used the annual incremental increase between 2022 and 2023 reported by the Company in discovery, whereas Scenario D1 used the 1.25% increment reflected in Code § 56-596.2.[96] While Ms. Ricketts acknowledged Scenario D1 may be ambitious, she also indicated that this particular customer segment (low-income, elderly, disabled, or veterans) could have greater opportunities for energy efficiency improvements relative to Dominion's broader customer base.[97]

Ms. Ricketts also presented additional alternatives for targets under Code § 56-596.2:2.[98]

Ms. Ricketts recognized that additional data collection from customers to identify low-income, elderly, disabled, or military veteran customers may not be possible for purposes of setting a target prior to January 1, 2025. She indicated the Commission could direct Dominion to implement the data acquisition steps identified by the Company.[99] She also identified an approach for obtaining proxy information for this purpose. Specifically, the Commission could direct Dominion to coordinate with the Virginia Department of Social Services to acquire data necessary to calculate the total annual usage for low-income PIPP-eligible customers for a given

[93] *Id.* at 23.
[94] *Id.* at 26, 35.
[95] *Id.* at 34-35.
[96] *Id.*
[97] *Id.* at 37.
[98] *Id.* at attached corrected Appendix AAR-3; Tr. at 190-91 (Ricketts).
[99] Ex. 10 (Ricketts) at 38, n.81.

year, and then 1% of that data could be used as a proxy value for 1% of the Company's low-income, elderly, disabled, or military customers. Staff was unable to calculate an illustrative example of using this proxy approach because the PIPP was not available to customers in 2023.[100] Ms. Ricketts also testified that Staff would not oppose Dominion's rebuttal approach, which she indicated could represent a reasonable approximation of annual target values for Dominion's income and age-qualifying customers.[101]

Ms. Ricketts did not recommend specific savings targets, recognizing these are ultimately questions for the Commission to decide.[102] She testified that Staff's options were developed with potentially competing interests in mind. Ms. Ricketts cited the ratemaking award in Code § 56-585.1 A 5 c for achieving energy efficiency targets and that establishing targets higher than historical performance could encourage continued performance improvement by Dominion.[103] She agreed with Dominion witness Goldberg that the effects of the Inflation Reduction Act remain uncertain.[104]

Appalachian Voices

Appalachian Voices offered the testimony of **Jim Grevatt**, a Managing Consultant with Energy Futures Group. Mr. Grevatt's primary conclusions are as follows:[105]

1. The Company proposes energy savings targets for 2026-2028 that utterly disregard precedent and legislative intent established by the current statutory savings targets which, if adopted, will deprive its customers of energy efficiency benefits, and forego cost-effective solutions to reduce carbon emissions;
2. Dominion proposes goals that largely reflect its own weak performance, supported by a potential study that is itself grounded in the Company's lackluster history. Dominion asserts that its proposal is grounded in its actual performance while taking no responsibility for how poor that performance has been. Meanwhile, the utility continues to ignore recommendations prepared by its consultant for a 2021 Long-Term DSM Plan[106] ... that would have helped it increase savings;
3. Dominion relies on the [2024 Potential Study] to support its proposal, but the [2024 Potential Study] is a speculative exercise that relies on many assumptions which together produce a remarkably conservative estimate of what Dominion could achieve;
4. Dominion's proposal leans on the claim that "Virginia ... has certain notable differences that impact [the Company]'s ability to achieve energy efficiency savings" but provides no empirical data to support its foundational hypothesis. Indeed, the best empirical data to use in estimating potential are the actual results of leading energy efficiency program administrators, which Dominion disregards entirely; [and]

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[100] *Id.* at 38-39 and attached Appendix AAR-1, p. 6 (Dominion's response to Staff discovery request no. 3-9 f). The "PIPP" is the percentage of income payment program established pursuant to Code § 56-585.6.
[101] Tr. at 198-99 (Ricketts).
[102] Ex. 10 (Ricketts) at 40.
[103] *Id.* at 26-27.
[104] Tr. at 212-13 (Ricketts).
[105] Ex. 5 (Grevatt) at 4-5.
[106] The 2021 Long-Term DSM Plan was admitted as Exhibit 7. Mr. Grevatt indicated that Dominion does not have a detailed project management plan for consolidating programs, and is instead "kick[ing] the can" on this recommendation of the 2021 Long-Term DSM Plan. Tr. at 104-105 (Grevatt).

5. Dominion proposes ill-conceived and grossly inadequate targets for income and age qualifying … program savings.

Mr. Grevatt identified directives of 2018 and 2019 legislation for $870 million and $25 million of energy efficiency spending during the ten-year period ending July 1, 2028. He identified the 2020 VCEA's enactment of an award for achieving energy efficiency targets. In his opinion, "bonuses are not offered for actions that are easily hit without additional effort or changes to operations; a bonus is meant to encourage improved performance."[107] He also identified a provision of Code § 56-585.1 A 5 c that precludes the Commission from approving the construction of new carbon-dioxide electric generating facilities if Dominion has not met its energy savings, which he believes is a strong policy incentive for Dominion to maximize such savings.[108]

Mr. Grevatt offered a dictionary definition of "feasible" as "capable of being done or carried out." Based on this definition, he asserted that "to be feasible does not mean that a thing should be easy – only that it can be done."[109] He further asserted that "poor past performance is not a clear indicator of potential at all. It merely shows that poorly organized and implemented programs will achieve disappointing results."[110]

Mr. Grevatt does not believe it is common industry practice to set energy efficiency standards based on prior industry-lagging performance.[111] He recognized that Dominion failed to meet the statutory 2022 savings target, and he believes Dominion will also fail to meet the 2023 savings target.[112] However, in his view, the statutory targets for 2022-2025 were achievable. He cited, among other things, a low ACEEE scorecard ranking of Dominion compared to other utilities and associated information from that publication.[113] While this ranking includes non-jurisdictional sales in savings calculations, Mr. Grevatt testified that Duke North Carolina has succeeded in achieving nearly four times as much savings as Dominion even though Duke North Carolina's non-jurisdictional or "opt-out" load has been far higher than Dominion's.[114] He described Dominion's reluctance to rely on other States' targets due to jurisdictional differences, particularly for established programs, as a "red-herring, intended to distract the Commission."[115]

Mr. Grevatt indicated that a regulatory commission would not allow a utility with poor reliability to use poor past performance as the determining factor of what the utility can achieve. He posited that a commission would put pressure on such a utility to improve its performance based on the success of other utilities.[116]

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[107] Ex. 5 (Grevatt) at 6-8 (referencing 2018 Va. Acts ch. 296, 2019 Va. Acts ch. 748, and 2020 Va. Acts chs. 1193, 1194).
[108] Ex. 5 (Grevatt) at 7-8.
[109] *Id.* at 8.
[110] *Id.* at 9.
[111] Tr. at 96-97 (Grevatt).
[112] Ex. 5 (Grevatt) at 10-11.
[113] *Id.* at 9-13.
[114] *Id.* at 13-14.
[115] *Id.* at 20.
[116] Tr. at 106-07 (Grevatt).

Mr. Grevatt reiterated testimony he offered in the 2023 DSM Case expressing concern that Dominion's forecasts are not on track to meet the VCEA standards, which he asserted were achievable when the VCEA was passed. He pointed out that Dominion estimates it will barely achieve half of the statutory savings target by 2025.[117] He called for the Commission to "step in,"[118] "demand that Dominion live up to the statutory requirements," and "hold it accountable for getting as close as it can by maximizing the implementation of cost-effective energy efficiency programs."[119]

In proposing targets, Mr. Grevatt found Dominion's reliance on actual experience unfortunate because he views this experience as an "appalling failure to implement effective energy efficiency programs."[120] He described Dominion's proposed Code § 56-596.2:2 as "a shockingly low fraction of the already *de minimis* total benefits the Company proposes."[121]

In setting targets in the instant case, Mr. Grevatt asserted that the Commission should consider energy savings accomplishments of industry leaders and legislative intent in establishing the initial VCEA goals.[122] He emphasized that other utilities' experiences and performances are actual data.[123] He provided the results of analysis he conducted with a colleague in 2021, and an update to this analysis conducted using primarily data reported for 2022 programs.[124] As described, Mr. Grevatt's analysis identified common energy efficiency program types from which selected high achieving utilities achieve most of their savings. For various programs, his analysis then multiplied average reported savings from such utilities by Dominion's jurisdictional sales. Assuming Dominion achieves the same savings as his comparison utilities in 2022, Mr. Grevatt calculated that Dominion would achieve total annual incremental savings for the entire portfolio of almost 2.0% of 2019 jurisdictional sales, which he indicated is an order of magnitude higher savings for Dominion's customers.[125] He then adjusted these results downward to 1.50% to reflect that lighting savings will be lower prospectively.[126]

Mr. Grevatt pushed back on Dominion witness Goldberg's characterization of the other utilities he selected from the ACEEE scorecard as "medal winners."[127] He also testified that even using the six utilities Dr. Goldberg's rebuttal testimony focused on shows Dominion is dramatically underperforming.[128]

Mr. Grevatt testified that his 1.50% annual incremental savings figure does not equate to total energy savings because savings that reach the end of their useful lives must be subtracted each year from the total. He made a simplifying assumption that 10% of the total energy savings

[117] Ex. 5 (Grevatt) at 14-16.
[118] *Id.* at 20.
[119] *Id.* at 22.
[120] *Id.* at 17-18.
[121] *Id.* at 16-17.
[122] *Id.* at 19, 21.
[123] Tr. at 97-98 (Grevatt).
[124] Ex. 5 (Grevatt) at 22-27, 31.
[125] *Id.* at 24-27.
[126] *Id.* at 28. His analysis assumes no savings from the residential appliances and lighting base program and assumed a lower-than-average penetration rate for commercial lighting. *Id.*
[127] Tr. at 107-108 (Grevatt).
[128] Tr. at 111-12 (Grevatt).

that Dominion estimates it will achieve in 2025 is lost in each subsequent year due to measure expiration.[129] He asserted that information Dominion filed in the 2023 DSM Case shows the amount of measure expiration is decreasing year-by-year, rather than overcoming the savings potential.[130] Mr. Grevatt found Dominion witness Walker's suggestion that Dominion will run out of new savings opportunities contradictory to Dominion witness Goldberg's assertion (with which Mr. Grevatt agrees) that utilities with large-scale, long-running energy efficiency programs have a savings advantage over Dominion because of customer familiarity.[131]

Mr. Grevatt believes the Commission should set goals that are ambitious based on his interpretation of legislative intent. He described the statutory 2022-2025 goals as "high, yet realistically achievable" and also cited statutory language applicable to setting 2029-2031 goals at "the greatest level of energy savings that the Commission finds is feasible and cost-effective…."[132] He opined that this suggests legislative intent for similar levels of savings for 2026-2028.[133]

Mr. Grevatt recommended that the Commission reject Dominion's proposed targets. He recommended the Commission instead approve the following targets under Code § 56-596.2:[134]

2026	2027	2028
3.80%	5.40%	7.00%

He noted that his proposal, while considerably larger than Dominion's proposed targets, does not reach the statutory 2025 goal level until 2027.[135] To calculate his proposal, he used the adjusted results of his analysis of other utilities, as summarized above, in addition to Dominion's projected savings for 2023-2025 for programs, voltage optimization, and opt-outs. These components are shown in the table below.[136]

	2023	2024	2025	2026	2027	2028
Net Total Program Savings	909,518	1,197,890	1,524,628	2,527,572	3,530,515	4,533,459
Voltage Optimization	-	5,879	69,066	157,522	245,976	334,342
Opt outs	59,855	60,955	62,055	63,155	64,256	65,356
Measure Expiration				(152,463)	(152,463)	(152,463)
Total annual savings	969,372	1,264,724	1,655,749	2,595,787	3,688,284	4,780,694
Total energy savings % 2019 Jurisdictional Sales	1.42%	1.85%	2.43%	3.80%	5.41%	7.01%

Mr. Grevatt described his targets' 1.6% incremental increase as a reasonable high-end boundary for what is feasible. He indicated lower incremental figures – such as the 0.91% ACEEE scorecard average and Duke Energy Carolina's savings, reported as 0.76% but

129 Ex. 5 (Grevatt) at 28-29.
130 Tr. at 100 (Grevatt).
131 Tr. at 109-110 (Grevatt).
132 Ex. 5 (Grevatt) at 29-30 (referencing Code § 56-596.2 B 4).
133 Ex. 5 (Grevatt) at 30.
134 *Id*. at 5, 31.
135 *Id*. at 31.
136 *Id*. at 31-32.

approximately 1.0% of eligible sales – could also satisfy the statute.[137] He acknowledged that the statutory language regarding the greatest level of energy savings that are feasible and cost-effective apply to the proceeding for setting 2029-2031 targets.[138]

Mr. Grevatt acknowledged the hierarchical preference of data in 20 VAC 5-318-40 applicable the collection of EM&V data: utility-specific, then Virginia-specific, then non-utility-specific or non-Virginia-specific. But he does not believe that standard is relevant for setting targets.[139] He acknowledged that EM&V data is used to determine actual savings that are evaluated against whatever target the Commission sets.[140] He also indicated his testimony uses Dominion-specific data provided by the Company to show that its proposed targets are considerably less than the Company projects it would achieve from programs Dominion already had in place in the 2023 DSM Case.[141]

Mr. Grevatt expressed concern about the targets being set too low. Given the statutory ratemaking incentives, he testified that "[f]ailing to establish feasible, achievable, and industry leading goals will lead to increased costs for customers for which they will gain no benefits…."[142]

As for Code § 56-596.2:2, Mr. Grevatt recommended that the Commission direct no less than 15% of total program investments be allocated and invested to benefit income and age qualifying households. [143] However, he stressed that the overall budget for total programs must be meaningful in order for his recommendation to be meaningful.[144] He testified that Dominion: (i) made no attempt to estimate the number or level of need of eligible households; (ii) did not consider in its proposal whether income and age qualifying households would receive benefits in proportion to their presence in customer base; and (iii) did not consider whether such customers would pay more into the program costs through rates than would be invested in income and age qualifying programs.[145] He suggested that, to comply with Code § 56-596.2:2, it would be reasonable to calculate an imprecise 1% savings amount based in part on "a best estimate of the number of eligible households using census data or other sources of public information" and assuming usage consistent with average residential usage.[146]

Mr. Grevatt took issue with the alternative approach to Code § 56-596.2:2 identified in Dominion witness Walker's rebuttal testimony. Mr. Grevatt indicated that this alternative approach would mean only 2% of Dominion's residential customers would be eligible for such programs, as opposed to the 44% figure estimated in the 2024 Potential Study.[147] He also described this alternative approach as effectively saying that all eligible households have already

[137] Tr. at 121-23 (Grevatt).
[138] Tr. at 129 (Grevatt).
[139] Tr. at 133-37 (Grevatt).
[140] Tr. at 139-40 (Grevatt).
[141] Tr. at 145-46 (Grevatt). *See* Ex. 5 (Grevatt) at 18.
[142] Tr. at 99 (Grevatt).
[143] Ex. 5 (Grevatt) at 5, 35.
[144] *Id.* at 32-33.
[145] *Id.* at 32.
[146] *Id.* at 33.
[147] Tr. at 102 (Grevatt).

participated in such programs.[148] Mr. Grevatt testified that census data indicates 24% of households in the Commonwealth have income at or below 200% of the federal poverty level.[149]

Sierra Club

Sierra Club offered the testimony of **Roger D. Colton**, owner of Fisher Sheehan & Colton Public Finance and General Economics. He works primarily on low-income utility issues, and in the instant case his testimony focused on residential customers.[150]

Mr. Colton found Dominion's assessment of technical savings potential to be problematic. First, Dominion's reported residential energy use appears unreasonably low to him because energy intensities for residential households do not vary based on housing unit size. He believes such assumptions must be an error because, overall, space heating and cooling electricity usage is closely related to housing size.[151]

Mr. Colton took issue with the fact that Dominion's aggregate energy savings assume a specified free ridership level without also accounting for spillover effect.[152] He believes this treatment biases Dominion's analysis against adoption of energy efficiency measures.[153]

According to Mr. Colton, Dominion systematically and substantially understates the electric savings that might be available through basic residential energy efficiency measures such as air sealing, insulation, and controllable thermostats. In his view, census data and survey data published by the federal government show substantial unrealized room for Dominion households to be able to reduce electric heating usage with controllable thermostats. He indicated that Dominion's 2024 Potential Study identified smart thermostats as top measures contributing to residential technical energy savings potential and residential economic energy savings potential, but that smart thermostats directed exclusively at heating (rather than those that control combined heating and cooling) were not included.[154]

Mr. Colton presented 2020 federal survey data on the frequency of households reporting their homes as "drafty." He asserted that Dominion's study did not consider the extent to which its residential customers have a need for improving their building shell through air sealing or insulation, and reiterated his concern about a lack of consideration specific to low-income households.[155]

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[148] Tr. at 101 (Grevatt).
[149] Tr. at 102-103 (Grevatt).
[150] Ex. 8 (Colton) at 2, 7.
[151] *Id.* at 8-9. Mr. Colton based his analysis on survey data published by the federal government and census data. *Id.* at 9-10.
[152] *Id.* at 10-11. Mr. Colton described the spillover effect, which accounts for measures that a consumer adopts because they have adopted a different measure, as the "flipside to free ridership." *Id.* at 11.
[153] *Id.* at 67.
[154] *Id.* at 12-15.
[155] *Id.* at 16-17. Some of the survey results he presented show, among other things, 12.4% of responding households with incomes less than $5,000 reported their homes are drafty all the time and 0.0% of responding households with incomes of $150,000 or greater reported their homes are drafty all the time. *Id.* at 17.

Mr. Colton found several aspects of the 2024 Potential Study's economic potential analysis to be problematic. He asserted that Dominion's TRC analysis used a "utility" discount rate of 7.03% and a "customer" discount rate of 6.25%. He described both of these as inappropriate and recommended Dominion be directed to redo its cost-effectiveness screening using interest rates on long-term (*e.g.*, ten-year) U.S. Treasury Bills. He also took issue with Dominion using a single "customer" discount rate, rather than using a different discount rate for residential and low-income customers. He believes a discount rate lower than the "utility" discount rate is appropriate because he views energy efficiency investment as less risky with regard to planning, construction, and operation, and he sees little risk that societal benefits will not arise given Virginia's cost recovery framework.[156]

Mr. Colton asserted that Dominion understated economic potential because the Company evaluated cost-effectiveness at the measure, rather than program, level. In support of his argument, he indicated that TRC results are skewed against energy efficiency measures because it is difficult to properly account for "other program impacts" at the measure level for each building. He took issue with the inputs to Dominion's TRC analysis being limited to avoided capacity and energy costs and a utility line loss factor. He cited health impacts of energy efficiency savings a key other program impacts that Dominion's analysis failed to consider.[157] He also cited participants' increased comfort, increased job creation, and a reduction in utility arrears and associated working capital.[158] He thinks it is asymmetric[159] and "indisputably in error" to give other program impacts an implicit value of $0 by excluding them from the cost-benefit analysis.[160] He agreed that, when dealing with other program impacts, symmetry requires consideration of the costs and benefits of such impacts.[161]

Mr. Colton described the difference in the technical potential and economic potential in the 2024 Potential Study as substantial. He attributed this difference to the use of an incomplete set of benefits. He pointed out that for low-income households four of the nine measures with the highest technical potential were excluded because Dominion's TRC results were less than 1.0.[162] In his opinion, including other program impacts in the analysis would not only impact the total investment in efficiency programs but could also affect the distribution of that funding among program components.[163]

To account for other program impacts, Mr. Colton recommended Dominion apply a 20% adder in its assessment of the economic potential of non-low-income measures. He based this recommendation in part on his review of data and conclusions from Colorado, Massachusetts, Connecticut, and Maryland.[164]

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[156] *Id.* at 18-20.
[157] *Id.* at 18, 20-23.
[158] *Id.* at 24.
[159] *Id.* at 25-26.
[160] *See, e.g.*, Ex. 8 (Colton) at 26; Tr. at 176 (Colton).
[161] Tr. at 179 (Colton).
[162] Ex. 8 (Colton) at 23-24.
[163] *Id.* at 27-28.
[164] *Id.* at 28-31 and attached Ex. RDC-2. For low-income customers, Mr. Colton recommended a 40% adder. *Id.* at 55.

Based on his review, Mr. Colton recommended that Dominion's residential savings goals be increased by 175% to the following levels.[165]

Adjusted Dominion Proposed Non-IAQ EE Targets Total (Net)				
	DSM Proposed Non-IAQ EE Target (mWh)	Adjustment	Adjusted Proposed Targets	Increase
2026	1,175,829	1.75	2,057,701	881,872
2027	1,293,412	1.75	2,263,471	970,059
2028	1,422,753	1.75	2,489,818	1,067,065

He did not present a residential savings as a percentage of total 2019 sales because he asserted that his recommended adjustments are only relevant in how they affect the total savings, for all sectors, as a percentage of 2019 sales.[166] Because he focused only on the residential sector and his recommended targets do not include savings from voltage optimization or opt-out customers, he does not view his recommended targets as directly comparable to other case participants' targets that are based on all sectors.[167]

Mr. Colton testified that the 2023 ACEEE scorecard report is a reasonable resource to use when developing potential energy efficiency targets. He has used it in other States.[168]

Turning to income and age-qualifying targets, Mr. Colton asserted that Dominion did not propose to comply with Code § 56-596.2:2. He indicated that Dominion's Target Proposal falls well short of the statutory minimum of 1% of 2019 sales and further that Dominion's proposed low-income targets represent a smaller and declining proportion of total savings.[169] In support of this assertion, he presented the following table.[170]

[165] *Id*. at 66 (table number omitted).
[166] *Id*. at 68.
[167] Tr. at 152-53 (Colton). He testified that the percentages Dominion witness Walker attributed to his recommended targets were too low because they did not include his recommended income- and age-qualifying percentages. Tr. at 173-74 (Colton) (At the hearing, Mr. Colton stated "IAQ" rather than "IRP").
[168] Tr. at 175 (Colton).
[169] Ex. 8 (Colton) at 32-33.
[170] *Id*. at 34 (table number omitted).

Total Net Savings vs. IAQ Net Savings (2019 – 2028)						
Year	2019 Sales	Total Savings (Net)	Total IAQ Savings (Net)	% Total Savings of 2019 Sales	% IAQ Savings of 2019 Sales	% IAQ Savings of Total Saved
2019	68,231,360	933,129	20,720	1.37%	0.030%	2.22%
2020	68,231,360	983,140	21,839	1.44%	0.032%	2.22%
2021	68,231,360	1,057,526	22,510	1.55%	0.033%	2.13%
2022	68,231,360	1,268,843	25,286	1.86%	0.037%	1.99%
2023	68,231,360	1,463,553	30,024	2.14%	0.044%	2.05%
2024	68,231,360	*Not Available*				
2025	68,231,360					
2026	68,231,360	2,081,156	36,387	3.05%	0.053%	1.75%
2027	68,231,360	2,356,757	40,026	3.45%	0.059%	1.70%
2028	68,231,360	2,650,876	44,029	3.89%	0.065%	1.66%

Mr. Colton testified that Dominion has understated the electricity savings potential for low-income households. He cited, among other things, the predominant use of electricity as a primary heating fuel in Virginia households and the overrepresentation of low-income households heating with electricity in the population of households that do not have controllable thermostats. His review of census data for the geographic area served by Dominion also indicated that 22% of owner-occupied housing stock, and one-third of all rental housing units, were built before 1970.[171]

Mr. Colton asserted that Dominion's 74% net-to-gross ratio for its low-income investments is much too low and should be replaced with a figure at or near 100%. He asserted that low-income households tend not to invest in energy efficiency without external third-party assistance, such as a utility-funded program,[172] even though they tend to have the greatest need for energy efficiency investments by Dominion.[173] He discussed energy insecurity and bill payment difficulties experienced by low-income households.[174]

Mr. Colton asserted that low-income energy efficiency programs should be implemented not only as a resource efficiency measure, but also as an important tool in controlling other system-wide utility costs. He pointed to reduced arrears, reduced working capital, and reduced credit and collection expenses as utility avoided costs that should also be considered in assessing

[171] *Id.* at 35-37.
[172] *Id.* at 39-40. He attributed this to low-income households' overall levels of income, relative shelter burdens, tenure, and tendency to move more frequently. *Id.* at 40-42.
[173] *Id.* at 43. However, he testified that if the same net-to-gross ratio that is used to set targets is also used to measure achievement towards the savings targets, the activity required to meet the target would be the same. Tr. at 183-84 (Colton).
[174] Ex. 8 (Colton) at 44-50; Tr. at 149 (Colton) (correction).

the cost-effectiveness of low-income energy efficiency investments.[175] He expressed concern about an inequitable scenario in which low-income ratepayers are left paying for programs from which they are disproportionately excluded if other program impacts are not adequately incorporated into the TRC cost-benefit analysis.[176] To incorporate other program impacts, such as the low-income avoided costs he described as unique, Mr. Colton recommended incorporating a 40% adder into the TRC analysis.[177]

Mr. Colton disagreed with Dominion's assertion that there are no other avoided costs to incorporate into the Company's TRC analysis. He suggested that the Company's decision may be based on the 2001 California Standard Practice Manual, which Mr. Colton described as out of date. Mr. Colton cited to a statement in the 2020 California Energy Efficiency Policy Manual indicating that avoided greenhouse gas emission related costs should be included in benefit calculations.[178] He also indicated that the more recent National Standard Practices Manual, which the Commission must rely on in Case No. PUR-2024-00120,[179] includes extensive discussion of why TRC analysis should include other program impacts.[180] He further asserted that including other program impacts would promote the maximum effective conservation, consistent with Code § 56-235.1.[181]

Mr. Colton challenged Dominion's approach to Code § 56-596.2:2, asserting that Dominion "need not have a reasonable degree of certainty that it is targeting [such] investments."[182] Based on his own analysis, he concluded there are reasonably available ways for Dominion to identify low-income customers for purposes of establishing goals that comply with the statute. From American Community Survey's list of Virginia cities and towns with the most/worst poverty, he identified 16 cities and towns in which Dominion provides electric service. American Community Survey data indicates, among other things, that approximately 18.7% of the households in these communities have income below the federal poverty level and approximately 56% of the occupied housing units in these communities were constructed before 1970. Nearly three of five homes use electricity as their primary heating fuel.[183] Mr. Colton performed a similar analysis using zip code data, which he similarly found exhibit characteristics that are associated with a need for, but an inability to invest in, energy efficiency measures.[184] He also evaluated census tract information to identify concentrated areas of need in the Dominion service territory. Whether evaluated as broadly as a community or as narrow as a census tract, Mr. Colton concluded the concentrated areas of need in Dominion's service territory are prevalent.[185]

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[175] Ex. 8 (Colton) at 50-54.
[176] *Id.* at 54-55.
[177] *Id.* at 55.
[178] *Id.* at 55-56.
[179] Tr. at 165 (Colton).
[180] Ex. 8 (Colton) at 55-56; Tr. at 177-78 (Colton).
[181] Tr. at 163-64 (Colton).
[182] Ex. 8 (Colton) at 57.
[183] *Id.* at 57-59. He reiterated these are the types of households that will not have the ability to invest in energy efficiency even though they have the greatest need for such investment. *Id.* at 59.
[184] *Id.* at 60. He indicated, among other things, that 24.3% of persons living in select zip codes with the highest rates of poverty have income below the federal poverty level, most of the low-income households live in housing units built before 1970, and 63.7% of these homes use electricity as their primary heating fuel. *Id.*
[185] *Id.* at 61-63.

Regarding Dominion's alternative approach to Code § 56-596.2:2 offered on rebuttal, Mr. Colton expressed concerns similar to those of Appalachian Voices' witness Grevatt. Mr. Colton asserted that using the 52,537 customers who have participated in Dominion's low-income, age-qualifying programs as a proxy for Dominion's total number of low-income, age-qualifying customers implies only 2.3% of Dominion's customer are low-income. He indicated the actual reported number is substantially higher. Mr. Colton also challenged using, for such purposes, an annual average consumption figure of 7,503 kilowatt-hours ("kWh"). He identified significantly higher average consumption figures for Dominion's overall residential sector. He does not believe it is credible that Dominion's low-income consumption is between 35% to 42% lower than the overall residential average.[186]

Rather than set the Code § 56-596.2:2 at the statutory minimum of 1%, Mr. Colton recommended a 2% target based on his analysis indicating a high percentage of customers that are low-income. He used average residential consumption data and the number of income-qualified customers he indicated Dominion reported in this proceeding to estimate low-income usage. He then used a multiplier to calculate savings amounts that approximate a 2% target, according to Mr. Colton.[187]

Mr. Colton recommended the following:[188]

(1) That Dominion be directed to re-calculate its future residential savings goals with the following modifications to its analysis:
   (a) Dominion should consider the cost-effectiveness of energy efficiency not on a measure basis[,] but rather on a program basis.[189] Doing so is necessary to comply with the express language of Code § 56-596.2:2, which references the cost-effectiveness of "measures and programs."
   (b) In utilizing the [TRC] approach, Dominion should include [other program impacts] in its assessment of energy efficiency benefits. In doing so, it should quantify its [other program impacts] through application of a minimum 20% [other program impacts] adder.
   (c) Dominion should use a discount rate which reflects the societal risk not customer risks. Use of the Ten Year rate for US Treasury Bills is most appropriate.
   (d) In accounting for the achievable energy savings potential, Dominion should consider not only the "free rider" effect but should also consider the corresponding "spillover effect."
   (e) Dominion should take into account in its assessment of residential energy savings the difference in the size of residential housing units heating with electricity between low-income and non-low-income households.
   (f) Dominion should undertake a systematic study of the potential for electricity savings through air-sealing and basic home insulation as distinguished for low-income and non-low-income households.

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[186] Tr. at 153-55 (Colton).
[187] Ex. 8 (Colton) at 70-72.
[188] *Id.* at 4-6.
[189] Tr. at 148 (Colton) (correction). Even if cost-effectiveness is considered on an individual measure basis, Mr. Colton asserted that the administrative costs of delivering measures should be included in the cost-benefit calculation. Tr. at 166 (Colton).

(2) That Dominion be directed to re-calculate its future [Code § 56-596.2:2] goals with the following modifications to its analysis:
   (a) Dominion should be directed to prepare a detailed analysis of the market barriers unique to income-qualified customers that impede, if not completely prevent, the investment in energy efficiency measures in the absence of external assistance. The market barrier analysis should include an explicit explanation of the ways in which the Dominion income-qualified programs are designed to address those market barriers.
   (b) Dominion should be directed to prepare a detailed analysis of how a geographic targeting of income-qualified energy efficiency investments to [c]oncentrated [a]reas of [n]eed would improve the rate of installation of energy savings measures.
   (c) Dominion should be directed to account for [other program impacts], including [those] unique to low-income households, in determining the benefits of energy efficiency investments. An income-qualified [other program impacts] adder of 40% would be appropriate.
   (d) Dominion should be directed to quantify the utility avoided costs that would be generated by income-qualified energy efficiency investments, including avoided costs such as avoided bad debt, working capital, credit and collection expenses, and enhanced revenues associated with improved payment patterns.
   (e) Dominion should be directed to apply each of the modifications recommended for residential customers generally to its development of future income-qualified energy savings goals.

(3) That Dominion be directed to increase its proposed [Code § 56-596.2] targets (net) by at least 175%.

(4) That Dominion be directed to meet a 2% [Code § 56-596.2:2] savings goal given the high percentage of low-income customers, which will result in an income-qualified energy efficiency savings equal to about 11% of total energy efficiency savings.

Mr. Colton described Dominion's concerns about collecting and protecting demographic information from customers as a red herring. He indicated that public data, including census data, can be used for estimates, consistent with his experience outside of Virginia.[190] He asserted that the rebuttal testimony of Dominion witness Goldberg, indicating a more granular analysis could show either higher or lower than average usage by low-income customers, supports the need for more granular analysis.[191] Mr. Colton's experience in other States has not extended to all of the customer groups identified by Code § 56-596.2:2 and, in particular, veterans and disabled customers.[192]

[190] Tr. at 156-57, 185-87 (Colton).
[191] Tr. at 158-60 (Colton). Regarding the level of granularity, Mr. Colton testified that Illinois regulators require reporting on a zip code basis while Washington regulators require reporting on a census tract basis. Tr. at 186 (Colton).
[192] Tr. at 187-88 (Colton).

Dominion – Rebuttal

On rebuttal, Dominion offered the testimonies of **Mr. Walker** and **Dr. Goldberg**.

Mr. Walker compiled the target recommendations of the case participants[193] in the following two tables he presented.

Rebuttal Table 1[194]

	Company	Staff Scenario A1[i]	Staff Scenario B1[ii]	Staff Scenario A2[iii]	Staff Scenario B2[iv]	APV	Sierra Club[1]
2026	2.09%	2.37%	3.45%	5.17%	6.25%	3.80%	3.02%
2027	2.39%	2.54%	4.70%	5.34%	7.50%	5.40%	3.32%
2028	2.72%	2.71%	5.95%	5.51%	8.75%	7.00%	3.65%

[i] 0.17% annual incremental savings, 2.2% energy savings starting point
[ii] 1.25% annual incremental savings, 2.2% energy savings starting point
[iii] 0.17% annual incremental savings, 5.0% energy savings starting point
[iv] 1.25% annual incremental savings, 5.0% energy savings starting point

Rebuttal Table 2[195]

	Company	Staff Scenario C1[i]	Staff Scenario D1[ii]	APV	Sierra Club[2]
2025	0.036%	0.042%	1.287%	Multiply average residential electricity use by the number of eligible households, and then taking 1% of that amount as the minimum required IAQ savings.	--
2026	0.039%	0.047%	2.537%		0.365%
2027	0.043%	0.052%	3.787%		0.402%
2028	0.048%	0.057%	5.037%		0.442%

[i] 0.005% annual incremental savings, 0.037% energy savings starting point
[ii] 1.250% annual incremental savings, 0.037% energy savings starting point

Mr. Walker requested that the Commission adopt the Company's proposed targets, shown in the two tables above.[196] He asserted that many of the proposals presented by the respondents and Staff are based on factors beyond those set forth in Code § 56-596.2 B 3. He referenced Appalachian Voices' witness Grevatt's recommendation for the Commission to consider the legislative intent in establishing the initial VCEA goals and Staff witness Ricketts'

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[193] Mr. Walker indicated that he converted Sierra Club's proposed energy savings totals to a percentage of the Company's 2019 average annual energy jurisdiction retail sales for both tables. Ex. 12 (Walker rebuttal) at 2, n.1.
[194] *Id*. at 2-3.
[195] *Id*. at 3.
[196] *Id*. at 11.

reference to the potential for aspirational targets and "other considerations." Mr. Walker maintained that the statutory factors are feasibility and achievability.[197] He amplified his position by asserting that in the instant case "the General Assembly requires the Commission to evaluate whether the savings targets are feasible and achievable – whether they can reasonably be attained or successfully accomplished through cost-effective programs and measures."[198] Mr. Walker described Dominion's proposed targets as aligned with these statutory requirements because they are based on actual data, historical experience, and Virginia's unique legal and regulatory framework.[199] He also acknowledged that he is not a lawyer.[200]

Mr. Walker found Staff's incorporation of a 1.25% incremental increase (illustrated in his Rebuttal Table 1 as Staff Scenarios B1 and B2) neither feasible nor achievable based on the fact that Dominion's cumulative energy savings from its entire portfolio was 1.23% for 2023. He added that this approach does not account for the fact that: (i) new savings must be added that are greater than the amount of prior savings that reaches the end of its measure life in that year and is no longer counted in the total; and (ii) with declining savings potential, the decrease in persistent savings will eventually outweigh the increase in new savings.[201]

Although Mr. Walker testified that Dominion is aware of other utilities' reported savings, he indicated that the Company was focused on its own experience in its service territory.[202] He described peer data as a useful reference point, but not determinative of Dominion's proposed targets.[203] He acknowledged that Dominion's consultant (Cadmus) used peer utility data in the 2021 Long-Term DSM Plan to identify ways to help the Company increase savings.[204]

Mr. Walker disagreed with Appalachian Voices' witness Grevatt's assertion that Dominion is ignoring recommendations prepared by its consultant for the 2021 Long-Term DSM Plan.[205]

Turning to the Code § 56-596.2:2 targets, Mr. Walker stood behind Dominion's proposal, but acknowledged the Staff and respondent testimony on this point. He offered that the population of customer accounts that has participated in Dominion-sponsored income and age qualifying demand-side-management programs could provide a reasonable proxy that satisfies the statute. He reported that a total of 52,537 unique Virginia customer accounts have participated in such programs dating back to Phase I, with median annual energy usage of 7,503 kWh. He multiplied these figures to arrive at 394,185,111 kWh of annual energy retail sales for that proxy group. He suggested that the statutory minimum could be set at 1% of this

[197] *Id.* at 3-4. As discussed in the Code section of this Report below, the General Assembly moved the factors referenced by Mr. Walker from Code § 56-596.2 B 3 to Code § 56-596.2 B 4, effective July 1, 2024.
[198] Ex. 12 (Walker rebuttal) at 4.
[199] *Id.*
[200] Tr. at 219-20 (Walker).
[201] Ex. 12 (Walker rebuttal) at 4-5.
[202] Tr. at 221-22 (Walker).
[203] Tr. at 225 (Walker).
[204] Tr. at 224-25 (Walker).
[205] Ex. 12 (Walker rebuttal) at 5. The 2021 Long-Term DSM Plan is Exhibit 7. *See also* Ex. 9 (Project Management Report).

figure, or 3,941,851 kWh.[206] He indicated that Dominion's proposed targets are all above 6% of this figure.[207] He elaborated further that this amount of assumed usage suggests that Dominion's targets would be at or above 1% if the number of relevant customers was 325,000 customers. He acknowledged that the 325,000 figure is not necessarily the "right" figure, which, although not an expert on census data, he believes is probably closer to 25-30% of Dominion's footprint.[208] He confirmed that the Company does not collect information on whether customers are low-income, elderly, disabled, or veterans.[209]

Mr. Walker does not believe it is meaningful to focus on one snapshot in time to assess whether Dominion is achieving the 15% minimum allocation of energy efficiency programs to low-income, elderly, or disabled individuals or veterans.[210]

Mr. Walker questioned whether Sierra Club witness Colton's recommendation for Dominion to identify concentrated geographical areas of need in its service territory and target income and age qualifying programs to those areas is within the scope of this proceeding. However, Mr. Walker indicated that Dominion uses qualified, local weatherization service providers who currently offer such services through the Virginia Department of Housing and Community Development. He indicated that relationships with local weatherization networks and other social service intake organizations allow Dominion to target areas of known need in the service territory without concentrating any efforts to a specified area. He asserted that this approach allows all qualified customers the opportunity to receive the benefits of such programs.[211]

Mr. Walker requested that the Commission reject Staff witness Rickett's suggestion that the Commission may wish to direct Dominion to collect income information to implement Code § 56-596.2:2. Mr. Walker indicated specific customer income information is not needed by Dominion to provide its services. The normal course of Dominion's business does not include tracking, soliciting, or maintaining demographic information regarding individual customers or specific accounts, including income. Even with Dominion's PIPP program, the Department of Social Services verifies and maintains all income information. Mr. Walker emphasized Dominion's view that "[t]his is not an appropriate function for the utility to perform."[212] In order to perform such a function, he testified that:

> [T]he Company would be required to modify its systems and intake information from customers on an ongoing and proactive basis; implement additional controls to limit viewing of income information by employees; manage the income information through particular applications so that the income information could

[206] Ex. 12 (Walker rebuttal) at 6-7.
[207] *Id.* at 7.
[208] Tr. at 227-29 (Walker).
[209] Tr. at 229 (Walker).
[210] Ex. 12 (Walker rebuttal) at 7-8. Mr. Walker indicated that a 13.7% allocation was presented in a prior proceeding, but that last year's figure was 15.4%. *Id.* at 7. He added that Dominion performs low-income weatherization work through its EnergyShare Program and proposed approximately $36 million related to its Phase VIII HB2789 HVAC Health and Safety Program, neither of which count towards the VCEA's goals. *Id.* at 8-9.
[211] *Id.* at 9-10.
[212] *Id.* at 10-11. The "PIPP" is the percentage of income payment program established pursuant to Code § 56-585.6.

be deleted upon customer request; maintain special controls to protect the information and applications; and implement processes to consistently reassess income levels, as customers' jobs and income levels change on an ongoing basis. Since the Company does not currently have customer income information, it would also need to collect income information from all its existing approximately three million customers.[213]

Mr. Walker testified that Dominion is working with the Virginia Department of Energy and stakeholders to understand how programs implemented pursuant to the Inflation Reduction Act will play out. He understands that a request for proposals process is underway and indicated there will be some complexity associated with those programs and programs Dominion is offering.[214]

Dr. Goldberg clarified Dominion's 2023 achieved savings amount and that the Company's proposed targets are based on a 10% year-over-year increase to that actual savings amount.[215]

Dr. Goldberg identified concerns with using Appalachian Voices' witness Grevatt's Pathways model because it assumes that the highest levels of achievement of other program administrators provide a good proxy for what is feasible for Dominion in Virginia. She initially likened this approach to assuming that "the best way to determine an individual runner's potential is to look at the times of the medal winners."[216] She subsequently testified that her initial characterization is "probably not the most apt description" of the peer utilities Appalachian Voices witness Grevatt used.[217] She also acknowledged Mr. Grevatt calculated an average of such peer data.[218]

Dr. Goldberg testified that, by selecting only utilities with reported annual incremental savings of at least 1%, Mr. Grevatt's screening criteria ensures the proxy analysis will indicate Dominion can achieve better than 1% annual new net savings.[219] She also found relatively few of the proxy utilities used in Mr. Grevatt's analysis to have substantially similar climates to Dominion's, which can affect savings opportunities. She is unclear how Mr. Grevatt's screening determined his proxy utilities, some of which serve the Upper Midwest, and only a few of which are geographically similar to Dominion.[220]

Dr. Goldberg also testified that Dominion has not had a large-scale energy efficiency portfolio for as long as many of the proxy utilities used by Appalachian Voices' witness Grevatt. In Dr. Goldberg's view, more mature programs make it more likely that customers and service providers will think about program options when it is time to replace equipment. She explained that the passage of the VCEA essentially coincided with the pandemic, causing substantial

[213] Ex. 12 (Walker rebuttal) at 10-11.
[214] Tr. at 216-17 (Walker).
[215] Ex. 13 (Goldberg rebuttal) at 2-4.
[216] *Id.* at 4-5.
[217] Tr. at 250 (Goldberg).
[218] Tr. at 247 (Goldberg).
[219] Ex. 13 (Goldberg rebuttal) at 5-6.
[220] *Id.* at 6.

disruption well into 2022. She cited the pandemic, market confusion resulting from implementation of the GTSA, and disappearing large-scale lighting savings due to changing federal appliance standards as factors that have "interfered" with Dominion's ability to fully establish its programs.[221] Dr. Goldberg agreed that during roughly 2020 and 2021 the pandemic caused Dominion's programs to effectively "stall[] out for about two years."[222]

Dr. Goldberg acknowledged that the five years Dominion averaged to calculate the 10% annual increase used for its proposed target calculation includes two years of stalled-out pandemic performance.[223] However, she described 2022 and 2023, which were also included, as "rebound" years that reflected deferred demand from 2020 and 2021.[224] She indicated that if Dominion continued to see the type of growth in 2024 and 2025 that occurred in 2022 and 2023 she would consider it a trend.[225]

She explained that the level of electricity rates affects savings potential and provided the table below to illustrate that all but one of the comparison utilities used by Appalachian Voices' witness Grevatt have higher electric retail rates than Dominion.[226]

Data Year	Entity	State	RTO	Average Price (All sectors) (cents/kWh)[a]	% of DOM Retail Rate (All sectors)	Net savings as a % of retail sales[b]
2022	Entergy Arkansas LLC	AR	MISO	9.21	86%	1.38%
2022	**Virginia Electric & Power Co**	**VA**	**PJM**	**10.66**	**100%**	**0.20%**
2022	Delaware Electric Cooperative	DE	PJM	12.87	121%	0.76%
2022	Delmarva Power	DE	PJM	12.97	122%	0.75%
2022	Northern States Power Co - Minnesota (Xcel Energy)	MN	MISO	13.24	124%	2.16%
2022	DTE Electric Company	MI	MISO	13.67	128%	2.06%
2022	Consumers Energy Co	MI	MISO	14.14	133%	1.86%
2022	Baltimore Gas & Electric Co	MD	PJM	14.33	134%	1.29%
2022	Ameren Illinois Company	IL	MISO	14.82	139%	1.30%
2022	Commonwealth Edison Co	IL	PJM	15.59	146%	2.17%
2022	Delmarva Power	MD	PJM	16.43	154%	0.75%

a. 2022 Utility Bundled Retail Sales- Total. Electric Sales, Revenue, and Average Price - Energy Information Administration (eia.gov).
b. ACEEE 2023 Utility Energy Efficiency Scoreboard Report.

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221 Ex. 13 (Goldberg rebuttal) at 7-8. As explained by Dr. Goldberg, the pandemic was problematic for energy efficiency programs because commercial customers were not on premises and residential customers would not allow anybody in their homes. Tr. at 233 (Goldberg).
222 Tr. at 250-51 (Goldberg).
223 Tr. at 251-52 (Goldberg).
224 Tr. at 270-71 (Goldberg).
225 Tr. at 271 (Goldberg).
226 Ex. 13 (Goldberg rebuttal) at 8-9 (table header omitted).

When Dr. Goldberg focused instead on utilities listed in the ACEEE scorecard report with comparable or lower rates than Dominion, are in the South, and have over 100,000 customers, she calculated average net savings of 0.66% for those utilities, with only one exceeding Mr. Grevatt's 1% screening criteria. She added that this is a "new savings" figure, and not the cumulative persistent savings used for Virginia's targets. She asserted that this average indicates Dominion's proposed targets are reasonable.[227]

Dr. Goldberg also used gross savings data from U.S. Energy Information Administration Form 861 to compile data for southern utilities with overall retail rates at or below Dominion's with over 100,000 customers. According to this information, only two of 22 utilities reached Mr. Grevatt's 1% threshold, even when using the gross metric. She showed Dominion ranked 10th out of this 22-utility group in terms of gross savings achieved (%).[228]

Dr. Goldberg disagreed that Dominion ignored recommendations from its 2021 Long-Term DSM Plan. She indicated, among other things, that Dominion adopted key program changes, including expansion of focused offerings for the industrial sector and increased program marketing. She asserted that the study's achievable potential results reflect these program improvements and are higher than they would have been if no improvements were assumed.[229]

Dr. Goldberg indicated that the residential energy intensities used by Dominion's analysis are the averages determined from Dominion's own consumption data. She testified that using averages across all customers does not understate overall residential energy use or corresponding opportunities.[230]

Dr. Goldberg asserted that Sierra Club witness Colton's conclusion that savings are understated due to omission of spillover effects is incorrect. She described the 2024 Potential Study's analysis and indicated that a higher or lower free rider assumption does not change the net savings. She concluded that spillover is effectively included in her calculated gross and net savings.[231] She distinguished her use of the term "gross savings" in this context from how the term is used in the 2024 Potential Study.[232]

Dr. Goldberg also disagreed with Sierra Club witness Colton's assertion that Dominion understated the potential for savings from residential energy efficiency measures. She testified that the potential for each residential measure, general or low-income, reflects the overall proportion of homes for which the measure would be applicable and that do not yet have it, along with the overall adopted rates estimates for those homes under the program scenarios.

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[227] *Id.* at 9-10; Tr. at 231-32 (Goldberg) (correction). She acknowledged that higher new savings should lead to higher cumulative persistent savings. Tr. at 241 (Goldberg).
[228] Ex. 13 (Goldberg rebuttal) at 10-12.
[229] *Id.* at 12-13.
[230] *Id.* at 13.
[231] *Id.* at 14; Tr. at 265-67 (Goldberg). Dr. Goldberg described "spillover" as "essentially because I see my neighbor doing it, … I'm going to do it myself. Or because I see there's a rebate, I do it, but then I never go and take the rebate. So there are measures installed because of the program, but they don't take incentives from the program." Tr. at 237 (Goldberg).
[232] Tr. at 262-63 (Goldberg).

Dominion's 2024 Potential Study based savings for each residential measure on average characteristics of the relevant population. For measures specific to low-income programs, Dominion calibrated the base adoption rates to the historic adoption rates of such measures in these programs.[233]

With respect to the discount rate used in Dominion's TRC analysis, Dr. Goldberg pointed to the requirement in 20 VAC 5-304-30(6) for the Company to use the same discount rate in all TRC calculations as is used in its IRP process. The 2024 Potential Study used these values to determine economic potential.[234]

Dr. Goldberg addressed Sierra Club witness Colton's concern that Dominion's analysis was on a measure, rather than program, level. She testified that TRC analysis at the program level adds program administration and delivery costs that may make some measures that are cost-effective on a no-program-cost basis become not cost-effective. As for other program impacts, Dr. Goldberg testified that Dominion is following the TRC test defined by the California Standard Practice Manual and that if the current stakeholder process on cost-effectiveness tests results in a Commission order that directs a different test to be applied, Dominion would comply with such an order.[235]

Dr. Goldberg does not view the societal cost test as a variant of the TRC test, except that the latter is the starting point for the former.[236] In her view, the National Standard Manual indicates that each jurisdiction can choose which benefits appropriately belong in its test.[237] If broader societal perspectives were to be included in the test, she does not disagree that a societal discount rate might be applied.[238]

Dr. Goldberg asserted that a more granular analysis of potential achievable, cost-effective savings for low-income households could produce different results (higher or lower) for such customers, with complementary differences for the remaining customers, but a similar result for the residential sector overall. She indicated that including Sierra Club witness Colton's proposed adder would not change the availability of income and age-qualifying programs.
Dr. Goldberg explained that under Code § 56-576, low-income programs are not required to pass the TRC test, or any cost-effectiveness test, to be "in the public interest."[239] She testified that since low-income programs are not required to be cost-effective the 2024 Potential Study analysis included low-income measures with TRC results exceeding 0.75 (rather than 1.0),[240] but indicated this is not clearly documented.[241]

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[233] Ex. 13 (Goldberg rebuttal) at 14-15.
[234] *Id.* at 15.
[235] *Id.* at 15-16 (citing Case No. PUR-2024-00120).
[236] Tr. at 252-53 (Goldberg).
[237] Tr. at 255-56 (Goldberg).
[238] Tr. at 261-62 (Goldberg).
[239] Ex. 13 (Goldberg rebuttal) at 16-17.
[240] Tr. at 235 (Goldberg).
[241] Tr. at 269-70 (Goldberg).

CODE

Code § 56-596.2, as amended effective July 1, 2024,[242] states in part as follows:

A. Notwithstanding subsection G of § 56-580, or any other provision of law, each incumbent investor-owned electric utility shall develop proposed energy efficiency programs. Any program shall provide for the submission of a petition or petitions for approval to design, implement, and operate energy efficiency programs pursuant to subdivision A 5 c of § 56-585.1. At least 15 percent of such proposed costs of energy efficiency programs shall be allocated to programs designed to benefit low-income, elderly, or disabled individuals or veterans.

B. Notwithstanding any other provision of law, each investor-owned incumbent electric utility shall implement energy efficiency programs and measures to achieve the following total annual energy savings:

...

2. For [Dominion]:
a. In calendar year 2022, at least 1.25 percent of the average annual energy jurisdictional retail sales by that utility in 2019;
b. In calendar year 2023, at least 2.5 percent of the average annual energy jurisdictional retail sales by that utility in 2019;
c. In calendar year 2024, at least 3.75 percent of the average annual energy jurisdictional retail sales by that utility in 2019; and
d. In calendar year 2025, at least 5.0 percent of the average annual energy jurisdictional retail sales by that utility in 2019;

3. For the time period 2026 through 2028, the Commission shall, after notice and hearing, establish new energy efficiency savings targets measured as a percentage of the average annual energy jurisdictional retail sales by that utility in 2019;

As shown above, Code § 56-596.2 B 3 states simply that "For the time period 2026 through 2028, the Commission shall, after notice and hearing, establish new energy efficiency savings targets measured as a percentage of the average annual energy jurisdictional retail sales by that utility in 2019[.]" Prior to 2024 legislative amendments, this provision stated in relevant part, as reflected in the Consolidated Procedural Order, that:

[242] 2024 Va. Acts chs. 794, 818. Code § 56-576 defines "[t]otal annual energy savings" as:

(i) the total combined kilowatt-hour savings achieved by electric utility energy efficiency and demand response programs and measures installed in that program year, as well as savings still being achieved by measures and programs implemented in prior years, or (ii) savings attributable to newly installed combined heat and power facilities, including waste heat-to-power facilities, and any associated reduction in transmission line losses, provided that biomass is not a fuel and the total efficiency, including the use of thermal energy, for eligible combined heat and power facilitates must meet or exceed 65 percent and have a nameplate capacity rating of less than 25 megawatts.

> For the time period 2026 through 2028, and for every successive three-year period thereafter, the Commission shall establish new energy efficiency savings targets. In advance of the effective date of such targets, the Commission shall, after notice and opportunity for hearing, initiate proceedings to establish such targets. As part of such proceeding, the Commission shall consider the feasibility of achieving energy efficiency goals and future energy efficiency savings through cost-effective programs and measures.[243]

For large general service customers who opt-out of Dominion's energy efficiency programs, Code § 56-585.1 A 5 c directs that savings from such customers "shall be accounted for in utility reporting in the standards in § 56-596.2."

As enacted in 2023 (and not subsequently amended),[244] Code § 56-596.2:2 states in part as follows:

> The [Commission] shall establish for [Dominion] annual energy efficiency savings targets for customers who are low-income, elderly, disabled, or veterans of military service to be achieved through utility energy efficiency programs (low-income energy efficiency savings programs) designed to benefit such customers, provided that each year's target shall be measured by the total combined kilowatt-hour savings achieved by electric utility energy efficiency and demand response programs and measures installed for such customers in that program year, as well as savings still being achieved by measures and programs implemented for such customers in prior years, and that such annual targets shall be at least one percent of the average annual energy retail sales by that utility to those customers, to the extent that the potential exists and is reasonably achievable as determined by the Commission.
>
> In establishing such targets, the Commission shall seek to optimize energy efficiency and the health and safety benefits of utility energy efficiency programs.
>
> In advance of the effective date of such annual energy efficiency targets, the first of which shall be for 2025, the Commission shall, after notice and opportunity for hearing, initiate proceedings to establish such targets and the appropriate retail sales against which the energy efficiency targets will be measured.
>
> In setting such targets, the Commission shall consider the impact and savings of energy efficiency programs authorized by subdivision C 2 of § 10.1-1330 of the Code of Virginia. The Commission shall also consider federal loan guarantees, grant funds, and rebates made available pursuant to the federal Inflation Reduction Act (P.L. 117-169) or other similar federal legislation that facilitates energy efficiency projects.
>
> The Commission shall, for the period 2028 through 2030, review and, at its discretion, revise such minimum annual targets to ensure continued consistency

[243] 2021 Special Session I Va. Acts ch. 401.
[244] 2023 Va. Acts ch. 728.

with the provisions of this section.

All savings from low-income energy efficiency programs shall be applied to the energy efficiency savings set forth in subsection B of § 56-596.2 of the Code.... ...

Code § 56-585.1 A 5 c establishes the ratemaking significance of achieving Code § 56-596.2 targets:

Beginning January 1, 2022, and thereafter, if the Commission determines that the utility meets in any year the annual energy efficiency standards set forth in § 56-596.2, in the following year, the Commission shall award a margin on energy efficiency program operating expenses in that year, to be recovered through a rate adjustment clause, which margin shall be equal to the general rate of return on common equity determined as described in subdivision 2. If the Commission does not approve energy efficiency programs that, in the aggregate, can achieve the annual energy efficiency standards, the Commission shall award a margin on energy efficiency operating expenses in that year for any programs the Commission has approved, to be recovered through a rate adjustment clause under this subdivision, which margin shall equal the general rate of return on common equity determined as described in subdivision 2. Any margin awarded pursuant to this subdivision shall be applied as part of the utility's next rate adjustment clause true-up proceeding. The Commission shall also award an additional 20 basis points for each additional incremental 0.1 percent in annual savings in any year achieved by the utility's energy efficiency programs approved by the Commission pursuant to this subdivision, beyond the annual requirements set forth in § 56-596.2, provided that the total performance incentive awarded in any year shall not exceed 10 percent of that utility's total energy efficiency program spending in that same year.

The Commission shall annually monitor and report to the General Assembly the performance of all programs approved pursuant to this subdivision, including each utility's compliance with the total annual savings required by § 56-596.2, as well as the annual and lifecycle net and gross energy and capacity savings, related emissions reductions, and other quantifiable benefits of each program; total customer bill savings that the programs produce; utility spending on each program, including any associated administrative costs; and each utility's avoided costs and cost-effectiveness results.

Code § 56-585.1 A 5 c also explains the significance of failing to achieve Code § 56-596.2 targets:

Notwithstanding any other provision of law, unless the Commission finds in its discretion and after consideration of all in-state and regional transmission entity resources that there is a threat to the reliability or security of electric service to the utility's customers, the Commission shall not approve construction of any new

> utility-owned generating facilities that emit carbon dioxide as a by-product of combusting fuel to generate electricity unless the utility has already met the energy savings goals identified in § 56-596.2 and the Commission finds that supply-side resources are more cost-effective than demand-side or energy storage resources.[245]

Sierra Club cited Code § 56-235.1 as a requirement for utilities to promote the maximum effective conservation.[246] Since 1976, Code § 56-235.1 has stated in part as follows:[247]

> It shall be the duty of the Commission to investigate from time to time the acts, practices, rates or charges of public utilities so as to determine whether such acts, practices, rates or charges are reasonably calculated to promote the maximum effective conservation and use of energy and capital resources used by public utilities in rendering utility service. Where the Commission finds that the public interest would be served, it may order any public utility to eliminate, alter or adopt a substitute for any act, practice, rate or charge which is not reasonably calculated to promote the maximum effective conservation and use of energy and capital resources used by public utilities in providing utility service ...; provided, however, that nothing in this section shall be construed to authorize the adoption of any rate or charge which is clearly not cost-based or which is in the nature of a penalty for otherwise permissible use of utility services.

Appalachian Voices pointed to Code § 45.2-1706.1 A (5) as a policy for Dominion to maximize energy savings.[248] This referenced part of the Commonwealth Energy Policy states in part as follows:

> The Commonwealth recognizes that effectively addressing climate change and enhancing resilience will advance the health, welfare, and safety of the residents of the Commonwealth. The Commonwealth further recognizes that addressing climate change requires reducing greenhouse gas emissions across the Commonwealth's economy sufficient to reach net-zero emission by 2045 in all sectors, including the electric power, transportation, industrial, agricultural, building, and infrastructure sectors. To achieve these objectives, it shall be the policy of the Commonwealth to:
>
> ...
>
> Maximize energy efficiency programs as defined in § 56-576, to the extent determined to be in the public interest, that are the lowest-cost energy option to reduce greenhouse gas emissions, in order to produce electricity cost savings and to create jobs and economic opportunity from the energy efficiency sector....

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245 *See also* Code § 56-585.1 A 6.
246 Tr. at 163-64 (Colton).
247 1976 Va. Acts ch. 379.
248 Tr. at 59-60 (Benforado).

ANALYSIS OF CODE § 56-596.2 TARGETS FOR 2026-2028

Applicable Law

On January 5, 2024, the Commission initiated this proceeding. On April 17, 2024, the Governor signed legislation that amended Code § 56-596.2, effective July 1, 2024. For ease of comparison, a "before and after" of the relevant statutory provisions is shown below.

Before July 1, 2024	On and After July 1, 2024
Code § 56-596.2 B 3: For the time period 2026 through 2028, and for every successive three-year period thereafter, the Commission shall establish new energy efficiency savings targets. In advance of the effective date of such targets, the Commission shall, after notice and opportunity for hearing, initiate proceedings to establish such targets. As part of such proceeding, the Commission shall consider the feasibility of achieving energy efficiency goals and future energy efficiency savings through cost-effective programs and measures.	Code § 56-596.2 B 3: For the time period 2026 through 2028, the Commission shall, after notice and hearing, establish new energy efficiency savings targets measured as a percentage of the average annual energy jurisdictional retail sales by that utility in 2019[.] Code § 56-596.2 B 4: For the time period 2029 through 2031, and for every successive three-year period thereafter, the Commission shall establish new energy efficiency savings targets measured as a percentage of the average annual energy jurisdictional retail sales by that utility in 2019, which shall be the greatest level of energy savings that the Commission finds is feasible and cost-effective pursuant to the Commission's cost-effectiveness test regulations.... As part of such proceeding, the Commission shall consider the feasibility of achieving energy efficiency goals and future energy efficiency savings through cost-effective programs and measures.

Dominion asserted that the statute effective when this case was initiated – *i.e.*, the left column in the table above – is the law applicable to the case.[249] In support of its position, Dominion quoted the Supreme Court of Virginia's *Washington* opinion, which stated that "when a statute is amended while an action is pending, the rights of the parties are to be decided in accordance with the law in effect when the action was begun, unless the amended statute shows a clear intention to vary such rights."[250] Dominion also pointed to the fact that the Commission's

[249] *See, e.g.*, Tr. at 38-39 (Jackson), 295-96 (Ray).
[250] Tr. at 295 (Ray); Ex. 2 (Targets Proposal) at 2, n.5 (citing the above quotation of *Washington v. Commonwealth*, 216 Va. 185, 193 (1975) ("*Washington*"), in *Appalachian Power Co. v. State Corp. Comm'n*, 301 Va. 257, 295 (2022)).

Consolidated Procedural Order, which was entered before the 2024 legislation was enacted, cited the prior version of the statute.[251] However, VAEEC, Appalachian Voices, and Sierra Club asserted that the applicable version of the statute is its current form – *i.e.*, Code § 56-596.2 B 3 as it appears in the right column of the table above.[252]

Applying *Washington*,[253] the 2024 legislative amendment could express a clear intention for the Commission to apply its amended language when setting the targets for 2026-2028 in this case. By separating the provisions applicable to the 2026-2028 targets (Code § 56-596.2 B 3) from those applicable to future targets (Code § 56-596.2 B 4), the instant case represents the only opportunity to apply the amended language of Code § 56-596.2 B 3. In other words, the question presented in the instant case is not *when* the new language is implemented (the *Washington* issue the Commission typically confronts); the question is *whether* the new language is ever implemented. Accordingly, application of *Washington* in the manner suggested by Dominion conflicts with the statutory rule of construction that words of a statute are presumed not to be meaningless.[254] By moving more prescriptive language to the statutory provisions governing targets for 2029 to be set in a future case, the plain language of the 2024 amendments could show a clear intent to ensure the Commission has broader discretion in the instant case.

Which version of the statute controls, however, does not materially affect my analysis of this case. That the current version of the statute does not expressly require the Commission to consider feasibility and cost-effectiveness does not mean the Commission cannot, or should not, consider such factors. In exercising its broad discretion, I agree with Staff, Dominion, Appalachian Voices, VAEEC, and Sierra Club[255] that the Commission should consider evidence on feasibility and cost-effectiveness when setting Dominion's targets for 2026-2028.[256] Consequently, my analysis below would not differ, regardless of the version of Code § 56-596.2 B 3 the Commission decides to apply in this case.

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[251] Tr. at 49-50 (Ray).
[252] Tr. at 279 (Clancy), 285 (D. Jaffe), 52, 57-58 (C. Jaffe).
[253] I view *Washington* as an important precedent, especially given the more frequent legislative changes made recently to utility statutes governing Commission proceedings. *Washington* provides greater legal certainty to the Commission, regulated entities, other Commission case participants, and potentially also to the General Assembly as it crafts legislation.
[254] *See, e.g., Bragg Hill Corp. v. City of Fredericksburg*, 297 Va. 566, 584 (2019) ("[W]e presume that every part of a statute has some effect, and [ ] will not consider any portion meaningless unless absolutely necessary.") (quoting *Logan v. City Council*, 275 Va. 483, 493 (2008)).
[255] Tr. at 193-95 (Ricketts), 279 (Clancy), 285 (D. Jaffe), 57-58 (C. Jaffe).
[256] Additionally, I do not view the requirement for the Commission to consider feasibility and cost-effectiveness (as previously required for setting all targets, but now required for setting targets after 2028) as establishing exclusive criteria for the Commission to consider.

Analysis

The table below shows Dominion's proposed targets and the proposals/scenarios that are directly comparable to Dominion's proposal.[257]

	Staff Scenario A1	Dominion	Staff Scenario A2	Staff Scenario B1	Appalachian Voices	Staff Scenario B2
2026	2.37%	2.10%	5.17%	3.45%	3.80%	6.25%
2027	2.54%	2.41%	5.34%	4.70%	5.40%	7.50%
2028	2.71%	2.73%	5.51%	5.95%	7.00%	8.75%

In addition, while not directly comparable to the figures shown above, Sierra Club proposed increasing by at least 175% Dominion's residential target amounts not attributable to income- and age-qualifying customers.[258]

The 2026 targets for Staff Scenarios A2 and B2 are much higher than the other proposals because the starting point for calculating these scenarios is the 5.0% statutory target for 2025. No case participant – Dominion, Staff, or the respondents – has suggested that Dominion is on track to achieve the 5.0% statutory target for 2025 that the General Assembly enacted in 2020, before the scale and effects of the pandemic were known. The record indicates Dominion achieved net savings of approximately 1.23% in 2022 and reported 1.4% of net savings for 2023.[259] Accordingly, my comparative analysis has focused on the proposals/scenarios other than Staff Scenarios A2 and B2, as shown below.

	Staff Scenario A1	Dominion	Staff Scenario B1	Appalachian Voices
2026	2.37%	2.10%	3.45%	3.80%
2027	2.54%	2.41%	4.70%	5.40%
2028	2.71%	2.73%	5.95%	7.00%

As shown above, while they are based on different methodologies, Staff Scenario A1 and Dominion's proposal are relatively comparable. Staff's Scenario A1 is based on Dominion's projected 2.2% net energy savings in 2025 and the annual incremental savings between 2022 and 2023, as reported in the 2023 EM&V Report.[260] In contrast, Dominion's methodology takes 2023 actual net energy savings, increases customer-facing program savings by 10% year-over-year, and then adds Dominion's projected levels of savings from its voltage optimization program and large general service customer opt-outs.[261]

Staff Scenario B1 is based on Dominion's projected 2.2% net energy savings in 2025 (same as A1), but is increased annually by the 1.25% increment the General Assembly used for the statutory 2022-2025 targets.[262]

[257] *See, e.g.*, Ex. 15; Ex. 10 (Ricketts) at 30-31; Ex. 5 (Grevatt) at 31.
[258] *See, e.g.*, Ex. 8 (Colton) at 66. Mr. Colton did not offer such residential savings as a percentage of 2019 savings, because he found such a figure irrelevant and not directly comparable to the percentages shown above. *Id.* at 68; Tr. at 151-52 (Colton).
[259] *See, e.g.*, Ex. 10 (Ricketts) at 11-13.
[260] Ex. 10 (Ricketts) at 28, 30; Ex. 11.
[261] *See, e.g.*, Ex. 15.
[262] Ex. 10 (Ricketts) at 30-31.

Appalachian Voices' proposed targets are based on Dominion's projected net energy savings for 2025 (like Staff Scenarios A1 and B1).[263] To this amount, Appalachian Voices applied a 1.60% annual incremental increase based on reported peer utility data. Specifically, Appalachian Voices first averaged net savings percentages during 2020, 2021, or 2022 for nine electric utilities generally located in the Southeast or Midwest.[264] These utilities were originally selected in part because they all had reported net savings percentages above 1.00%, although two utilities fell below that initial screening threshold for the year used by Appalachian Voices.[265] Appalachian Voices indicated it then applied the 1.53% average incremental annual savings of peer utilities to all the energy efficiency programs Dominion offers, which resulted in approximately 2.0% total annual incremental savings.[266] Appalachian Voices then adjusted this incremental amount down to 1.47% to: (i) eliminate savings from the residential appliances and lighting base program; and (ii) lower the penetration rate for non-residential prescriptive savings to account for reduced lighting potential.[267] Appalachian Voices then lowered this incremental amount by 152,463 MWh annually as an assumed 10% annual measure expiration. Finally, Appalachian Voices added Dominion's projected savings from voltage optimization and opt outs to arrive at its proposed 1.60% annual net savings increment for Dominion.[268]

In setting energy efficiency targets pursuant to Code § 56-596.2, I find value in considering data from Dominion's performance in addition to data from peer utilities.[269] Indeed,

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[263] Mr. Grevatt adds projected opt-out and voltage optimization savings to Dominion's 2025 projection of 1,524,628 MWh to arrive at 2.43%. Staff presents a 2025 projection of 2.2%, which is based on the same 1,524,628 MWh figure but does not add separate amounts for opt-out and voltage optimization savings. *Compare* Ex. 5 (Grevatt) at 32 *with* Ex. 10 (Ricketts) at 13. The 2023 EM&V Report supports Staff's use of a 2.2% figure. Ex. 11 at 2.

[264] Ex. 5 (Grevatt) at 24-25. These utilities are Ameren (Illinois), BG&E, ComEd, Consumers, Duke North Carolina, Duke Progress, DTE, Entergy (Arkansas), and Xcel (Minnesota). *Id. See also* Ex. 6 at 51.

[265] Ex. 5 (Grevatt) at 24-25.

[266] *Id.* at 27.

[267] *Id.* at 28, 30.

[268] *Id.* at 30, 32.

[269] Counsel for VAEEC pointed to the regulatory use of peer group companies to determine a public utility's rate of return on common equity. *See, e.g.,* Tr. at 277-78 (C. Jaffe). I note the Commission has previously recognized value in peer group data when evaluating generation and reliability performance for purposes of a return on equity performance incentive under superseded provisions of Code § 56-585.1 A 2 c. *See, e.g., Commonwealth of Virginia, ex rel. State Corporation Commission, Ex Parte: In re: In the matter of adopting rules and regulations for consideration of the Performance Incentive authorized by § 56-585.1 A 2 c of the Code of Virginia*, Case No. PUE-2012-00021, 2013 S.C.C. Ann. Rep. 238, 239, Order Adopting Rules and Regulations (Jan. 11, 2013) ("APCo also requested that its generating plant performance, customer service, and operating efficiency only be compared with its own historic performance levels when determining whether a Performance Incentive should be applied and not be compared with peer group data. [Dominion] requested a similar approach when measuring customer service using, for example, the System Average Interruption Duration Index … and the System Average Interruption Frequency Index…. The Commission finds, however, that the benchmarking analyses included in the proposed rules and regulations should be retained. Such information may, on a case-by-case basis, be relevant in exercising the Commission's discretion under this statute. A utility's generating plant performance, for example, may be trending upward over time but may fall well below the performance levels of its peers. Conversely, a utility's generating plant performance may be trending downward over time, but such performance may be far superior to the generating plant performance of a utility's peers. The Commission finds that the filing requirements for peer group data, which can be used for benchmarking purposes, should be retained in Schedule 49. The Commission further recognizes that differences in service territories, generation mix, and methods of reporting exist among utilities. However, the solution to this problem is not to entirely eliminate the filing requirement for peer group data, which can be used for benchmarking purposes."). Code § 56-585.1 A 2 c has been amended multiple times since this rulemaking and no longer uses the phrase "performance incentive." *See* 2013 Va. Acts ch. 2.

while Dominion did not use peer utility data to calculate its proposed targets, Dominion witness Walker acknowledged that peer data is a useful reference.[270] Dominion's consultant (Cadmus) also used peer utility data in the 2021 Long-Term DSM Plan to identify ways to help the Company increase savings.[271] Accordingly, the record indicates that peer data can – and has – been used to identify potential energy efficiency savings for Dominion.

While Appalachian Voices' methodology does not rely exclusively on peer data, it uses "high achieving utilities"[272] to produce what Appalachian Voices' witness Grevatt described as "a reasonable high-end boundary for what is feasible."[273] In my opinion, target setting pursuant to Code § 56-596.2 should not over-rely on peer data. Due to differences in rates, climates, stringency in cost-effectiveness reviews, and other factors, I view one utility's energy efficiency performance as informative, but not directly transferrable, to another utility's performance or potential.[274] Additionally, Commission regulation prefers the use of Dominion-specific information in the Company's EM&V reports,[275] which the *2023 DSM Order* used to determine whether Dominion achieved the Code § 56-596.2 savings target for 2022.[276]

In the instant case, record evidence specific to Dominion supports a finding of potential energy efficiency savings untapped by Dominion and not sufficiently reflected in the Company's proposal, including:

- Dominion's implementation of energy efficiency recommendations in the 2021 Long-Term DSM Plan remains ongoing and has not been completed.[277]
- As energy efficiency programs become more mature than Dominion's, it is more likely that customers and service providers will think about program options when it is time to replace equipment.[278]
- In 2022 and again in 2023, savings from Dominion's customer-facing energy efficiency programs grew 16% year-over-year, which is higher than the five-year average from 2019-2023 used by Dominion's target methodology. If this higher growth continues, it could reveal a trend instead of a "rebound" out of the pandemic.[279]
- Dominion's 2024 Potential Study estimated achievable potential savings in Dominion's Virginia service territory that are higher than the Company's proposed targets.[280]

[270] Tr. at 224-25 (Walker).
[271] *Id.*
[272] Ex. 5 (Grevatt) at 25. Of the 52 utilities for which ACEEE's 2023 scorecard ranked, all of Mr. Grevatt's utilities are in the top half, ranging from the third to 25th ranking. Ex. 6 at 51-52.
[273] Tr. at 123 (Grevatt).
[274] *See, e.g.*, Ex. 2 (Target Proposal) at 13-15.
[275] 20 VAC 5-318-50 B (referencing 20 VAC 5-318-40).
[276] Ex. 10 (Ricketts) at 9-10 (citing *2023 DSM Order* at 16).
[277] *See, e.g.*, Ex. 9 (Project Management Report).
[278] Ex. 13 (Goldberg rebuttal) at 7-8. As explained by Dr. Goldberg, the pandemic was problematic for energy efficiency programs because commercial customers were not on premises and residential customers would not allow anybody in their homes. Tr. at 233 (Goldberg).
[279] Tr. at 271 (Goldberg); Ex. 2 (Target Proposal) at 6. Using Dominion's methodology, but increasing year-over-year growth of the Company's customer-facing programs from 10% (five-year average) to 16% (average of the most recent two years of data) increases the target calculation to 2.40% (2026), 2.87% (2027), and 3.39% (2028).
[280] *See, e.g.*, Ex. 2 (Target Proposal) at 11 (showing, among other things, achievable net savings of 3.32% and 3.96% by 2028 under the 2024 Potential Study's 50% and 75% incentive scenarios, respectively).

- Large general service customer opt-out savings, which can increase with no investment or implementation by Dominion, count towards Dominion's savings achievement.[281]

Case participants have also identified the legislative directive for the Commission to modify its cost-effectiveness evaluation of energy efficiency programs.[282] That process has been initiated in Case No. PUR-2024-00120. Should the Commission modify the cost-effectiveness evaluation in a manner that allows more of Dominion's programs to pass such scrutiny,[283] this possible outcome would increase potential savings.

Based on the record, including the evidence identified above, I find that Dominion's proposal and Staff's Scenario A1 establish a reasonable low-end of a range of feasible targets pursuant to Code § 56-596.2. And I agree with Appalachian Voices that its proposal is a reasonable high-end boundary for feasible targets pursuant to Code § 56-596.2. I recommend proposed targets of 3.00%, 4.00%, and 5.00%, which is near the midpoint between the low- and high-end of the range I find reasonable. However, I recognize the Commission could weigh the evidence differently to approve targets that are higher or lower than my recommendation.

The targets recommended herein are based on my evaluation and weighing of evidence on the feasibility of achieving energy efficiency goals and future energy efficiency savings through cost-effective programs and measures. I have considered the potential effects of the Inflation Reduction Act, which Staff and Dominion agree remain uncertain.[284] I am also mindful of the Code § 56-585.1 A 5 c consequences that the General Assembly has attached to the achievement, or failure to achieve, the Code § 56-596.2 targets set in this case. Set the target too low, and the ratemaking bonus effectively becomes a ratepayer gift to the utility of up to 10 percent of total energy efficiency program spending in a year.[285] Set the target too high, the Commission may not, absent a reliability issue, consider approving a fossil fuel power plant – no matter how economic the plant may be for ratepayers. These statutory consequences offer further support, in my view, to setting targets near the midpoint of the low- and high-end of the range the record developed in this proceeding establishes as reasonable.

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281 Code § 56-585.1 A 5 c.

282 2024 Va. Acts chs. 794, 818, Enactment Clause 2 ("That, no later than September 30, 2025, the [Commission] shall promulgate regulations establishing a single, consistent cost-effectiveness test for use in evaluating proposed energy efficiency programs. In developing this test, the Commission shall (i) refer to the cost-benefit analysis framework and process contained in the National Energy Screening Project's National Standard Practice Manual for Benefit-Cost Analysis of Distributed Energy Resources, in addition to any other materials deemed relevant by the Commission; (ii) utilize a stakeholder process to develop such regulations, facilitated by an independent monitor with technical assistance provided by a group with experience in the process set forth in the National Standard Practice Manual for Benefit-Cost Analysis of Distributed Energy Resources, compensated under the funding provided pursuant to [Code § 56-592.1 E]; and (iii) design such regulations to further the Commonwealth's energy policy requirements and goals, including furthering compliance with the standards set forth under [Code § 56-596.2], as amended by this act.").

283 Sierra Club asserted that potential savings are higher than Dominion's estimates because Dominion failed to include other program impacts in its TRC test. *See, e.g.*, Ex. 8 (Colton) at 20-23, 27-28. Whether other program impacts should be added to the Commission's cost-effectiveness review is a question better addressed in Case No. PUR-2024-00120, in my opinion.

284 *See, e.g.*, Tr. at 92-93 (Goldberg), 212-13 (Ricketts).

285 In Consumer Counsel's opinion, "the Commission's task in this case is to set targets that find a balance between feasibility and challenge." Tr. at 72 (Farmer).

ANALYSIS OF CODE § 56-596.2:2 TARGETS BEGINNING IN 2025

Applicable Law

Dominion's Target Proposal asserted that the legislative amendment to Code § 56-596.2 enacted in 2024 (as discussed in the preceding section) shows a clear intention by the General Assembly to supersede the language in Code § 56-596.2:2.[286] I do not see any such intent in the 2024 legislation. The 2024 legislation did not repeal or amend Code § 56-596.2:2. Nor did the 2024 legislation include a *non-obstante* clause ("Notwithstanding Code § 56-596.2:2 …") or other language indicating that the language maintained in Code § 56-596.2:2 should be disregarded for language in the amended Code § 56-596.2. Accordingly, my analysis below applies Code § 56-596.2:2 to the evidence developed on energy efficiency savings targets for the relevant Dominion customers.

Analysis

In setting annual targets pursuant to Code § 56-596.2:2 for Dominion's "customers who are low-income, elderly, disabled, or veterans of military service," the statute directs the Commission to establish "targets and the appropriate retail sales against which the energy efficiency targets will be measured." Further, "such annual targets shall be at least one percent of the average annual energy retail sales by [Dominion] to those customers, to the extent that the potential exists and is reasonably achievable."

Dominion witness Walker summarized the target proposals for Code § 56-596.2:2 customers using the table below.[287]

	Company	**Staff Scenario C1[I]**	**Staff Scenario D1[II]**	**APV**	**Sierra Club[2]**
2025	0.036%	0.042%	1.287%	Multiply average residential electricity use by the number of eligible households, and then taking 1% of that amount as the minimum required IAQ savings.	--
2026	0.039%	0.047%	2.537%		0.365%
2027	0.043%	0.052%	3.787%		0.402%
2028	0.048%	0.057%	5.037%		0.442%

Other than Appalachian Voices' proposal, all proposals/scenarios shown above are presented as percentages of 2019 retail sales to all Virginia jurisdictional customers, similar to the proposals/scenarios presented under Code § 56-596.2. However, as discussed above, the General Assembly directed the Commission to establish targets under Code § 56-596.2:2 as a percentage of "annual energy retail sales by [Dominion] to those customers."[288] Based on my

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[286] Ex. 2 (Target Proposal) at 2 (referencing 2024 Va. Acts chs. 794, 818).

[287] Ex. 12 (Walker rebuttal) at 3 (footnotes omitted) (table number omitted). I find the table accurately represents the target proposals it addresses. Staff presented six additional alternative scenarios not included in the table, the two identified above approximate the high-end and low-end of Staff's scenarios. Those scenarios are also presented as percentages of 2019 retail sales. Ex. 10 (Ricketts) at attached corrected Appendix AAR-3.

[288] Appalachian Voices characterized Dominion's approach to implementing this language as a "shoulder shrug[]." Ex. 5 (Grevatt) at 33.

reading of the statute, "those customers" refers back to Dominion's "customers who are low-income, elderly, disabled, or veterans of military service." Accordingly, I find Appalachian Voices' approach more consistent with Code § 56-596.2:2.

The record demonstrates that the annual amount of retail energy Dominion sells to its low-income, elderly, disabled or veteran customers is unknown and cannot be estimated with any reasonable degree of precision at this time. Dominion does not collect information on whether customers are low-income, elderly, disabled, or veterans,[289] and has legal concerns associated with doing so.[290] Sierra Club witness Colton is not aware of any utility that collects such information from its customers.[291] Dominion's implementation of income and age-qualifying energy efficiency programs and the percentage of income payment program provides, or will provide, some information, which the Company and Staff have suggested can be used as a proxy amount.[292] But even that information would only provide a subset of a subset of the data needed to calculate an annual amount of sales for all of "those customers."[293] Given these circumstances, Appalachian Voices' approach of calculating an imprecise 1% savings amount based in part on an estimate of eligible households using census data or other sources of public information and an assumed average usage level appears to be reasonable.[294]

Most of the estimates addressing this issue focused on low-income customers (number and usage). Witnesses provided low-income customer estimates ranging between 25% to 44% of Dominion's residential customers. The record identifies annual usage of Dominion's residential customers averaging between 11,536 and 13,048 kWh in recent years,[295] while Dominion indicated that the approximately 52,000 customers who have participated in Dominion's income and age qualifying programs have had median annual energy usage of 7,503 kWh.[296] Combining the high-end of the customer count range (44%) and the low-end of the usage range (7,503 kWh) produces a 1% figure (77,016 MWh) that is close to the 1% figure (76,099 MWh) produced by combining the low-end of the customer count range (25%) and the high-end of the usage range (13,048 kWh).[297] As the approximately 77,000 MWh amount arrived at with both of these calculations focuses on low-income customers, it likely understates the annual amount of retail energy Dominion sells to its low-income, elderly, disabled or veteran customers, in my opinion.

Assuming 77,000 MWh is a reasonable, albeit imprecise and likely understated, estimate of 1% of the average annual energy retail sales by Dominion to its Virginia jurisdictional low-income, elderly, disabled, and veteran customers for purposes of implementing Code

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[289] Tr. at 229 (Walker).
[290] Tr. at 304-05 (Ray) (referencing potential implications under data privacy laws, such as the Virginia Consumer Data Protection Act).
[291] Tr. at 185-86 (Colton).
[292] *See, e.g.*, Ex. 12 (Walker rebuttal) at 6-7; Ex. 10 (Ricketts) at 38-39; Tr. at 198-99 (Ricketts).
[293] *See, e.g.*, Ex. 10 (Ricketts) at 38-39 and attached Appendix AAR-1, p. 6 (Dominion's response to Staff discovery request no. 3-9 (e) ("PIPP participants will not represent the entire population of 'IAQ-eligible or similar customers.' Thus, while the Company could use PIPP participant energy usage as a proxy, it may under-represent the total population.")); Tr. at 212 (Ricketts), 153-54 (Colton).
[294] Ex. 5 (Grevatt) at 33.
[295] Tr. at 154 (Colton).
[296] Ex. 12 (Walker rebuttal) at 6-7.
[297] 2,332,881 residential customers x .44 x 7,503kWh = 7,701,586,703kWh. 1% = 77,015,867kWh or 77,016 MWh. 2,332,881 residential customers x .25 x 13,048kWh = 7,609,857,822kWh. 1% = 76,098,578kWh or 76,099 MWh.

§ 56-596.2:2, the next question under the statute is "the extent that the potential exists" and the amount "is reasonably achievable as determined by the Commission." In this regard, my analysis focuses on the years 2025 through 2027, because Code § 56-596.2:2 specifically directs the first target under the statute to be for 2025[298] and directs the Commission to consider – in the future – a potential revision of targets for 2028 through 2030.[299]

Dominion's proposed annual target savings amounts range from 24,468 MWh to 32,566 MWh.[300] Sierra Club recommends annual target savings amounts of approximately 249,219 MWh to 301,556 MWh.[301] Based on the record, I find the potential may exist in 2025 for the statutory default amount of 77,000 MWh savings from the broad assortment of customers identified in Code § 56-596.2:2. However, in 2023 Dominion achieved 22,370 MWh of savings through its income and age qualify qualifying energy efficiency programs.[302] Given that 2025 is weeks away, it does not appear "reasonably achievable," in my opinion, for Dominion to more than triple such savings in so short a time. Accordingly, I recommend Code § 56-596.2:2 targets that incorporate savings growth that is proportional to the Code § 56-596.2 targets I recommend. Specifically, I recommend Code § 56-596.2:2 targets of 39,400 MWh for 2025; 47,900 MWh for 2026; and 63,900 MWh for 2027.[303]

The targets recommended herein are based on my evaluation and weighing of evidence on the feasibility of achieving future energy efficiency savings through programs and measures that the Code and Commission do not require to be cost-effective.[304] I have considered the potential effects of the Inflation Reduction Act, which Staff and Dominion agree remain uncertain.[305] I am also mindful that, unlike Code § 56-596.2:2, the General Assembly has attached no direct Code § 56-585.1 A 5 c consequences to the achievement, or failure to achieve, the Code § 56-596.2:2 targets set in this case.[306]

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[298] Code § 56-596.2:2 ("In advance of the effective date of such annual energy efficiency targets, the first of which shall be for 2025…").

[299] *Id.* ("The Commission shall, for the period 2028 through 2030, review and, at its discretion, revise such minimum annual targets….").

[300] Ex. 2 (Target Proposal) at 18. Dominion proposes targets for 2025 through 2028.

[301] Ex. 8 (Colton) at 71. Sierra Club's recommended targets for 2026 through 2028 that are based in part on a 2% target, average residential usage, and a 43% customer count. *Id.* at 70-71.

[302] Ex. 2 (Target Proposal) at 7. One of these programs includes disability as a criterion for eligibility. Ex. 11 (2023 EM&V Report) at unpaginated 69.

[303] For 2026, 22,370 MWh * (3.0%/1.4%) = 47,936 MWh. For 2027, 22,370 MWh * (4.0%/1.4%) = 63,915 MWh. For 2025, 22,370 MWh * (2.47%/1.4%) = 39,413 MWh. Because there is no recommended Code § 56-596.2 B 3 target for 2025, the factor used to increase the Code § 56-596.2:2 target for this year is interpolated from the 2023 actual amount and the 2026 Code § 56-596.2 target recommended herein. 3.0%-1.4%=1.6%. 1.6%/3=0.533%. 1.4% + 0.533% + 0.533% = 2.47%.

[304] Code § 56-576 ("In the public interest" definition) ("an energy efficiency program may be deemed to be 'in the public interest' if the program … provides measurable and verifiable energy savings to low-income customers or elderly customers …"). Code § 56-596.2:2 directs the Commission, in establishing such targets, to "seek to optimize energy efficiency and the health and safety benefits of utility energy efficiency programs." In my opinion, the Commission's establishment of feasible and reasonably achievable targets under Code §§ 56-596.2 and 56-596.2:2, respectively, would be consistent with this directive.

[305] *See, e.g.,* Tr. at 92-93 (Goldberg), 212-13 (Ricketts).

[306] Code § 56-596.2:2 requires savings from low-income energy efficiency programs also to be applied to achievement under Code § 56-596.2. Accordingly, low-income savings can affect achievement under Code § 56-596.2 and the legal consequences associated therewith.

FINDINGS AND RECOMMENDATIONS

Based on the Code and the record developed in this case, I find that:

(1) For purposes of establishing Dominion's energy savings targets pursuant to Code § 56-596.2 B 3, the record can support a range of feasible targets for 2026, 2027, and 2028.

(2) The energy savings targets proposed by Dominion (2.10%, 2.41%, and 2.73%) and presented in Staff's Scenario A1 (2.37%, 2.54%, and 2.71%) establish a reasonable low-end of feasible targets pursuant to Code § 56-596.2 B 3.

(3) The energy savings targets proposed by Appalachian Voices (3.80%, 5.40%, and 7.00%) are a reasonable high-end boundary for feasible targets pursuant to Code § 56-596.2 B 3.

(4) Pursuant to Code § 56-596.2 B 3, it would be reasonable to establish for Dominion energy savings targets of 3.00%, 4.00%, and 5.00%, for 2026, 2027, and 2028, respectively. These target levels are near the midpoint between the low- and high-end of the range I find reasonable. However, the Commission could weigh the evidence differently to approve targets that are higher or lower than my recommendation.

(5) Any target calculation pursuant to Code § 56-596.2:2 will necessarily be imprecise, as Dominion does not track which customers it serves are low-income, elderly, disabled, or veterans of military service.

(6) Based on the record, 77,000 MWh is an imprecise and likely understated estimate of 1% of the average annual energy retail sales by Dominion to its Virginia jurisdictional low-income, elderly, disabled, or veteran customers.

(7) Pursuant to Code § 56-596.2:2, energy savings targets of 39,400 MWh for 2025; 47,900 MWh for 2026; and 63,900 MWh for 2027 would be reasonably achievable. However, the Commission could weigh the evidence differently to approve targets that are higher or lower than my recommendation.

Accordingly, **I RECOMMEND THAT** the Commission enter an order that:

(1) ***ADOPTS*** the findings and recommendations in this Report;

(2) ***ESTABLISHES*** for Dominion, pursuant to Code § 56-596.2, energy savings targets of 3.00% for 2026; 4.00% for 2027; and 5.00% for 2028; and

(3) ***ESTABLISHES*** for Dominion, pursuant to Code § 56-596.2:2, energy savings targets of 39,400 MWh for 2025; 47,900 MWh for 2026; and 63,900 MWh for 2027.

COMMENTS

Staff and parties are advised that, pursuant to Rule 5 VAC 5-20-120 C of the Commission's Rules of Practice and Procedure ("Rules of Practice") and Code § 12.1-31, any comments on this Report must be filed on or before November 25, 2024. To promote administrative efficiency, the parties are encouraged to file electronically in accordance with 5 VAC 5-20-140 of the Rules of Practice. If not filed electronically, an original and fifteen (15) copies must be submitted in writing to the Clerk of the Commission, c/o Document Control Center, P.O. Box 2118, Richmond, Virginia 23218. Any party filing such comments shall attach a certificate to the foot of such document certifying that copies have been sent by electronic mail to all counsel of record and any such party not represented by counsel.

Respectfully submitted,

D. Mathias Roussy, Jr.
Chief Hearing Examiner

Document Control Center is requested to send a copy of the above Report to all persons on the official Service List in this matter. The Service List is available from the Clerk of the State Corporation Commission, c/o Document Control Center, 1300 East Main Street, Tyler Building, First Floor, Richmond, VA 23219.