

COMMONWEALTH OF VIRGINIA
STATE CORPORATION COMMISSION
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COMMONWEALTH OF VIRGINIA, *ex rel.*

STATE CORPORATION COMMISSION

CASE NO. PUR-2020-00156

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

FINAL ORDER

Virginia Electric and Power Company d/b/a Dominion Energy Virginia ("Dominion" or "Company") annually files with the State Corporation Commission ("Commission") a petition for approval of costs related to demand-side management ("DSM") programs pursuant to § 56-585.1 A 5 of the Code of Virginia ("Code").¹ Through cases filed to date, Dominion has received approval for eight phases of DSM programs.

¹ See e.g., *Petition of Virginia Electric and Power Company, For approval to implement new demand-side management programs and for approval of two updated rate adjustment clauses pursuant to § 56-585.1 A 5 of the Code of Virginia*, Case No. PUE-2014-00071, 2015 S.C.C. Ann. Rept. 230, Final Order (Apr. 24, 2015); *Petition of Virginia Electric and Power Company, For approval to implement new demand-side management programs, for approval to continue a demand-side management program, and for approval of two updated rate adjustment clauses pursuant to § 56-585.1 A 5 of the Code of Virginia*, Case No. PUE-2015-00089, 2016 S.C.C. Ann. Rept. 275, Final Order (Apr. 19, 2016); *Petition of Virginia Electric and Power Company, For approval to implement new, and to extend existing, demand-side management programs and for approval of two updated rate adjustment clauses pursuant to § 56-585.1 A 5 of the Code of Virginia*, Case No. PUE-2016-00111, 2017 S.C.C. Ann. Rept. 384, Final Order (June 1, 2017); *Petition of Virginia Electric and Power Company, For approval to extend an existing demand-side management program and for approval of two updated rate adjustment clauses pursuant to § 56-585.1 A 5 of the Code of Virginia*, Case No. PUR-2017-00129, 2018 S.C.C. Ann. Rept. 282, Final Order (May 10, 2018) ("2017 DSM Proceeding"); *Petition of Virginia Electric and Power Company, For approval to implement demand-side management programs and for approval of two updated rate adjustment clauses pursuant to § 56-585.1 A 5 of the Code of Virginia*, Case No. PUR-2018-00168, 2019 S.C.C. Ann. Rept. 285, Order Approving Programs and Rate Adjustment Clauses (May 2, 2019).

The purpose of DSM programs is to reduce energy usage, either at peak times (demand response and peak-shaving programs) or year-round (energy efficiency programs). Once DSM programs have been approved, the Company is required to submit annual evaluation, measurement, and verification ("EM&V") reports of the approved programs to the Commission including evidence of actual energy savings achieved as a result of each specific program along with revised cost-benefit test results that incorporate actual Virginia energy savings and cost data. The EM&V presented in the Company's annual DSM filings routinely has been a disputed issue among the case participants.²

In its 2019 DSM Final Order, the Commission indicated that it would establish a new docket to consider issues related to, among other things, the determination of baselines, the measurement of savings for Dominion's current DSM programs and the creation of a standardized "dashboard" for reporting energy investments and savings.³

Accordingly, on August 28, 2020, the Commission issued its Order Initiating Proceeding ("Initiating Order") in this docket to consider the baselines and measurement of savings for specified programs on Dominion's Phase I through Phase VIII DSM Programs.⁴ Through the Initiating Order, the Commission directed Dominion to make an initial filing including information on: a summary or "dashboard" style format for reporting energy and demand savings; the baseline Dominion used in its analysis when initially proposing each program and

² See, e.g., 2017 DSM Proceeding, Ex. 20 (Loiter) at 13-14, 20.

³ See *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. Rept. 368, 375, Final Order (July 30, 2020) ("2019 DSM Final Order").

⁴ A list of these programs may be found in the Initiating Order at 4-5.

measure and whether the Company now recommends changing this baseline;⁵ how the baseline was determined, the cost or estimated cost of determining the baseline, and whether the baseline is utility-specific or Virginia-specific; and information related to the ability and cost of collecting program- and measure-specific EM&V data that is utility-specific, Virginia-specific, and based on data from non-Virginia jurisdictions and sources.⁶ The Initiating Order also established a procedural schedule for this case, set a public hearing on this matter for May 25, 2021, and appointed a Hearing Examiner to conduct all further proceedings in this case on behalf of the Commission.⁷

On November 6, 2020, Dominion filed its direct testimony and supporting materials ("Initial Filing").⁸ Notices of participation were filed by the following: the Virginia Energy Efficiency Council ("VAEEC"), the Office of the Attorney General's Division of Consumer Counsel ("Consumer Counsel"), Appalachian Power Company, Washington Gas Light Company ("WGL"), Appalachian Voices ("Environmental Respondent"), Columbia Gas of Virginia, Inc. ("Columbia Gas"), and the Board of Supervisors of Culpeper County.⁹

⁵ For purposes of this case, the Commission defined the "baseline" as "the expected energy or demand usage for an activity absent the DSM program or measure." Initiating Order at 6.

⁶ *Id.* at 5-7.

⁷ *Id.* at 7-13.

⁸ On January 13, 2021, Dominion filed corrected pages to its Initial Filing.

⁹ On December 17, 2020, Dominion filed a Motion for Entry of a Protective Ruling and Additional Protective Treatment. The Company requested extraordinarily sensitive treatment for information related to competitively negotiated terms, conditions, and prices the Company paid to DNV and other DSM vendors ("DSM Contracts and Prices"). The Chief Hearing Examiner's Protective Ruling and Additional Protective Treatment for Extraordinarily Sensitive DSM Contracts and Prices was issued on December 21, 2020. DNV, formerly known as DNV GL, is Dominion's third-party EM&V vendor. Report of Alexander F. Skirpan, Jr., Chief Hearing Examiner ("Report") at 2 and n.6.

On March 23, 2021, Environmental Respondent and the VAEEC filed direct testimony. On April 13, 2021, the Commission's Staff ("Staff") filed direct testimony. On May 4, 2021, Dominion filed rebuttal testimony.

Due to the ongoing public health issues caused by COVID-19, a Chief Hearing Examiner's Ruling dated April 8, 2021, advised the hearing scheduled for May 25, 2021, would be conducted virtually via Microsoft Teams and set forth procedures for the virtual hearing. On May 25, 2021, the hearing for this matter was held virtually. Vishwa B. Link, Esquire, Lisa R. Crabtree, Esquire, and April M. Jones, Esquire, of McGuireWoods, LLP; and Audrey T. Bauhan, Esquire, of Dominion Energy Services, Inc., appeared on behalf of Dominion. Cale Jaffe, Associate Professor of Law and General Faculty Director of the Environmental and Regulatory Law Clinic, University of Virginia School of Law, appeared on behalf of VAEEC. Nathaniel H. Benforado, Esquire, of the Southern Environmental Law Center, appeared on behalf of Environmental Respondent. John E. Farmer, Jr., Esquire, and C. Mitch Burton, Jr., Esquire, appeared on behalf of Consumer Counsel. Andrea B. Macgill, Esquire, and Kiva Bland Pierce, Esquire, appeared on behalf of Staff.

One public witness offered testimony. Additionally, the following filed public comments: Robert Vanderhye, WGL, Columbia Gas, Natural Resources Defense Council, James Taylor, and the Virginia Department of Mines, Minerals and Energy.¹⁰

Post-hearing briefs were filed on June 22, 2021, by Dominion, VAEEC, Environmental Respondent, Consumer Counsel, and Staff.

¹⁰ The Virginia Department of Mines, Minerals and Energy was renamed the Virginia Department of Energy effective October 1, 2021.

On July 30, 2021, Chief Hearing Examiner Alexander F. Skirpan, Jr., filed his Report. In the Report, the Chief Hearing Examiner made the following findings:¹¹

- (1) The focus of this proceeding is on adopting a more rigorous and accurate EM&V, and not on whether the Company's current EM&V meets industry standards.
- (2) The Commission should direct Staff to participate in the stakeholder process as a stakeholder to work with the Company and others to develop more rigorous and accurate EM&V data.
- (3) The Commission should adopt the dashboard proposed by Company Witness Frost in his rebuttal testimony and included as Attachment 1 to the Report.¹²
- (4) The Commission should adopt the reporting requirements committed to by Dominion as further outlined in the Discussion section of the Report.¹³
- (5) The Commission should direct Dominion to file the May EM&V Report in the Company's December DSM filings.
- (6) Deemed input values meet the measured and verified standard for determining compliance with the energy saving requirements of the Virginia Clean Economy Act ("VCEA").¹⁴

¹¹ Report at 75-76.

¹² The Chief Hearing Examiner agreed with Dominion that the dashboard should be provided in May of each year and reflect actual, verified information for and as of the prior year. The Chief Hearing Examiner rejected requests for a quarterly dashboard since these likely would be based on unaudited data and would be expensive and overly burdensome. *Id.* at 55.

¹³ A list of metrics Dominion agreed to include in an EM&V annual summary, which would be filed in May each year as part of the Company's annual EM&V Report, can be found at pages 55-56 of the Report. Dominion's commitment includes all metrics except the two items in bold on page 56 of the Report (program participation rate as a share of the eligible population, and program participation by geographic location). In addition to the annual EM&V Report filing in May (which, if the Chief Hearing Examiner's findings are adopted, would now include the dashboard and additional EM&V metrics), Dominion also committed that, by the end of July each year, it will provide raw/unverified results of metrics such as program participation and expenditures from the first six months of the year. Further, as part of its annual DSM Update Filing currently filed in December each year, Dominion commits to including the dashboard (with the same information as provided the previous May) and to complying with Mr. Grevatt's proposal for existing and proposed programs but presenting a mix of verified persistent savings and projections for future years, according to Mr. Grevatt's sample data chart. *See* Report at 57; Dominion's Post-hearing Brief at 23-26; Ex. 12 (Grevatt Sample Data Chart); Ex. 13 (James Direct) at 22-27.

¹⁴ 2020 Va. Acts. chs. 1193, 1194.

(7) To increase the rigor and accuracy of the EM&V process, the Commission should adopt a combination of the Company's proposed framework and Staff's proposed hierarchical framework,¹⁵ with both frameworks as further modified herein.

(8) The Commission should direct the Company to document the baselines used during program design and all subsequent adjustments or changes to the baselines, and provide the documentation to Staff and the other parties upon request.

(9) The Commission should direct the Company to increase the coordination between DNV and the program designer(s) consistent with their commitment in this proceeding.

(10) The Commission should direct the Company to undertake at least one baseline study based on Staff's input.¹⁶

The Chief Hearing Examiner recommended that the Commission enter an order that adopts the findings of the Report and dismisses this case from the Commission's docket of active cases.¹⁷

Comments on the Report were filed on August 23, 2021, by Dominion, Environmental Respondent, VAEEC, Consumer Counsel, and Staff, respectively.

NOW THE COMMISSION, having considered this matter, is of the opinion and finds that the findings and recommendations set forth in the Chief Hearing Examiner's Report should be adopted except as otherwise provided herein.

Applicable Law

Several laws and regulations must be considered in relation to Dominion's DSM program, including but not limited to certain definitions in Code § 56-576, the rate adjustment clause provisions of Code § 56-585.1 A 5 c; and the provisions of Code § 56-596.2.

¹⁵ In Comments on the Report, Staff clarified that its hierarchical framework is not the most to least preferable and that the "least preferred option" in Staff's framework "is the current, primarily deemed values approach the Company is currently using." Staff Comments at 10.

¹⁶ According to the Chief Hearing Examiner, "[D]etermining when to conduct a baseline study requires a balancing of rigor and accuracy" with EM&V budgets and the value of the information, and "By conducting at least one baseline study, Staff and the Commission may be able to better gauge the value of such studies." Report at 74.

¹⁷ *Id.* at 76.

In Code § 56-576, the definition:

"Measured and verified" means a process determined pursuant to methods accepted for use by utilities and industries to measure, verify, and validate energy savings and peak demand savings. This may include the protocol established by the United States Department of Energy, Office of Federal Energy Management Programs, Measurement and Verification Guidance for Federal Energy Projects, measurement and verification standards developed by the American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE), or engineering-based estimates of energy and demand savings associated with specific energy efficiency measures, as determined by the Commission.

Code § 56-585.1 A 5 c:

5. A utility may at any time, after the expiration or termination of capped rates, but not more than once in any 12-month period, petition the Commission for approval of one or more rate adjustment clauses for the timely and current recovery from customers of the following costs:

...

c. Projected and actual costs for the utility to design, implement, and operate energy efficiency programs or pilot programs. . . . Prior to January 1, 2022, the Commission shall award a margin for recovery on operating expenses for energy efficiency programs and pilot programs, which margin shall be equal to the general rate of return on common equity determined as described in subdivision 2. 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 § 56-596.2:

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 Phase II electric utilities:

- 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; and

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. . . . The Commission shall annually review the feasibility of the energy efficiency program savings in this section and report to the Chairs of the House Committee on Labor and Commerce and the Senate Committee on Commerce and Labor and the Secretary of Natural and Historic Resources and the Secretary of Commerce and Trade on such feasibility by October 1, 2022, and each year thereafter.

C. The projected costs for the utility to design, implement, and operate such energy efficiency programs and portfolios of programs shall be no less than an aggregate amount of . . . \$870 million for a Phase II Utility for the period beginning July 1, 2018, and ending July 1, 2028, including any existing approved energy efficiency programs. In developing such portfolio of energy efficiency programs and portfolios of programs, each utility shall utilize a stakeholder process, to be facilitated by an independent monitor compensated under the funding provided pursuant to subsection E of

§ 56-592.1, to provide input and feedback on (i) the development of such energy efficiency programs and portfolios of programs; (ii) compliance with the total annual energy savings set forth in this subsection and how such savings affect utility integrated resource plans; (iii) recommended policy reforms by which the General Assembly or the Commission can ensure maximum and cost-effective deployment of energy efficiency technology across the Commonwealth; and (iv) best practices for evaluation, measurement, and verification for the purposes of assessing compliance with the total annual energy savings set forth in subsection B. Utilities shall utilize the services of a third party to perform evaluation, measurement, and verification services to determine a utility's total annual savings as required by this subsection, 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 and portfolios produce; and utility spending on each program, including any associated administrative costs. . . . Such stakeholder process shall include the participation of representatives from each utility, relevant directors, deputy directors, and staff members of the Commission who participate in approval and oversight of utility energy efficiency savings programs, the office of Consumer Counsel of the Attorney General, the Department of Mines, Minerals and Energy, energy efficiency program implementers, energy efficiency providers, residential and small business customers, and any other interested stakeholder whom the independent monitor deems appropriate for inclusion in such process.

The Commission is also guided by its Rules Governing the Evaluation, Measurement, and Verification of the Effects of Utility-Sponsored Demand-Side Management Programs, 20 VAC 5-318-10 *et seq.* ("EM&V Rules").¹⁸

The Measured and Verified Standard

As a threshold matter, this case considers the measurement of energy savings for Dominion's current DSM programs and, more specifically, the ability and cost of collecting program- and measure-specific EM&V data that is utility-specific, Virginia-specific, or based on

¹⁸ The EM&V Rules became effective January 1, 2018, before the passage of the VCEA. *Commonwealth of Virginia, ex rel. State Corporation Commission, Ex Parte: In the matter of Adopting New Rules Governing the Evaluation, Measurement, and Verification of the Effects of Utility-Sponsored Demand-Side Management Program*, Case No. PUR-2017-00047, 2017 S.C.C. Ann. Rept. 489, 491, Order Adopting Rules and Regulations (Nov. 9, 2017).

data from non-Virginia jurisdictions and sources.¹⁹ In our Initiating Order, we noted that the EM&V presented in Dominion's annual DSM filings routinely has been a disputed issue among case participants.²⁰

Dominion's DSM cases are governed by the laws and regulations in effect when those cases are filed. One set of such regulations is the Commission's EM&V Rules. These rules provide that the sources of data or estimates used as inputs for proposed DSM measures or programs, in descending order of preference, are: utility-specific data; Virginia-specific data if utility-specific data is unavailable or impracticable; and data from non-Virginia jurisdictions or sources, if neither utility-specific data nor Virginia-specific data is available or practicable.²¹ Rule 40 requires that "EM&V of DSM programs or measures should comply, as appropriate, with Options A, B, C, or D from the International Performance Measurement and Verification Protocol (January 2012)." Rule 40 recognizes that every utility has unique characteristics, that DSM measures are being developed and refined constantly, and that alternative methodologies may be considered.²²

In 2020, the General Assembly passed the VCEA, which made changes to Code § 56-596.2 setting forth specific energy efficiency targets for Dominion to achieve, by calendar year, based on Dominion's average annual energy jurisdictional retail sales in 2019.²³ The

¹⁹ Initiating Order at 5-7.

²⁰ *Id.* at 2 (*citing*, as one example, 2017 DSM Proceeding, Ex. 20 (Loiter) at 13-14, 20).

²¹ 20 VAC 5-318-40 of the EM&V Rules ("Rule 40").

²² EM&V Rule 40 D.

²³ Code § 56-596.2 B 2. Annual targets are not set after 2025. "For the time period 2026 through 2028, and for every successive three-year period thereafter, the Commission shall establish new energy efficiency savings targets." Code § 56-596.2 B 3.

VCEA also modified Code § 56-585.1 A 5 C to provide a margin on operating expenses of such energy efficiency programs for a utility's success in meeting its energy efficiency targets. Under the VCEA, Dominion is eligible for "20 basis points for each additional incremental 0.1 percent in annual savings in any year achieved" by its Commission-approved energy efficiency programs "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."²⁴ Thus, the measurement and verification of energy efficiency program savings is important to determine whether the utility has achieved the energy savings targets as well as whether it is eligible for such additional margins.

In considering the question of how to measure the energy savings of DSM programs, the Chief Hearing Examiner found that "[d]eemed input values meet the measured and verified standard for determining compliance with the energy saving requirements of the VCEA."²⁵ In so doing, the Chief Hearing Examiner agreed with the Company that the EM&V process is complex and involves the use of judgment.²⁶ He also noted that utility-specific and Virginia-specific data "can be less accurate and reliable than deemed values due to limitations of utility-specific and Virginia-specific samples" when compared to the breadth of a sample supporting deemed values.²⁷ The Chief Hearing Examiner concluded as follows in this regard:

[I]n striving for increased rigor and accuracy in the EM&V process, the Commission should not view deemed input values as insufficient for meeting a measured and verified standard for determining compliance with the requirements of the VCEA or that deemed inputs always introduce an

²⁴ Code § 56-585.1 A 5 c.

²⁵ Report at 75.

²⁶ *Id.* at 61.

²⁷ *Id.*

unacceptable level [of] uncertainty in EM&V savings estimates. The record in this case shows all inputs have varying degrees of uncertainty that must be managed in the EM&V process to arrive at the most reliable and accurate savings estimates, subject to budget and value of information limitations.²⁸

Consumer Counsel argues that deemed savings may be useful at the planning level but "are not an appropriate verification tool for purposes of determining whether Dominion has met the energy savings targets of § 56-596.2 'in actual practice.'"²⁹

We agree that deemed input values meet the measured and verified standard for determining compliance with the energy saving requirements of the VCEA. We further find that the extent to which deemed values should be used to measure energy savings for specific programs or measures should be addressed on a case-by-case basis.

In making this finding, we are mindful of the multiple factors that must be considered when determining the level of rigor and accuracy in the EM&V process. Such factors include, but are not limited to, reliability of data, size of data samples, breadth of samples supporting deemed values, EM&V cost, the amount of additional certainty gained from additional EM&V processes, and the amount and cost of EM&V estimated and included in cost caps for older DSM programs.³⁰ The Commission expects the Company and other stakeholders to discuss the appropriateness of using deemed savings versus other methods in their stakeholder meetings and

²⁸ *Id.* at 61-62.

²⁹ Consumer Counsel Comments at 4-6.

³⁰ Report at 61-62; *see also* Environmental Respondent Comments at 3-4; Dominion Comments at 6-7; VAEEC Comments at 2-4.

present any recommendations on the preferred methodology for each program or for a portfolio of programs as part of the Company's annual DSM Update filings.³¹

EM&V Framework and Related Concerns

The Chief Hearing Examiner's Report evaluated both Dominion's proposed framework and Staff's proposed framework and found that, to increase the rigor and accuracy of the EM&V process, the Commission should adopt a combination of Staff's and Dominion's proposed frameworks, as modified in the Report.³²

The Commission adopts the combination of the Company's and Staff's proposed frameworks as recommended by the Chief Hearing Examiner in the Report.³³ A complete list of these principles is included in Attachment A to this Final Order. In adopting this combination, the Commission agrees that the approved framework balances rigor and accuracy with overall EM&V budgets and the value of the information gained from various EM&V procedures.³⁴

³¹ See Report at 62 ("[T]he EM&V process will continue to be a detailed, complex process best suited to a stakeholder process.").

³² *Id.* at 75.

³³ In making this determination, we are aware of our recent directive to Appalachian Power Company to

file an updated EM&V report on or before May 1, 2022, in which it shall use sampling and statistical analysis for each program to demonstrate the extent to which actual savings are present for each program, or to explain why sampling and statistical analysis was not used for a particular program, what was used instead to determine energy savings associated with that program, and why the alternative method provides evidence of actual energy savings reasonably comparable to sampling and statistical analysis.

Petition of Appalachian Power Company, For approval to continue rate adjustment clause, the EE-RAC, and for approval of new energy efficiency programs pursuant to §§ 56-585.1 A 5 c and 56-596.2 of the Code of Virginia, Case No. PUR-2020-00251, Doc. Con. Cen. No. 210730134, Order Approving Rate Adjustment Clause at 8-9 (July 29, 2021). We note that this Final Order applies only to Dominion and is based upon the specific facts and circumstances of this case.

³⁴ See Report at 73.

The Commission notes that at this time we will adopt the Chief Hearing Examiner's recommendation that overall EM&V budgets for future DSM programs should be in the range of 5 to 7 percent of program spending until we direct otherwise.³⁵ This will provide flexibility for the Company, in consultation with the stakeholder group, to decide which EM&V procedures best fit the circumstances surrounding each DSM program.

We also specifically note our agreement with the Chief Hearing Examiner and require Dominion to sample prior DSM installations to ensure those installations remain in place and operational and to increase confidence in future reported energy savings.³⁶ We agree that if Dominion is counting the savings from previous installations towards earning a margin or bonus margin years after such installations, verification that these installations remain in use is appropriate. The possibility of such sampling also should be reflected in DSM program costs for all programs where the measure lives of installed equipment or products is designed to produce energy savings beyond the timeframe in which Dominion proposes to run the programs.³⁷

Another topic of debate among the case participants was whether adjustment factors or revised savings parameters from EM&V of a particular program should be applied prospectively only, or both prospectively and retrospectively.³⁸ The Chief Hearing Examiner found that such

³⁵ *Id.* at 64.

³⁶ *Id.* at 65 (*citing* Staff Brief at 42). We decline to adopt Consumer Counsel's position that deemed savings not be used as evidence when awarding a margin on energy efficiency program operating expenses pursuant to Code § 56-585.1 A 5 c. *See* Consumer Counsel's Brief at 7-10.

³⁷ Report at 65. Energy savings is experienced over the measure lives of installed equipment or products, which can be years longer than the timeframe in which Dominion runs the energy efficiency program promoting the installation of the equipment or products at issue. *See* Staff Brief at 42 (*citing* Tr. 236-237).

³⁸ *See, e.g.*, Ex. 15 (Dalton) at 69-70; Ex. 22 (Goldberg Rebuttal) at 8-9.

factors should be applied both prospectively and retrospectively.³⁹ The Commission agrees and thus adopts the standard recommended by the Chief Hearing Examiner, included as Item 5 in Attachment A, based on the emphasis on accurate measurement underlying this case.⁴⁰ We note that the savings Dominion claims from its DSM programs are savings that may form the basis of claims for lost revenues at a future time if the circumstances so warrant, and are savings upon which Dominion may be eligible for a financial award under Code § 56-585.1 A 5 c. Under these particular circumstances, the Commission agrees that both look-back and going-forward audits are appropriate.

In adopting the Chief Hearing Examiner's proposed modifications to Staff's secondary principle, we are providing the flexibility for EM&V to be performed using either a sampling of key input variables, a pilot program, or both. We agree with Staff that a sampling of key input variables or a pilot program designed to measure the variables most likely to have the largest impact on the accuracy of savings estimates should be less costly than measuring all deemed input variables⁴¹ and should be an option for determining the accuracy of savings estimates for one or more DSM programs.

We are aware of Staff's concern that, under the Chief Hearing Examiner's recommended framework, Dominion retains discretion to determine the appropriate EM&V for given DSM programs and measures.⁴² We note that such discretion is not unbounded. In particular, the EM&V protocol that Dominion plans to implement for any particular DSM program or measure

³⁹ Report at 67-68.

⁴⁰ *Id.*

⁴¹ *See* Ex. 15 (Dalton) at 54-56.

⁴² *See, e.g.*, Staff Comments at 8, 14, 19.

must be vetted through the stakeholder process, proposed in a DSM Update case, and approved by the Commission.

Filing of the EM&V Report

The Chief Hearing Examiner recommended that the Commission direct Dominion to file its May EM&V Report in the Company's DSM Update filing, which is currently filed in December each year.⁴³ We agree and adopt this finding. In so doing, we clarify that the Company should continue to file the EM&V Report every May in the docket of the prior complete DSM Update case, as well as file the EM&V Report in the record of the upcoming DSM Update case. We also grant the Company's request to allow Dominion to provide the EM&V Report, as part of the DSM Update filing, in electronic form.⁴⁴

Baselines

Concerning baselines, the Chief Hearing Examiner found that the Commission should direct Dominion to document the baselines used during program design, as well as subsequent adjustments or changes to the baselines, and provide the documentation to Staff and other parties on request.⁴⁵ The Chief Hearing Examiner also found that the Commission should direct Dominion to undertake at least one baseline study with input from Staff.⁴⁶

The Commission agrees with this recommendation and hereby requires the Company and Staff to meet and select at least two DSM programs on which to perform baseline studies. The

⁴³ Report at 75.

⁴⁴ Dominion Comments at 4. For example, Dominion's May 14, 2021 EM&V Report was filed in the 2019 DSM Update case docket and will be filed again (electronically, if the Company so desires) as part of the Company's 2021 DSM Update case in December 2021. These practices should continue on an ongoing basis until the Commission directs otherwise.

⁴⁵ Report at 75.

⁴⁶ *Id.* at 76.

Company and Staff should file a letter report, within ninety (90) days of the date of this Final Order, explaining which DSM programs were selected for baseline study and why, how the programs selected differ sufficiently so that the overall value of baseline studies may be gauged, who will perform the baseline studies, the expected completion date for the studies, and how the Company plans to report on the results of the baseline studies to the Commission.

Coordination During Program Design

The Chief Hearing Examiner found that the Commission should direct Dominion to increase coordination between DSM program designers and the Company's third-party EM&V consultant, DNV, consistent with the Company's commitment in this case.⁴⁷ No party contested this finding, and Staff specifically supported it.⁴⁸ Accordingly, we adopt this recommendation.

The Dashboard

The Chief Hearing Examiner found that the Commission should adopt the dashboard proposed by Company Witness Frost in rebuttal testimony and included as Attachment 1 to the Report. We agree with this finding. VAEEC requested that the dashboard be updated quarterly.⁴⁹ We note that Dominion agreed to provide unaudited, "raw" data by July 1 of each year,⁵⁰ which will provide stakeholders with a semi-annual view of DSM progress. At this time, we find that the dashboard presented in Attachment 1 to the Report strikes a proper balance in

⁴⁷ *Id.*

⁴⁸ Staff Comments at 22.

⁴⁹ VAEEC Comments at 5-7; Ex. 13 (James Direct) at 23.

⁵⁰ We adopt the Chief Hearing's Examiner's Finding (4) and will require Dominion to comply with all reporting requirements to which it has committed, as outlined in the Report. We agree with Environmental Respondent that Dominion should work with stakeholders to implement and finalize the reporting requirements and explore whether potential changes are needed in the future. Environmental Respondent Comments at 3.

providing the appropriate amount of information on a reasonable timeline. Should the dashboard's contents or timing be inadequate for stakeholder consideration, such issues may be raised in future Dominion annual DSM Updates.

The Stakeholder Process

The Chief Hearing Examiner found that the Commission should direct Staff to participate in the stakeholder process as a stakeholder.⁵¹ Staff and Consumer Counsel expressed concern over this finding.⁵² In particular, both noted the possibility of a Staff member having their credibility attacked or their participation in good faith during the stakeholder process questioned if they took one position during the stakeholder meetings and changed that position in testimony during a litigated DSM case.⁵³

Upon consideration, we adopt this finding of the Chief Hearing Examiner and will require Staff to participate "as a stakeholder" in the stakeholder process. We are cognizant that positions taken during the stakeholder process are based on program concepts and information that typically is further developed and refined through the litigation process before the Commission. Staff and all stakeholders are free to change their positions upon further deliberations or upon new or updated information.

We also take this opportunity to affirm that the Commission speaks through its Orders⁵⁴ and not through Staff in stakeholder meetings.

⁵¹ Report at 75.

⁵² See, e.g., Staff Comments at 22-27; Consumer Counsel Comments at 6-9.

⁵³ Staff Comments at 25-26; Consumer Counsel Comments at 7-8.

⁵⁴ Staff Comments at 27; *Kennedy v. Aceves Constr. & Maint. Co.*, No. 0385-94-4, 1995 WL 3380, at *1 (Va. App. Jan. 3, 1995) ("Administrative agencies, like trial courts, speak through their orders.") (citing *Frank L. Cook Transfer and Greyvan Storage of Va. v. Commonwealth*, 196 Va. 384, 390, 83 S.E.2d 733, 736 (1954) (applying this rule to the State Corporation Commission)).

Accordingly, IT IS ORDERED THAT:

(1) The findings and recommendations set forth in the Chief Hearing Examiner's Report are adopted, as modified herein.

(2) The Company and Staff shall file a letter report, within ninety (90) days from the date of this Final Order, containing information related to the agreed-upon baseline studies, as directed above.

(3) This case is dismissed.

A COPY hereof shall be sent electronically by the Clerk of the Commission to all persons on the official Service List in this matter. The Service List is available from the Clerk of Commission.

EM&V FRAMEWORK FOR DOMINION'S DSM PROGRAMS

1. Evaluation budgets should be in the range of 5 to 7 percent of annual program spending.
2. Which EM&V studies to undertake and the timing of those studies should be guided by a Value of Information framework. This framework assesses the extent to which various evaluation activities cost-effectively reduce uncertainty and mitigate risk. Considerations under such a framework include:
 - a. The magnitude of portfolio uncertainty contributed by a particular program, measure, or parameter.
 - b. The potential contribution to uncertainty in a future portfolio, even if the current program is small.
 - c. Uncertainty as to whether a particular program or measure passes a basic benefit/cost screening test, or uncertainty in other key design questions.
 - d. The ability of empirical studies to reduce those uncertainties, and at what cost.
 - e. Overall budget constraints.
 - f. DNV's evaluation of uncertainty assessments and sensitivity analyses as described in Case No. PUR-2020-00156 Exhibit 21 (Feng Rebuttal) at pp. 15-16.
3. Programs will typically be subject to primary impact evaluations (Stage 3 EM&V) after the program has attained full-scale operation, so that the findings will be most meaningful and robust for the full program cycle. There may be instances where earlier primary impact evaluation would be recommended before particular decision-making. There also may be some small programs or program components for which primary impact evaluation will not be conducted, based on the Value of Information.
4. Primary EM&V for a particular program should be conducted every few years while the program is active. More frequent EM&V may be recommended if there are major changes to the program or the affected market.
5. Adjustment factors or revised savings parameters determined from primary EM&V of a particular program year should be applied both retrospectively and prospectively, until new information is developed in another study.
6. The Company should implement comprehensive consumption or billing analyses for all programs for which it is feasible subject to overall budget constraints and the Value of Information framework. Net-to-gross studies should be required for all programs where the EM&V method does not otherwise produce net savings, and where the study is justified by the Value of Information framework within the overall budget constraints.
7. For programs where the Company determines that a comprehensive consumption analysis is infeasible, the Company should provide evidence as to why the Company made such determination(s). For a sample of programs chosen during the stakeholder process where a comprehensive consumption analysis is not performed, the Company should provide a simplified analysis of pre- and post-monthly billing data, in addition to sampling key input variables and/or developing a pilot program as proposed in Case No. PUR-2020-

00156 Exhibit 15 (Dalton Direct) at pp. 54-56, subject to the overall budget and value of information framework.

8. For all programs where some form of consumption or billing analysis is infeasible and the programs have sufficient participation for such analysis to be useful subject to overall budget constraints and the Value of Information framework, the Company should perform the Evaluated Savings Approach specified for these programs and should provide an explanation and evidence supporting the determination that performing a consumption analysis is infeasible.

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