

STATE CORPORATION COMMISSION

AT RICHMOND, MAY 21, 2020

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PETITION OF

APPALACHIAN POWER COMPANY

CASE NO. PUR-2019-00122

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

ORDER APPROVING RATE ADJUSTMENT CLAUSE

On September 30, 2019, Appalachian Power Company ("APCo" or "Company"), pursuant to §§ 56-585.1 A 5 and 56-596.2 of the Code of Virginia ("Code") and the Final Order of the State Corporation Commission ("Commission") in Case No. PUR-2018-00118,¹ filed with the Commission its petition for approval of the continued implementation of a rate adjustment clause – the "EE-RAC" – to recover the costs of its proposed energy efficiency ("EE")/demand response ("DR") portfolio ("EE/DR Portfolio"), as well as for the approval of three new programs ("Petition").

In its Petition, APCo sought approval to implement three new energy efficiency and demand response programs.² Specifically, the Company requested that the Commission permit it to implement the following proposed EE programs for a five-year period starting January 1, 2021, and subject to future extensions as requested by the Company and if granted by the Commission:

¹ *Petition of Appalachian Power Company, For revision of rate adjustment clause, the EE-RAC, pursuant to § 56-585.1 A 5 c of the Code of Virginia*, Case No. PUR-2018-00118, Doc. Con. Cen. No. 190510057, Order Approving Rate Adjustment Clause (May 2, 2019).

² See Ex. 2 (Petition) at 2-4.

- ENERGY STAR® Manufactured Housing Program ("ESMH")
- Low Income Multifamily Program ("LIMF")
- Low Income Single Family Program ("LISF")³

APCo requested approval to continue the EE-RAC for the rate year of July 1, 2020, through June 30, 2021 ("2020 Rate Year") to recover: (i) 2020 Rate Year costs associated with the Company's EE/DR programs ("Projected Factor"); and (ii) any (over)/under recovery of costs associated with the EE/DR Portfolio as of June 30, 2020 ("True-Up Factor").⁴ APCo calculated the margin on operating expenses for the Projected Factor based on a return on common equity of 9.42%, authorized by the Commission in Case No. PUR-2018-00048.⁵ The Company proposed a total EE-RAC revenue requirement of \$9,695,615 for the 2020 Rate Year, which consists of a Projected Factor in the amount of \$10,584,787, and a True-Up Factor credit of \$889,172.⁶ APCo did not seek recovery of lost revenues in this proceeding.⁷

On October 29, 2019, the Commission issued an Order for Notice and Hearing that, among other things, docketed this case; required the Company to provide notice of the Petition; established a schedule for the submission of notices of participation and prefiled testimony; scheduled a public hearing on the Petition for March 3, 2020; and appointed a Hearing Examiner to conduct all further proceedings in this matter and to file a final report.

³ *Id.*; Ex. 5 (Nichols Direct) at 14.

⁴ *See* Ex. 2 (Petition) at 6, Schedule 46C; Ex. 5 (Nichols Direct) at 16.

⁵ Ex. 2 (Petition) at 6. *See Application of Appalachian Power Company, For the determination of the fair rate of return on common equity to be applied to its rate adjustment clauses*, Case No. PUR-2018-00048, Doc. Con. Cen. No. 181120212, Final Order (Nov. 7, 2018).

⁶ Ex. 2 (Petition) at 6, Schedule 46C; Ex. 5 (Nichols Direct) at 16.

⁷ Ex. 2 (Petition) at 6; Ex. 5 (Nichols Direct) at 16.

The Office of Attorney General, Division of Consumer Counsel ("Consumer Counsel") filed a timely notice of participation. The hearing was convened by the Hearing Examiner as scheduled on March 3, 2020. The Company, Consumer Counsel, and the Staff of the Commission ("Staff") participated in the hearing.

On April 3, 2020, the Report of Mary Beth Adams, Hearing Examiner, was issued ("Report"). In her Report, the Hearing Examiner made the following findings and recommendations:

1. The Commission should approve the LIMF and LISF programs and deny the ESMH program. Alternatively, the Commission should approve a revised ESMH program that includes an incentive that would be split between the retailer and the participating ratepayer;
2. The Commission should approve an annual revenue requirement for the EE-RAC in the amount of \$9.44 million. Should the Commission approve the ESMH program, the annual revenue requirement would be \$9.70 million;
3. The cost caps based solely on the programmatic costs of the EE Programs should be approved;
4. The Company's Evaluation, Measurement and Verification ("EM&V") analysis should include sampling and statistical analysis to test the validity of the technical reference manual ("TRM") formulas and the accuracy of the claimed energy savings;
5. In future EE-RAC filings, the Company should be required to continue to provide the information recommended by Staff witness Mangalam;
6. The LIMF and LISF programs satisfy the requirements of Component 1 of § 56-596.2:1 of the Code and the Company should be permitted to apply the first three years of these programs towards meeting the goals established therein;
7. The updated EE-RAC rates should be implemented for service rendered during the 2020 Rate Year; and
8. The Company should make its next EE-RAC filing on or before September 30, 2020.⁸

⁸ Report at 27.

The Company, Consumer Counsel, and Staff filed comments in response to the Report on April 17, 2020.

NOW THE COMMISSION, having considered this matter, is of the opinion and finds as follows.

LIMF and LISF

The Hearing Examiner found that the LIMF and LISF each fail three of the four cost-benefit analyses required by the Code but noted that Code § 56-576 further provides that "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."⁹ The Hearing Examiner found that the record establishes that these programs are designed to provide measurable and verifiable energy savings to low-income customers.¹⁰

We agree with the Hearing Examiner and will approve the LIMF and LISF programs as proposed by the Company because they provide measurable and verifiable energy savings to low-income customers or elderly customers.

ESMH Program

The Company's proposed ESMH program would provide financial incentives to manufacturers and retailers of manufactured homes to encourage them to make ENERGY STAR homes available for purchase by the Company's ratepayers. The Hearing Examiner found that the ESMH program passes three of the four cost benefit tests, but noted that Staff raised several concerns with the program.¹¹

⁹ *Id.* at 21.

¹⁰ *Id.*

¹¹ *Id.* at 21-23.

Specifically, Staff argued that the ESMH program was based on a faulty analysis, which assumed a net-to-gross ("NTG") ratio of 100%.¹² NTG is a measurement of free ridership, and thus the Company claimed that there would be no free riders. Staff noted, however, that a small survey of customers purchasing manufactured homes showed that "five out of five survey respondents stated they were not aware of the ESMH program offered to manufacturers and that they would have purchased the ENERGY STAR home rather than the non-ENERGY STAR home regardless."¹³ Staff also argued that, because 69% of the energy savings from the ESMH program come from energy-efficient heat pumps, and the customer survey indicated that customers were already aware of the benefits of a heat pump compared to electric resistance heating, the energy savings of the program were likely overstated.¹⁴

The Hearing Examiner found that "the NTG assumed by the Company and the Cost/Benefit Model savings results presented by the Company for the proposed ESMH program are overstated."¹⁵ The Report recommends that the ESMH program not be approved but suggests that if the Commission were to approve the program, it should consider an alternative incentive structure in which the retailer receives a portion of the rebate and the APCo ratepayer who participates in the ESMH program receives a portion of the rebate.¹⁶

In its comments on the Report, the Company continued to support the ESMH program as proposed but stated that it would not oppose the alternative suggested by the Hearing

¹² *Id.* at 21-22; Ex. 6 (Boehnlein Direct) at 14-15.

¹³ Report at 22; *see also* Ex. 6 (Boehnlein Direct) at 14-17.

¹⁴ Report at 22; Ex. 6 (Boehnlein Direct) at 15-16.

¹⁵ Report at 23.

¹⁶ *Id.* at 23-24, 27.

Examiner.¹⁷ The Company suggested the following split of the incentive between retailer and ratepayer:

Party	Incentive Amount
APCo Customer	\$700
HVAC Contractor	\$50-\$100
Retailer	\$600-\$650
Manufacturer	\$0

We agree with the Hearing Examiner that the ESMH program as proposed is based on inflated NTG ratios and energy savings. We also agree that the program should provide benefit directly to the ratepayer purchasing the manufactured home. We will, therefore, approve the alternative ESMH program recommended by the Hearing Examiner, in which the incentives are split between the homebuyer and retailer. We find that the allocation of the incentive proposed by the Company in its comments on the Report is reasonable and that it should be adopted.

Revenue Requirement

We agree with the Hearing Examiner that, with the alternative ESMH program approved herein, the record in this case supports a revenue requirement of \$9,695,615.¹⁸ In approving this request for an increase in the EE-RAC that was filed on September 30, 2019, the Commission notes its awareness of the ongoing COVID-19 public health crisis, which has had negative economic effects that impact all utility customers. We are sensitive to the effects of rate increases, especially in times such as these. The Commission, however, must follow the laws

¹⁷ APCo Comments at 2-3, 8.

¹⁸ Report at 24.

applicable to any rate case, as well as the findings of fact supported by the evidence in the record.¹⁹ This is what we have done herein.

Cost Caps

We agree with the findings and recommendations of the Hearing Examiner as to cost caps on the EE programs proposed herein.²⁰ The Company did not propose cost caps on the EE Programs; however, Staff recommended cost caps based solely on the programmatic costs of the EE Programs.²¹ Staff's proposed cost caps do not include lost revenues. The Hearing Examiner recommended that if the Commission wished to impose cost caps in this proceeding, such caps should be based solely on the programmatic costs of the EE Programs.²² Nothing contained in the Company's comments suggest a concern with this finding and recommendation.²³ We find that this recommendation is reasonable and should be adopted.

Reporting Requirements

The Commission also agrees with the Hearing Examiner that the reporting requirements recommended by Staff witness Mangalam should be approved.²⁴ As to the dispute between Staff and APCo as to whether reporting should include sampling and statistical analysis in the reports

¹⁹ See, e.g., the definition of "in the public interest" in Code § 56-576 and the requirement in Code § 56-596.2 that a Phase I Utility such as APCo develop EE programs, at least 5% of which "shall benefit low-income, elderly, and disabled individuals."

²⁰ Report at 24.

²¹ *Id.*; Ex. 9 (Mangalam Direct) at 4, 9, 15.

²² Report at 24.

²³ See APCo Comments at 1-13.

²⁴ Report at 26. APCo also confirmed it will continue to work with Staff regarding these reporting requirements. Tr. at 61-62.

submitted by APCo for EM&V, we note that in the prior proceeding on APCo's EE-RAC,²⁵ the Commission found that the purpose of EE/DR programs is to reduce energy usage, either at peak times (demand response and peak shaving) or year-round (energy efficiency). Thus, the true test of any such program is whether, *in actual practice*, it is the proximate cause of a verifiable reduction in energy usage. This evidence will be, by definition, retrospective in nature. In the present case, we agree with the Hearing Examiner's finding that the record shows more rigorous evaluation, measurement, and verification is necessary to ensure that the programs are, *in actual practice*, the proximate cause of a verifiable reduction in energy usage.²⁶ Accordingly, we direct the Company to include in its annual EM&V report its evidence of the 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. We agree with the Hearing Examiner, and Staff, and find that APCo should be required to perform additional sampling and statistical analysis to test the validity of the TRM formulas and the accuracy of the claimed energy savings.²⁷ We will require this unless the Company can demonstrate in its EM&V report what alternative was used to document actual savings for the particular program for which it did not use sampling and statistical analysis, and why that alternative provides evidence of actual savings for that program reasonably comparable to sampling and statistical analysis. We further direct Staff to investigate each such report to analyze the program-specific evidence on actual

²⁵ *Petition of Appalachian Power Company, For revision of rate adjustment clause, the EE-RAC, pursuant to § 56-585.1 A 5 c of the Code of Virginia*, Case No. PUR-2018-00118, Doc. Con. Cen. No. 190510057, Order Approving Rate Adjustment Clause (May 2, 2019).

²⁶ Report at 1, 25-26.

²⁷ *Id.* at 26.

energy savings and the proximate cause thereof, and to report on its findings in the Company's next EE-RAC filing.

Future Filings

We direct APCo to file in every future rate adjustment clause proceeding under Code § 56-585.1 A 5 evidence of the actual energy savings achieved as a result of each specific program for which cost recovery is sought, along with revised cost-benefit tests that incorporate actual Virginia energy savings and cost data. As noted above, we direct Staff to investigate and analyze the program-specific evidence on actual energy savings and the proximate cause thereof, and to report on its findings. As we stated in Case No. PUR-2018-00118, this evidence will be relevant to at least two foreseeable issues: (i) identifying the true cost-effectiveness of programs, which will enable the Commission to determine which programs should be expanded in scope and budget so as to maximize the reductions in energy usage, which ones are least effective and should have their budgets shifted to more effective programs, and which ones are not cost-effective and should be discontinued; and (ii) evaluating any claim by APCo to cost recovery for lost revenues.²⁸

We find that APCo's request made in comments to the Hearing Examiner's Report to allow the Company to file its next EE-RAC petition on or before November 30, 2020, instead of

²⁸ Accurate EM&V reporting is also needed, on a going-forward basis, to permit the Commission to comply with the Virginia Clean Economy Act, which requires the Commission to "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." 2020 Va. Acts of Assembly, Ch. 1193, 1194.

September 30, 2020,²⁹ is reasonable and should be granted. APCo shall include in that petition the effect, if any, on the EE-RAC rate year or its EM&V reporting obligations arising from the delay in filing its next petition.

Goals Established in § 56-596.2:1 of the Code

We agree with the Hearing Examiner that LIMF and LISF programs satisfy the requirements of Code § 56-596.2:1 and the Company should be permitted to apply the first three years of these programs towards meeting the \$25 million goal established therein.³⁰ Further, as requested by APCo,³¹ we find that the costs associated with the new programs proposed in this Petition should count towards the \$140 million target established for the Company in Code § 56-596.2.

Accordingly, IT IS ORDERED THAT:

- (1) The Company's Petition is hereby granted as set forth herein.
- (2) The Company shall forthwith file revised tariffs designed to recover a 2020 Rate Year revenue requirement of \$9,695,615 with the Clerk of the Commission and with the Commission's Divisions of Public Utility Regulation and Utility Accounting and Finance.
- (3) The EE-RAC as approved herein shall become effective for usage on and after July 1, 2020.
- (4) The Company shall file its petition to continue Rider EE-RAC no later than November 30, 2020.

²⁹ APCo Comments at 12-13.

³⁰ Report at 17, 26-27.

³¹ APCo Comments at 12.

(5) In future EE-RAC filings, the Company shall continue to fulfill the reporting requirements agreed to with Staff in the form of a pre-filed exhibit(s). The Company shall continue to work with Staff to prepare such a pre-filed exhibit(s).

(6) The Company shall file an updated EM&V report on or before May 1, 2021, 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, why sampling and statistical analysis was not used, and why the alternative method provides evidence of actual energy savings reasonably comparable to sampling and statistical analysis.

(7) In every future rate adjustment clause proceeding under Code § 56-585.1 A 5, APCo shall submit evidence of the actual energy savings achieved by each specific program for which cost recovery is sought.

(8) The LIMF and LISF programs satisfy the requirements of Code § 56-596.2:1, and the Company is permitted to apply the first three years of these programs towards meeting the \$25 million goal established therein.³² The Company is also permitted to apply the new programs approved herein towards the \$140 million target established for the Company in Code § 56-596.2.

(9) This matter is continued.

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 the Commission.

³² Report at 17, 26-27.