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STATE OF SOUTH CAROLINA

BEFORE THE PUBLIC SERVICE COMMISSION

Docket No.: 2019-182-E

IN RE: South Carolina Energy Freedom Act (H.3659) Proceeding Initiated Pursuant to S.C. Code Ann. Section 58-40-20(C): Generic Docket to (1) Investigate and Determine the Costs and Benefits of the Current Net Energy Metering Program and (2) Establish a Methodology for Calculating the Value of the Energy Produced by Customer-Generators	**PARTIAL PROPOSED ORDER OF INTERVENOR ALDER ENERGY SYSTEMS, LLC**

PREFATORY STATEMENT

Intervenor Alder Energy Systems, LLC files this partial proposed order, pursuant to Commission Order 2020-143-H, entered in this proceeding on December 23, 2020. The order proposed is not intended to be inclusive of all issues presented in the docket, but rather to highlight important portions of the proceeding. Alder does not intend on filing a more comprehensive proposed order and relies of the content of this writing, unless instructed otherwise by the Commission.

[content of proposed order follows]

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I. INTRODUCTION

This matter comes before the Public Service Commission of South Carolina (the "Commission), upon the requirements of S.C. CODE ANN. § 58-40-20(C), for two statutory purposes:

(1) to determine the costs and benefits of the current net energy metering ("NEM") program of utilities Duke Energy Carolinas, LLC ("DEC"), Duke Energy Progress, LLC ("DEP" and together with DEC, "Duke"), and Dominion Energy South Carolina, Incorporated ("DESC" and together with Duke, the "Utilities") and

(2) to establish a methodology for valuing the energy produced by customer-generators, as defined by S.C. CODE ANN. § 58-40-10(C).

S.C. CODE ANN. § 58-40-20(C) is a part of a broader effort of the South Carolina General Assembly to enhance solar access in the state, which culminated in passage of the 'Energy Freedom Act' during 2019 ("A62").

To aid in its mandate, the Commission directed the parties, by Commission Order 2020-532, to provide information relative to: (1) improving the procedures and methodology implemented by Commission Order 2015-194;[1] (2) best NEM practices in other jurisdictions; and (3) a cost-benefit analysis of NEM implementation under Commission Order 2015-194.

Utilities appeared in the docket as parties through counsel. Intervenors appeared in the docket as parties through counsel, including:

- Alder Energy Systems, LLC,
- North Carolina Sustainable Energy Association,
- Nucor Steel - South Carolina,
- Office of Regulatory Staff,
- South Carolina Appleseed Legal Justice Center,
- Solar Energy Industries Association,
- South Carolina Coastal Conservation League,
- Southern Alliance for Clean Energy,
- Upstate Forever,
- Vote Solar, and
- South Carolina Department of Consumer Affairs.

[1] Commission Order 2015-194 establishes NEM and other distributed generation policies for the Utilities and their customers as authorized by the Distributed Energy Resources Program Act ("A236"), codified, in part, at S.C. CODE ANN. § 58-39-130 [distributed energy resources program].

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(collectively, "Intervenors," unless otherwise indicated).

Utilities offered direct and rebuttal testimony and exhibits during the evidentiary hearing that took place from November 17, 2020 through November 19, 2020 (the "Hearing"). Intervenors (except Nucor Steel, South Carolina Appleseed Legal Justice Center, South Carolina Department of Consumer Affairs) similarly offered direct and rebuttal testimony and exhibits during the Hearing.[2]

II. EVIDENCE

DESC witness Mark Furtick ("Furtick") serves DESC as 'Manager of Renewable Programs and Technical Services.' (Tr. 55:9-10.) Furtick's testimony discussed distinguishing features of residential versus nonresidential customers. Furtick testified:

- the load profiles of nonresidential customers vary significantly within the various nonresidential rate classes (Tr. 55:12-21);
- the rate schedules for nonresidential customers are traditionally more complex than for residential customers (Tr. 58:17-21);
- the complexity of nonresidential rate schedules, including the addition of a demand charges, captures cost of service in ways that residential rate design does not (*See* Tr. 58:22-59:3).

Notwithstanding, DESC combined residential and nonresidential data points in its filings, including within demonstrative figures included in its testimony. (*See* DESC Late Filed Hearing Exhibit No. 1, matter # 295531.)[3]

[2] All references to "Tr." refer to the Hearing transcript.

[3] DESC caused a late-filed exhibit to be a part of the record in the proceeding pursuant to a request for Commissioner Williams, Chairman. (Tr. 69-70.)

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DESC witness Scott Robinson ("Robinson") is employed by 'Guidehouse' as an associate director of the company's 'advanced solutions group.' DESC retained Guidehouse to prepare a market projection for distributed generation ("DG") within the Utility's territory. (Tr. 89:7-23.) Robinson projects DG growth to be a minimum of (66) percent in DESC territory. (Tr. 89:24-90:6.) Notwithstanding, according to Robinson, medium and large commercial and industrial nonresidential rate classes will experience limited growth over the next ten years, especially relative to small-commercial and other commercial (e.g., nontaxable entities like schools and churches). (Tr. 102:23-103:17.) Robinson was unable to testify what percentage of overall projected DG growth in DESC territory was attributable to nonresidential customers, but acknowledged it is small compared to residential—not more than (25) percent of the total capacity expected over the next ten years, and only about (17) percent of the total capacity in year 2020. (Tr. 107:16-109:19.)

Duke witness George Brown ("Brown") serves Duke as 'General Manager of Strategy, Policy, and Strategic Investment for Distributed Energy Technologies' and testified Duke projects 234 MW of installed DG capacity by 2030, assuming full-retail NEM. (Tr. 164-4.) Brown acknowledged:

- future market penetration of DG is "sensitive" to this Commission's discretion in establishing NEM policies (Tr. 164:11-13);
- the Commission's mandate in this proceeding and in the 'solar choice metering tariff' dockets is inclusive of residential and nonresidential customer concerns (Tr. 167:9-168:9);
- the methodology approved under Commission Order 2015-194 is not the same as Duke's avoided cost rate (Tr. 168:13-14); and
- Duke DG projections modeled a mere 8 kW system size while acknowledging that nonresidential DG systems are typically larger (Tr. 171:20-25).

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Brown agreed with Robinson's testimony that in Duke territory—as in DESC territory—nonresidential DG is a fraction of the total capacity. (Tr. 174-5.) Brown further admitted that the Commission would be unable to distinguish between residential and nonresidential in Duke's projections without important underlying data—the ratio of residential DG to nonresidential DG capacity used in Duke modeling. (Tr. 175:10-19.) Finally, Brown testified that Duke will seek Commission approval of a proposed settlement between it and some of the Intervenors in this proceeding, relative to Duke's proposed 'solar choice metering tariff.' (Tr. 177:15-21.)

Duke witness Leigh Ford ("Ford") was retained by Duke as a consultant. (Tr. 217:15.) Ford testified Duke conducted stakeholder meetings that informed the companies' filings in this proceeding, but did not invite Intervenor Alder Energy to participate in the meetings, nor any other solar developer focusing on nonresidential customer-generation. (Tr. 219-21, 228:11-22, 247:10-13.)

Intervenor witness Thomas Beach ("Beach") is principal consultant of 'Crossborder Energy' and was retained by some of the Intervenors as a consultant to discuss the benefit-cost methodology for valuing distributed generation. (Tr. 286, 290.3:4-6.) Beach testified that the utility-cost implications of customer-generation is different for residential and nonresidential customers. (Tr. 295-6.) The utility-cost implications are different between the rate classes, in part, because:

- the volumetric rates paid by nonresidential customers is less than for residential customers (Tr. 296:7-15);
- nonresidential customers have different load profiles from residential customers and, thus, traditionally export less customer-generated electricity to the grid (Tr. 296:16-19); and
- nonresidential customers traditionally have significant demand charges and it is difficult for customer-generation to offset or avoid those charges (Tr. 297:21-25).

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Beach also testified that the relative level of market penetration of customer-generation impacts the benefit-cost analysis and the valuation methodology of customer-generation. Specifically, customer-generation must reach a significant level of market penetration before it implicates the benefit-cost analysis and valuation methodology or otherwise materializes in a significant way relative to utility costs (including, specifically, ancillary costs). (Tr. 298-9.) Beach opined that an 11 MW growth in total capacity of nonresidential customer-generation over the next ten years—as projected by DESC in this proceeding—is relatively small and represents very modest penetration. (Tr. 299:12-22.)

Duke witness Bradley Harris ("Harris") is 'Rates and Regulatory Manager' for Duke and conducted a cost-to-serve study on residential NEM in Duke territory. (Tr. 345:12-14.) Harris testified residential customer-generation largely drives the concern for NEM cost-shifting because the vast majority of related issues are attributable to residential customer-generation, exclusively. (Tr. 358:14-359:9.)

Harris testified A62 requires the Commission to address the statutory mandate for both residential and nonresidential customers. Harris acknowledged, however, Duke did not perform a cost-to-serve study for nonresidential customer-generators participating in NEM and, further, that Duke's residential cost-to-serve study—the same one that formed the basis of Duke's conclusions in this proceeding—does nothing to address cost-shift within the nonresidential rate class. (Tr. 357:22-358:8, 359:22-360:1, 360-361:3.) Finally, Harris testified that—from a utility-cost perspective—energy consumed behind the meter should not be treated any different than energy efficiency or demand-side management. (Tr. 355.11.)

Intervenor Alder Energy witness Donald Zimmerman ("Zimmerman") is the President and CEO of Alder Energy Systems, LLC and testified on behalf of the company's customers, which are South Carolina businesses that participate in distributed generation. (Tr. 470:6, 475:12-476:13.) Zimmerman discussed the importance of nonresidential customer-generation to Alder's business

operations, in addition to the company's (15) employees ((14) of which are South Carolinians). (Tr. 477.) Zimmerman testified that most of Alder Energy's clients desire to achieve one-hundred percent offset of their energy usage and that current NEM pricing mechanisms discourage seeking larger offsets. (Tr. 484:9-485:6.) Zimmerman further testified Alder Energy's clients will not invest in distributed generation unless a system will produce a payback within four to seven years. (Tr. 484.) Zimmerman noted that Alder Energy's average system size is 114 kW, while Duke modeled a mere 8 kW system. (Tr. 491:7-12.) Finally, Zimmerman offered his calculation that—according to DESC's evidence in the proceeding—nonresidential customer-generation accounted for a mere two-tenths of the total DG capacity DESC projects for the next ten years. (Tr. 497:13-19.)

III. COMBINED FINDINGS OF LAW AND FACT

1. The South Carolina General Assembly passed A62, in part, to ensure ratepayer access to solar energy in South Carolina. *See* S.C. CODE ANN. § 58-41-40(A). Part and parcel to that end, A62 requires the Commission in this proceeding to establish the cost and benefits of both residential and nonresidential distributed generation and determine a methodology for valuing the same. S.C. CODE ANN. § 58-41-40(C). A62 requires the Commission to consider four key principles in executing this mandate: (a) continue enabling market-driven, private investment in DG; (b) reducing regulatory and administrative burden for customer-generation; (c) avoiding disrupting the growing market for DG; and (d) eliminating any cost-shift, to the greatest extent practicable. S.C. CODE ANN. § 58-41-40(A). The Commission finds A62 does not direct this Commission to value one of these principles over the other. They shall, instead, balance the other with equal weight.

2. The evidence showed, and the Commission finds, that meaningful distinctions exist between residential and nonresidential rate classes in the Utilities' territories, including:

- the load profiles of nonresidential customers vary significantly within the various nonresidential rate classes;

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- the rate schedules for nonresidential customers are traditionally more complex than for residential customers; and
- the complexity of nonresidential rate schedules, including the addition of a demand charges, captures cost of service in ways that residential rate design does not;
- the volumetric rates paid by nonresidential customers is less than for residential customers;
- nonresidential customers have different load profiles from residential customers and, thus, traditionally export less customer-generated electricity to the grid; and
- nonresidential customers traditionally have significant demand charges and it is difficult for customer-generation to offset or avoid those charges.

These distinctions bear directly on the cost and benefit analysis and value of solar methodology mandated for this proceeding.

3. The Utilities failed to make meaningful, if any, distinction between residential and nonresidential rate classes in their evidence, in contravention of A62 and Order 2020-532. DESC and Duke combined data that would otherwise be attributable to one or the other rate class. Duke failed to provide information as it relates to the cost to serve nonresidential customer-generation entirely. The Utility's evidence in this proceeding makes it difficult for the Commission to determine whether the costs, benefits and value of residential and nonresidential customer-generation are the same or should be treated differently.

4. The Commission finds that the current and future market penetration of nonresidential customer-generation in DESC and Dominion territory is small, and therefore, any concern that nonresidential customer-generation creates a cost shift or subsidy is trivial. That is true whether a concern arises, generally, or otherwise under the law, including S.C. CODE ANN. §§ 58-40-20(A)(3) and 58-40-20(G)(1).

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5. For these reasons, the Utility's conclusions, as they relate to dispositive issues in this proceeding affecting nonresidential customer-generators, are not well-taken. Nonresidential customer-generation shall be treated as a separate rate class for purpose of the costs, benefits and value analysis that is relevant to this and future proceedings, to the extent the subject matter includes DG, NEM, and/or customer-generation.

6. S.C. CODE ANN. § 58-40-20(D)(4) permits the Commission to consider the economic impact of DG when executing its discretion in this proceeding. The Commission finds that such economic impact is quantifiable; the relative value has a direct and positive impact on the South Carolina economy, through capital expenditures and job creation; and that such economic impact, direct and indirect, should be included in the methodology to value customer-generation.

7. Both DESC and Duke modeled DG market penetration for the next ten years. Since that time DESC and Duke presented their proposed 'solar choice metering tariff' in other proceedings, pursuant to S.C. CODE ANN. § 58-40-20(F). DESC and Duke's projections presented in this proceeding fail to model market penetration under their proposed 'solar choice metering tariff' and therefore inadequately address the future of DG and NEM within their territories.

8. The principle of judicial economy applies equally to proceedings before this Commission. *See generally Stone v. Thompson*, 426 S.C. 291(2019). Thus, the Commission highly encourages comprehensive stakeholder engagement prior to the Utilities' application or appearance before the Commission. The Commission acknowledges it does not regulate the decisions of the Utilities to conduct stakeholder meetings (unless specifically ordered); however, when a Utility undertakes one voluntarily, it need make every effort to notify *all* potentially affected parties. This tends to and can avoid the need for intervention in the electric dockets of the Commission.

BY ORDER OF THE COMMISSION

Commissioner Justin T. Williams,
Chairman

Commissioner Florence P. Belser,
Vice Chair

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January 21, 2021

Greenville, South Carolina

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CERTIFICATE OF SERVICE

I HEREBY CERTIFY on January 21, 2021 the undersigned served the foregoing upon the recipients in the attached service list by electronic mail.

By: */s/ R. Taylor Speer*

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