BEFORE

THE PUBLIC SERVICE COMMISSION OF

SOUTH CAROLINA

DOCKET NOS. 2020-264-E and 2020-265-E - ORDER NO. 2021-390

May 30, 2021

IN RE:	Docket No. 2020-264-E – Duke Energy Carolinas, LLC's Establishment of Solar Choice Metering Tariffs Pursuant to S.C. Code Ann. Section 58-40-20 (See Docket No. 2019-170-E)	)	ORDER APPROVING STIPULATIONS, APPROVING INTERIM RIDERS, AND ESTABLISHING SOLAR CHOICE TARIFFS
	and	)	
	Docket No. 2020-265-E – Duke Energy Progress, LLC's Establishment of Solar Choice Metering Tariffs Pursuant to S.C. Code Ann. Section 58-40-20 (See Docket No. 2019-169-E)	)	

TABLE OF CONTENTS

Page

I. INTRODUCTION AND PROCEDURAL HISTORY 3

A. Intervention 7
B. Testimony 8
C. Virtual Public Hearing 19

II. SUMMARY INTRODUCTION TO COMMISSION'S DECISION 22

III. JURISDICTION AND GUIDING LEGAL FRAMEWORK 28

A. Standard of Proof 29
B. Overview of Act 62 31

IV. OVERVIEW OF STAKEHOLDER PROCESS AND SETTLEMENT PROCESS 35

A. Stakeholder Process 35
B. Settlement Process 36

V. FINDINGS OF FACT 41

A. Compliance with the General Assembly's Intent When Enacting Act 62 41
B. Compliance with Specific Solar Choice Parameters 43
C. Elimination of Cost Shift 44

VI. EVIDENCE AND CONCLUSIONS 45

VII. EVIDENCE AND CONCLUSIONS SUPPORTING FINDINGS OF FACT A(1)-(6) 46

VIII. EVIDENCE AND CONCLUSIONS SUPPORTING FINDINGS OF FACT B(1)-(9) 54

A. S.C. Code Ann. § 58-40-20(F). 54
B. S.C. Code Ann. § 58-40-20(H) 61

IX. EVIDENCE AND CONCLUSIONS SUPPORTING FINDINGS OF FACT C(1)-(6) 63

X. ORDERING PARAGRAPHS 77

I. INTRODUCTION AND PROCEDURAL HISTORY

This matter comes before the Public Service Commission of South Carolina ("Commission") following the mandate set forth in House Bill 3659, now S.C. Act No. 62 of 2019 ("Act 62"), that requires the Commission to "establish a solar choice metering tariff for customer-generators to go into effect for applications received after May 31, 2021." S.C. Code Ann. § 58- 40-20(F)(1) (Supp. 2020). On June 10, 2019, the Clerk's Office of the Commission posted notice of an advisory committee meeting to the Commission's Document Management System ("DMS") in Docket No. 2019-182-E (the "Generic NEM Docket"), notifying the parties that procedural and scheduling issues related to Act 62 would be discussed. Subsequently, comments on the procedural schedule were filed by Vote Solar, the Southern Environmental Law Center ("SELC"), Dominion Energy South Carolina, Inc. ("DESC"), and jointly by Duke Energy Carolinas, LLC ("DEC") and Duke Energy Progress, LLC ("DEP"). DEC and DEP are at times referred to as the "Companies" in this Order. DESC, the Companies, and SELC argued that no urgent action in the Generic NEM Docket was required by the Commission at that time.

On August 1, 2019, the Commission issued a Notice of Oral Arguments for August 20, 2019, to discuss procedural issues. On August 19, 2019, the Companies, DESC, Lockhart Power Company, SELC, and the South Carolina Solar Business Alliance ("SBA") submitted a letter informing the Commission that they were in agreement that no immediate action was required by the Commission in the Generic NEM Docket and that the parties were working to establish a consensus timeline for initial stakeholder discussions. Oral arguments proceeded on August 20, 2019, at which time SBA orally submitted its opinion no action in the Generic NEM Docket was required at that time.

On August 26, 2020, the Commission issued Order No. 2020-570 setting a procedural schedule for the Generic NEM Docket, and bifurcating consideration of the utilities' respective solar choice tariffs into separate, utility-specific dockets. Although the Commission established a procedural schedule for the Generic NEM Docket, the Commission asked the parties to submit suggested procedural schedules to implement in the utility-specific solar choice dockets, and permitted DEP and DEC to submit bundled filings in each of the Duke-specific dockets—Docket Nos. 2020-264-E and 2020-265-E (collectively, the "Duke Energy Dockets").[1] On November 4, 2020, the Clerk's Office of the Commission issued a Notice of Filing and Hearing and Prefile Testimony Deadlines (the "Notice") in the Duke Energy Dockets,which indicated the nature of the proceeding and advised all interested parties desiring participation in the scheduled proceeding of the manner and time in which to file appropriate pleadings. On December 3, 2020, the Companies filed a joint request with certain other intervenors to extend certain deadlines in the Notice to allow for "additional collaboration that will aid the Commission's review of the complex topics in this proceeding and allow the evidentiary hearing to proceed more efficiently." In response, the Commission issued Order No. 2020-809 on December 9, 2020, appointing David Butler as Hearing Officer for the Duke Energy Dockets "for the purpose of holding a scheduling conference."

The scheduling conference was held via telephone on December 11, 2020. As a result, the Commission set a revised procedural schedule in Order No. 2020-824, which was

[1] The Duke Energy Dockets were originally established by Commission Directives issued in Docket Nos. 2019-169-Eand 2019-170-E on October 28, 2020. Those prior dockets were established for separate compliance tariff filings in response to Act 62.

issued on December 16, 2020. On December 17, 2020, the Clerk's Office of the Commission issued a Revised Notice of Filing and Hearing and Prefile Testimony Deadlines (the "Revised Notice") in the Duke Energy Dockets, which established a revised schedule in accordance with the Commission's order and advised all interested parties desiring participation in the scheduled proceeding of the manner and time in which to file appropriate pleadings. Importantly, the Revised Notice established a revised intervention deadline and required the Companies to provide notice to customers via publication in newspapers of general circulation and via bill inserts or email no later than January 6, 2021.

On December 18, 2020, the Companies submitted correspondence to the Commission indicating concerns with the timing of the new intervention deadline and the compressed deadline by which the Companies would have to provide notice to customers. In response, the Clerk's Office of the Commission issued a Second Revised Notice of Filing and Hearing and Prefile Testimony Deadlines (the "Second Revised Notice") in the Duke Energy Dockets on December 23, 2020, which further modified the Revised Notice and extended the date by which the Companies would have to provide notice to customers. During the Commission Business Meeting on January 20, 2021, the Commission voted to hold an additional Virtual Public Hearing in the Duke Energy Dockets to receive public testimony, and requested further feedback from the Companies on the time required to provide customers with notice of this additional public hearing. In response to feedback received from the Companies, the Commission issued Order No. 2021-64 on January 27, 2021, in which the Commission ordered that the virtual public hearing would be held on April 21, 2021. That same day, the Clerk's Office issued a Notice of Virtual Public Hearing

(the "Public Hearing Notice") to the Companies in these proceedings. Pursuant to Order No. 2021-64, the Companies provided the Public Hearing Notice to all applicable customers by March 21, 2021. The Public Hearing Notice provided customers with a description of the Solar Choice Tariffs and noted that any person desiring to testify as a public witness at the Virtual Public Hearing should notify the Commission of that intention no later than 4:45 PM on April 20, 2021. Order No. 2021-64 gave all parties an opportunity to provide responsive comments to the public testimony on April 23, 2021. On April 20, 2021, the Companies and SELC on behalf of Southern Alliance for Clean Energy ("Southern Alliance"), South Carolina Coastal Conservation League ("SCCL"), and Upstate Forever —submitted correspondence requesting that the Commission permit the parties in this proceeding to provide written responsive comments to the testimony rather than respond during the scheduled virtual hearing. On April 22, 2021, the Hearing Officer granted such request and indicated that written responsive comments should be filed as soon as practicable.

On April 26, 2021, ORS filed an Objection to Public Witness Testimony, seeking to strike from the record certain testimonyprovided by public witness Mandy Powers Norrell. Intervenors filed a response to ORS's objection on April 29, 2021. On April 30, 2021, the Companies provided written responses to the public testimony. NCSEA and SEIA also filed joint written responses to the public testimony on April 30, 2021.

A. Intervention[2]

The North Carolina Sustainable Energy Association ("NCSEA"), represented by Jeffrey W. Kuykendall, Esquire, and Peter Ledford, Esquire, filed a Petition to Intervene on July 27, 2020.

SCCL, Southern Alliance, and Upstate Forever, represented by Kate Lee Mixson, Esquire, of SELC, filed a Petition to Intervene on September 14, 2020. Alder Energy Systems, LLC ("Alder"), representedby R. Taylor Speer, Esquire, and Robert Mangum, Esquire, filed a Petition to Intervene on October 11, 2020. Solar Energy Industries Association ("SEIA"), represented by Jeffrey W. Kuykendall, Esquire, filed a Petition to Intervene on November 6, 2020. Vote Solar, represented by Thadeus B. Culley, Esquire, filed a Petition to Intervene on November 23, 2020. Nucor Steel – South Carolina, represented by Michael Lavanga, Esquire, filed a Petition to Intervene in Docket No. 2020-265-E on November 25, 2020. On February 12, 2021, Vote Solar filed a Motion to withdraw Thadeus B. Culley, Esquire, as counsel and substitute Bess DuRant, Esquire. There was no opposition to any of the Petitions to Intervene, and the Commission issued orders granting each Petition to Intervene. Lastly, the South Carolina Office of Regulatory Staff ("ORS") is considered a party of record in all proceedings before the Commission pursuant to S.C. Code Ann. § 58-4-10, and was represented in this docket by Andrew M. Bateman, Esquire, Benjamin P. Mustian, Esquire, Jeffrey M. Nelson, Esquire, and Jenny R. Pittman, Esquire. The Companies were represented by Heather Shirley Smith, Esquire, J. Ashley Cooper,

[2] Per the Commission Directive issued in Docket Nos. 2019-169-E and 2019-170-E, any intervenor in those dockets was automatically named and designated as an intervenor in the Duke Energy Dockets. As such, certain Petitions to Intervene were filed in those prior dockets.

Esquire, and Marion William Middleton, III, Esquire. Collectively, DEC, DEP, NCSEA, SCCL, Southern Alliance, Upstate Forever, Alder, SEIA, and ORS are referred to as the "Parties" or individually as a "Party."

B. Testimony

On November 2, 2020, the Companies filed an Application, a Stipulation (the "Residential Stipulation" [attached hereto as "Order Exhibit 1"]), and supporting direct testimony. The Companies filed the direct testimony of George V. Brown, General Manager of Strategy, Policy, and Strategic Investment in the Distributed Energy Technology group at Duke Energy Corporation ("Duke Energy"), Lon Huber, Vice President for Rate Design and Strategic Solutions for Duke Energy, Bradley Harris, Rates and Regulatory Strategy Manager for Duke Energy, and Leigh C. Ford, a consultant engaged by DukeEnergy to support Duke Energy's regulatory and legal teams in the implementation of Act 62. Exhibits were included with the direct testimony of Witnesses Huber, Ford, and Harris.

ORS, SCCL, Southern Alliance, Upstate Forever, Vote Solar, SEIA, and NCSEA filed direct testimony on February 8, 2021. ORS filed the direct testimony of Robert A. Lawyer and Brian Horii, Senior Partner at Energy and Environmental Economics, Inc. ("E3"). Exhibits were included with the direct testimony of Witness Horii. Several intervenors jointly filed direct testimony. SCCL, Southern Alliance, Upstate Forever, Vote Solar, SEIA, and NCSEA filed the direct testimony and exhibits of R. Thomas Beach, principal consultant of the consulting firm Crossborder Energy. NCSEA and SEIA filed the direct testimony and exhibits of Justin Barnes, Director of Research with EQ Research LLC.

On February 8, 2021, Alder also filed a Stipulation (the "Non-Residential

Stipulation" [attached hereto as "Order Exhibit 2"]), executed by and among the Companies and Alder, relating to non-residential provisions within the Solar Choice Tariffs. In support of the Non-Residential Stipulation, Witness Huber submitted Supplemental Direct Testimony on behalf of the Companies on February 17, 2021, and Witness Donald R. Zimmerman, principal and founder of Alder, submitted direct testimony on behalf of Alder on February 19, 2021.

On February 22, 2021, the Companies filed rebuttal testimony. The Companies filed the rebuttal testimony and exhibits of Witnesses Harris, Huber, and Ford, along with the rebuttal testimony and exhibits of Janice Hager, President of Janice Hager Consulting, LLC, and Dr. Ahmad Faruqui, a Principal with The Brattle Group. On February 22, 2021, SCCL, Southern Alliance, and Upstate Forever submitted rebuttal testimony of Edward Finley, an attorney in the private practice of law.[3]

On March 8, 2021, certain Parties filed surrebuttal testimony. ORS filed the surrebuttal testimony of Witnesses Lawyer and Horii, with Witness Lawyer's testimony containing an exhibit.SCCL, Southern Alliance, and Upstate Forever filed the surrebuttal testimony and exhibits of Eddy Moore, the Energy & Climate Program Director for SCCL. Finally, SEIA and NCSEA filed surrebuttal testimony of Witness Barnes.

The Commission conducted a public evidentiary hearing in this matter on March 17, 2021, March 18, 2021, and March 19, 2021, via videoconference, with the Honorable Justin T. Williams presiding as Chairman. On March 17, 2021, Witness Brown appeared as the

[3] SCCL, Southern Alliance, and Upstate Forever filed a Motion for Leave to File Rebuttal Testimony of Edward Finley, which the Commission granted by Order No. 2021-164 on March 10, 2021.

Companies' first witness.[4] Witness Brown gave a summary of his direct testimony and answered questions from counsel and the Commission. Witness Brown explained the Solar Choice Tariffs proposed by the Companies arose out of Act 62, which requires the Commission to establish the next generation of NEM for applications received after May 31, 2021. Witness Brown noted that the Companies' Application proposes two new residential riders, one residential rate schedule, and one non-residential rider. Witness Brown highlighted the fact that each of the Companies is proposing an interim rider (the "Interim Riders") to be effective until December 31, 2021, after which the permanent riders and rate schedules (the "Permanent Tariffs") will be effective. Witness Brown explained that the purpose of these Interim Riders is to provide time for the Companies to complete their ongoing implementation of a new billing system, which will more efficiently and effectively bill retail customers for electric service. Taken together, Witness Brown stated that the Solar Choice Tariffs proposed by the Companies fulfill the goals within Act 62, including permitting consumption of behind the meter generation "without penalty" while eliminating cost shift "to the greatest extent practicable."

The Companies next called Witness Ford, who gave a summary of her direct and rebuttal testimony and answered questions from counsel and the Commission. Witness Ford provided an overview of the broad stakeholder process hosted by the Companies that led to the negotiations resulting in the Residential Stipulation. Witness Ford provided details of the three stakeholder workshops hosted by the Companies, each of which had at

[4] Rather than taking direct and responsive testimony from each witness at the same time, the Parties presented the responsive testimony of certain witnesses only after the Commission took direct testimony of all other Parties.

least forty participants present. These stakeholder participants included various industry participants and clean-energy advocates. Importantly, in the third workshop, which included sixty-five (65) participants, the Companies explained the Memorandum of Understanding ("MOU") executed on September 16, 2020, by and among the Companies; NCSEA; Sunrun Inc.; Vote Solar; and SELC on behalf of SCCL, Southern Alliance and Upstate Forever (the "MOU"), which formed the foundation for the Residential Stipulation.

Witness Ford's rebuttal testimony responded to certain concerns of ORS that the MOU and corresponding Residential Stipulation may restrict the Companies from being forthright in this proceeding given that the MOU appears to bind the Companies to support the Solar Choice Tariffs in this proceeding. Witness Ford directly addressed ORS's concerns and explained the Companies first engaged ORS on NEM-related matters under Act 62 over a year prior to the hearing. Witness Ford outlined the interactions between ORS and the Companies on NEM-related matters over the past year, including multiple meetings and conference calls. Witness Ford noted that regardless of the specific language, it is only logical that parties to a settlement would support the same in front of the Commission while also answering all questions forthrightly and to the bestof each witness's ability.

Witness Huber was the Companies' next witness. Witness Huber gave a summary of his direct and supplemental direct testimony and answered questions from counsel and the Commission. Witness Huber echoed the testimony of Witness Ford, praising the broad coalition of stakeholders engaged in the stakeholder process that initiated the negotiations resulting in the Residential Stipulation. Witness Huber noted that the stakeholder process

and subsequent settlement negotiations were aimed at one goal—fulfilling the principles within Act 62. Witness Huber explained that, by utilizing industry best-practices, the Companies are able to more accurately align rates with the cost to serve Solar Choice customers, which serves to significantly, if not, completely, eliminate the cost shift in accordance with Act 62, while permitting the marketfor distributed energy generation in South Carolina to continue without disruption. Witness Huber then testified in support of the Non-Residential Stipulation and noted that the collaborative process with Alder resulted in proposed non-residential tariffs in this proceeding that account for not only the principles of Act 62, but also the needs of non-residential customers. Witness Huber further described the Non-Residential Stipulation as a result of "continued discussions with Alder in the spirit of stakeholder engagement that has been the hallmark of these dockets and other NEM-related dockets." (Tr. p. 148.4, ll. 1-2.) Witness Huber also noted that the tariffs arising from the Non-Residential Stipulation account for a key goal of many non-residential customers' corporate sustainability initiatives. Specifically, the Non-Residential Stipulation permits non-residential customer-generators to earn a renewable energy credit ("REC") for each megawatt hour producedby their on-site generation. Witness Huber stated that this aspect of the Non-Residential Stipulation seeks to benefit these customers by helping them achieve "these class-specific goals." (Tr. p. 148.7, ll. 11-18.)

For their final direct witness, the Companies called Witness Harris. Witness Harris gave a summary of his direct testimony and answered questions from counsel and the Commission. Witness Harris provided the Companies' cost of service analyses that formed the basis upon which the Solar Choice Tariffs were developed. Witness Harris explained that the Companies utilized the Cost Duration Method and data that has been previously

utilized and vetted by the Commission to develop the specific rates in the Solar Choice Tariffs. Mr. Harris testified that the proposed rates would substantially eliminate the cost shift over that arising under existing NEM programs (the "Existing NEM Programs") from a marginal cost perspective, and virtually eliminate all cost shift under an embedded cost perspective. Witness Harris described that both perspectives are necessary to the ratemaking process because the embedded perspective ensures that customers are paying a fair share of costs that have already been incurred, while the marginal perspective ensures customers are paying a fair share of costs going forward.

The next direct witness was Thomas Beach, testifying on behalf of Southern Alliance, SCCL, Upstate Forever, Vote Solar, SEIA and NCSEA. Witness Beach gave a summary of his direct testimony and answered questions from counsel and the Commission. Witness Beach explained that the Solar Choice Tariffs represented in the Residential Stipulation achieve the key goals of Act 62, and were developed through a settlement process that included a broad range of interests. According to Witness Beach, the key success of the Solar Choice Tariffs is that they balance the principles within Act 62 by maintaining distributed solar as a reasonable economic option, while still eliminating cost shift to the greatest extent practicable in accordance with Act 62. Witness Beach also testified in support of the time of use rates ("TOU Rates") and critical peak pricing ("CPP") structure used within the tariffs as a way to more closely align rates with the cost to serve these customers. TOU Rates are also part of a broader rate structure within the Solar Choice Tariffs that can be adapted to other distributed energy resources ("DER") technologies.

NCSEA and SEIA called Witness Barnes as the next direct witness. Witness Barnes gave a summary of his direct testimony and answered questions from counsel and the

Commission. Witness Barnes explained although he supported the MOU and corresponding tariffs offered by the Companies, such support was conditional upon the Winter Bring Your Own Thermostat Program[5] ("Winter-Focused BYOT Program") awaiting review by the Commission for use in conjunction with the Solar Choice Tariffs. Witness Barnes characterized the Winter-Focused BYOT Program as a "critical element" in achieving the General Assembly's intent within Act 62.

Witness Zimmerman next provided direct testimony on behalf of Alder and gave a summary of his direct testimony and answered questions of the Commission. Witness Zimmerman testified in support of the Non-Residential Stipulation and noted that non-residential tariffs proposed thereunder represent "the best possible balancing of A[ct] 62's various express interests for successor NEM tariffs" for the Companies' specific South Carolina service territories.

ORS presented the last direct witnesses. ORS first called Witness Lawyer who provided a summary of his direct testimony and answered questions from counsel and the Commission. Witness Lawyer summarized the ORS's statutory mission, noted its focus on eliminating cost shift, and provided an overview of Witness Horii's testimony. Witness Horii, ORS's next witness, gave a summary of his direct testimony and answered questions from counsel and the Commission. Witness Horii contended that the Companies erred in relying on the embedded cost of service studies that were vetted and approved by the

[5] The Companies have proposed a demand response management component through a Winter Bring Your Own Thermostat program and will propose an Energy Efficiency ("EE") program in separate dockets in South Carolina and North Carolina. Consistent with current EE programs, the Companies will implement new programs upon receiving necessary approvals from both the Commission and the North Carolina Utilities Commission. The Companies designed the Solar Choice Tariffs to allow customers the option to use either program or to take simultaneous advantage of these programs together.

Commission that utilized the Summer Coincident Peak (the "Summer CP") and form the basis of all of the Companies' retail rates. Instead, Witness Horii stated the Companies should use a different cost of service allocator in developing rates for the Solar Choice Tariffs. Witness Horii claimed adopting a new cost of service allocator for Solar Choice would even further eliminate the cost shift, but that such an approach should only be approved by the Commission "if the Commission determines that the elimination of a cost shift takes priority over the goal of Act 62 that look (sic) to minimize disruption of the solar industry in South Carolina." (Tr. p. 393.32, ll. 8-10.)

Next, the Commission heard rebuttal testimony. The Companies first called Witness Hager. After providing a summary of her rebuttal testimony and answering questions from counsel and the Commission, Witness Hager provided testimony focused upon cost of service and fundamental principles of ratemaking. Witness Hager testified that Witness Horii's recommendation to deviate from the Summer CP in this proceeding would be inappropriate because it would (i) diverge from the methodology that has been utilized by the Companies for many years and upon which all of the Companies' Commission-approved South Carolina retail rates are based, (ii) require the Commission to change ratemaking methodologies outside of a base rate case, and (iii) inappropriately reflect the actual drivers of the embedded costs of the Companies' systems. Witness Hager further testified changing the allocator only for a subset of customers would impact the Companies' overall revenue requirement and result in either an over- or under-collection of the same.

The Companies' next rebuttal witness was Witness Harris, who provided a summary of his rebuttal testimony and answered questions from the Commission. Witness

Harris expanded upon Witness Hager's concerns, and noted utilizing any allocator other than the Summer CP would not reflect the historical basis upon which these embedded costs were incurred and would significantly impact non-Solar Choice customers. Witness Harris was careful to note that ORS raised no issue with the Companies' marginal cost analysis, but only raised an issue with the embedded analysis given that Witness Horii sought to characterize the data as "outdated" in rejecting the Companies'utilization of a Commission-approved methodology. However, Witness Harris pointed out that Witness Horii's preferred data source comes from 2016 Resource Adequacy Studies that are actually based on older data than the analyses relied upon by the Companies.

Next, Witness Faruqui provided rebuttal testimony on behalf of the Companies. Witness Faruqui first provided a summary of his rebuttal testimony and then answered questions from the Commission. Witness Faruqui characterized the Residential Stipulation as breaking a "log jam that has stymied the NEM conversations between utilities and the solar industry around the country." (Tr. p. 509.8, ll. 6-7.) Witness Faruqui asserted that moving away from the Summer CP to a Winter CP methodology would be a "fundamental ratemaking mistake." (Tr. p. 507, ll. 9-10.)

Witness Huber completed the Companies' case by providing a summary of his rebuttal testimony and answering questions from counsel and the Commission. Witness Huber provided an overview of the key points made in the Companies' rebuttal testimony, which include:

- Witness Horii's allegation that the Companies move away from utilizing the Summer CP is inappropriate;
- Witness Horii's assertion that the Companies have not been forthright orprovided useful information is incorrect; and

- Contrary to the claims made by Witness Horii, the MOU represents an innovative and ground-breaking path forward for NEM.

In short, Witness Huber requested the Commission not adopt Witness Horii's approach to cost of service in this proceeding but instead adopt the Solar Choice Tariffs developed through a robust collaborative process, utilizing traditional, widely-accepted, and Commission-approved methodologies that comply with all of the directives of Act 62.

SCCL, Southern Alliance, and Upstate Forever next presented their rebuttal and surrebuttal witnesses. For rebuttal, SCCL, Southern Alliance, and Upstate Forever called Witness Finley to the stand. Witness Finley gave a summary of his rebuttal testimony and answered questions from counsel and the Commission. Witness Finley testified Act 62 requires the Commission to balance various policy directives, rather than focus singularly on eliminating any cost shift. Likewise, Witness Finley described Witness Horii's suggestion to move away from the Summer CP as a move that is inconsistent with established ratemaking principles and could "close the door to continued residential solar development." (Tr. p. 565.15, l. 6.)

Next, Witness Harris was recalled at the request of Commissioner Carolyn L. Williams to provide a clarification on annual bill savings. Witness Moore then provided surrebuttal testimony on behalf of SCCL, Southern Alliance, and Upstate Forever. Witness Moore read a summary of his surrebuttal testimony and answered questions from counsel and the Commission. Witness Moore echoed many of the other witnesses in this proceeding by applauding the collaborative nature of the settlement process to develop tariffs that comply with Act 62, while noting that ORS admittedly authorized parts of Act

62's relevant goals in its analysis—something which the Companies did not do when developing these tariffs.

Witness Barnes presented surrebuttal testimony on behalf of NCSEA and SEIA and noted his agreement with the Companies and several other witnesses that moving away from the Summer CP in this docket is inappropriate, would lead to rate shock for existing customers, and would under value the settlement reached by parties that are typically adverse to one another in these proceedings around the country.

Next, the Companies asked to recall Witness Harris a second time to provide the Commission with additional context for the annual bill savings numbers he provided to Commissioner Williams when he was first recalled. Witness Harris clarified that although there would be an increase in annual bills under the Solar Choice Tariffs when compared to the Existing NEM Programs, customers would not see such an increase given that they are permitted to take service under the Existing NEM Programs until 2025 or 2029, depending upon their enrollment date.

Finally, ORS concluded its case by presenting the surrebuttal testimony of Witness Lawyer and Witness Horii. Witness Lawyer was called to the stand first. Witness Lawyer provided a summary of his surrebuttal testimony and answered questions from counsel and the Commission. Witness Lawyer first clarified that the ORS "does not assert or allege that the Companies have acted in any manner less than transparent." (Tr. p. 650, ll 14-16.) Witness Lawyer went on to explain that ORS's focus in this proceeding arises from its statutory duty, which does not involve certain mandates placed upon the Companies by Act 62, such as avoiding disruption to the DER market.

ORS called Witness Horii as its last witness. He gave a summary of his surrebuttal

testimony and answered questions from counsel and the Commission. Witness Horii reiterated ORS's prioritization of eliminating the cost shift, while acknowledging the tariffs presented by ORS are "an option for the Commission to consider if the Commission deems a reduction of the cost shift is of primary importance in this docket." (Tr. p. 677, ll. 13-15.)

At the conclusion of testimony, the Parties discussed potential deadlines for proposed orders with the Hearing Officer. It was determined that the Hearing Officer would provide a subsequent update to the Parties on a deadline for proposed orders. On April 15, 2021, a deadline for proposed orders was set for May 3, 2021. As such, the Parties filed proposed orders on May 3, 2021.

C. Virtual Public Hearing

A total of six witnesses provided testimony to the Commission at the Virtual Public Hearing on April 21, 2021. Two topics seemed to dominate the majority of the testimony—(i) the notice afforded to customers related to this proceeding and (ii) the elimination of the cost shift under the tariffs due to new rate structures.

1. <u>Notice</u>

Certain public witnesses alleged that the notices provided by the Companies to the public were insufficient in describing the Companies' offerings in this proceeding and that the public was not put on notice about these hearings. However, notices were published in newspapers in 14 different newspapers within South Carolina—including in the upstate. Additionally, the Companies posted the date of the Virtual Public Hearing on social media, and the Companies published a news release on Duke Energy's website and PR Newswire notifying customers of the Virtual Public Hearing and describing the Stipulations presented in this proceeding. Further, both the Second Revised Notice and Public Hearing

Notice were provided to the Companies' customers via special mailing, bill insert, or electronic mail. The Solar Choice Tariffs and underlying Stipulations have been well-covered across the country, ranging from local publications such as the Charleston *Post & Courier* and the *Greenville News*, to national publications such as *Utility Dive* and *Greentech Media.*

Prior to proposing the specific tariffs in this proceeding, the Companies hosted three workshops for stakeholders.

2. Elimination of Cost Shift

Certain public witnesses provided testimony that implicated Act 62's call to "require the commission to establish solar choice metering requirements that fairly allocate costs and benefits to eliminate any cost shift or subsidization associated with net metering to the greatest extent practicable." [6] For example, the Commission heard from an existing NEM customer that noted the cost shift occurring under Existing NEM Programs should continue so that the twenty (20) year lease into which this witness entered to obtain solar panels remains economically viable. Another witness noted that although he is not an NEM customer, he views the new rate structure within the Solar Choice Tariffs as the Companies shifting money from NEM customers to their shareholders. With respect to Act 62's call to ensure "access" while also pursuing elimination of the cost shift, one witness provided a different perspective given that he works within the solar industry in South Carolina. That witness drew upon his industry experience and testified that although the rates within the

[6] In establishing a successor solar choice metering tariff, Section 58-40-20(G)(1) directs the Commission to "eliminate any cost shift to the greatest extent practicable on customers who do not have customer-sited generation while also ensuring access to customer-generator options for customers who choose to enroll in customer-generator programs." § 58-40-20(G)(1) (Supp. 2020).

Solar Choice Tariffs represent realignment of costs, the industry could adapt and continue to do business in South Carolina. However, that same witness noted that any increase beyond those rates proposed in the Solar Choice Tariffs could significantly harm the solar industry.

Finally, one witness drew upon her professional experience to provide the Commission with a picture of how the Solar Choice Tariffs would affect low-income customers and noted that studies indicate low-income customers in South Carolina already bear a high energy burden, and she is concerned with more cost shift being placed upon low-income customers. The witness stated that current solar provisions have allowed access to solar power for some low-income customers and expressed support for the Solar Choice Tariffs.

The Commission recognizes and appreciates the difficulty in balancing Act 62's objectives of eliminating cost shift while also providing access to customer-generator programs. Notwithstanding that difficulty, the Commission believes that the Solar Choice Tariffs have eliminated cost shift to the greatest extent practicable via innovative rate structures that reflect best practices from across the country. Although the Solar Choice Tariffs do represent a re-alignment of costs, the record reveals that this is not simply a shift of revenue from customers to the Companies. Instead,the rates represent a more accurate alignment of the cost to serve these customers and lessens potential cross-subsidization by non-participating customers. Even with this cost-alignment that is required to meet the directives of Act 62, the Companies have provided a glide path for existing customers to ensure that those rate impacts are mitigated. Customers under Existing NEM Programs can take service under those existing programs until 2025 or 2029, depending upon enrollment

date. Customers also have the option to obtain service under an Interim Rider until 2029. Although they can switch to a Permanent Tariff at any time during those periods,customers will not be forced to do so. Even if their programs expire and these customers opt not to take service under a Permanent Tariff, the Companies have committed to filing a transition tariff that would further mitigate the impacts of the expiration of the Existing NEM Programs.

The testimony presented during the Virtual Public Hearing indicates that the Solar Choice Tariffs represent a new rate structure that will be well-tolerated by the solar industry, resulting in continued operations within South Carolina even after the Solar Choice Tariffs are implemented. The record reveals that the Solar Choice Tariffs will alleviate the burden on low-income customers by reducing the amount of potential cost shift that those customers may otherwise have borne in connection with the Existing NEM Programs. Taken together, the Solar Choice Tariffs ensure access by establishing new rate structures that provide the solar industry a path forward, while also alleviating the potential burdenon non-participating customers—including low-income customers.

Therefore, by providing a glide path for existing customers and ensuring access to NEM programs, while eliminating cost shift "to the greatest extent practicable," the Commission is convinced that the Solar Choice Tariffs satisfy the requirements of Act 62 in a way that represents an appropriate balancing of the various interests therein.

II. SUMMARY INTRODUCTION TO COMMISSION'S DECISION

This proceeding arises out of the NEM provisions within Act 62 that direct this Commission to "establish a 'solar choice metering tariff' for customer-generators to go

into effect for applications received after May 31, 2021." S.C. Code Ann. § 58-40-20(F)(1). Act 62 paired several requirements with this directive that the Commission must consider. One set of requirements is found in Sections (F) through (H) of S.C. Code Ann. § 58-40-20. These specific, enumerated requirements direct the Commission to develop a methodology to compensate customer-generators for the benefits provided by their exports and select a solar choice tariff that eliminates any cost shift "to the greatest extent practicable . . . while also ensuring access to customer-generator options." The Commission's consideration of these tariffs is guided by the broader expression of the General Assembly's intent in S.C. Code Ann. § 58-40-20(A). There, Act 62 echoed the importance of eliminating any cost shift "to the greatest extent practicable," but also stated its intent to avoid disruption of the DER market in South Carolina and to build upon the successful deployment of DERs under Act 236. These potentially competing objectives require a balancing of interests that was simply not contemplated by Act 236—which sought to accelerate adoption of solar rather than balance the costs to serve Solar Choice customers with the benefits provided by the same to the system.

Although this balancing of interests was the topic of a great deal of testimony in this proceeding, it is apparent to the Commission that the disagreement between the Stipulating Partiesand ORS is largely based on (i) whether the General Assembly intended for the Commission to consider one requirement within Act 62 above the others, and (ii) whether the rates and corresponding cost shift measurements under the Solar Choice Tariffs should be based upon existing or new methodologies and allocators.

The Commission's consideration of any proposed Solar Choice Tariff must necessarily account for the broad range of interests at play within Act 62, which range from

non-participating customers, to customer-generators, and to the solar industry as a whole. On this point, the Commission notes the stakeholder process initiated over a year ago by the Companies. The record indicates that the participants in this stakeholder process represented the same wide-ranging interests at play within Act 62. Likewise, the Commission is encouraged by the Companies' willingness to negotiate with a broad range of interests to find compromises that are in the best interest of all ratepayers. Indeed, testimony indicates that the Residential and Non-Residential Stipulations were the subject of rigorous debate—striking a much different tone than the stakeholder process. The Stipulating Parties testified that those Stipulations serve the public interest in accordance with Act 62, and the Commission agrees.

As for the balancing of interests required by the express intent included within Act 62, the Commission finds that the Solar Choice Tariffs represent an appropriate balance. This is largely a byproduct of the diverse interests that signed onto the Stipulations, which range from solar developers to groups with a broader conservation focus not tied to the solar industry.

Act 62 requires the elimination of any potential cost shift to be balanced against other goals and requirements. The Commission believes the Companies have fulfilled the market-centric prongs of the General Assembly's intent. The Companies presented Solar Choice Tariffs that incorporate rate structures that should avoid disruption of the rooftop solar industry and continue to provide customers with access to solar options. At the same time, the Solar Choice Tariffs provide a platform for the deployment of other types of DERs. Providing this platform is consistent with other aspects of Act 62, including S.C. Code Ann. §§ 58-41-05 and 58-27-845(B). In fact, the Commission heard testimony at the

Virtual Public Hearing from a witness that worked within the solar industry in South Carolina who testified the Solar Choice Tariffs would allow the industry to keep moving forward in South Carolina. Likewise, Witness Zimmerman—principal and founder of a commercial solar developer in South Carolina— explained that the Non-Residential Stipulation would provide solar developers in South Carolina with enough room to grow, resulting in more options for customer-generators in South Carolina.

As for the requirements found in S.C. Code Ann. § 58-40-20(F)-(H), the Parties were generally in agreement the Solar Choice Tariffs comply with the statute. The avoided cost export credit is consistent with Act 62's call to create a methodology that compensates customer-generators for the benefits provided by their exports to the power system. The Commission finds for purposes of this proceeding that this export credit reflects an appropriate approximation of the benefit provided to the system. Although the export credit regime realigns costs with benefits under the Solar Choice Tariffs, customer-generators are still able to enjoy a 1:1 offset for energy consumed behind the meter in compliance with Act 62's prohibition on penalties for behind the meter consumption.

The monthly netting within the Solar Choice Tariffs aligns the costs and benefits of serving Solar Choice customers in the affected service territories. Although the Permanent Tariffs contain monthly netting within TOU periods, the Commission finds it unnecessary to include the same mechanism within the Interim Riders and the Non-Residential Riders[7], as suggested by ORS.

Furthermore, including the same monthly netting within TOU periods as the

[7] These riders contain monthly netting but do not net within TOU periods.

Permanent Tariffs would erode a key benefit of these Interim Riders—the glide path they present to the Permanent Tariffs. The Interim Riders necessarily contain different rate mechanisms than the Permanent Tariffs because the Interim Riders are intended to achieve a specific, enumerated consideration within Act 62—a mitigation measure to transition existing customer-generators.[8] Customer-generators remain under the Existing NEM Programs until 2025 or 2029 (depending upon enrollment date); alternatively, they can also switch to the Interim Riders and maintain service thereunder until 2029. If either existing customers or customers under the Interim Rider select not to take service under a Permanent Tariff when their applicable program expires, the Companies have committed to filing additional transition tariffs for those customers in advance of their transition date. No Parties disputed the purpose of the Interim Riders in achieving this express goal of Act 62, and the Commission finds the Interim Riders fulfill this goal.

Although the Parties are generally in agreement on the topics discussed above, the Stipulating Parties and the ORS maintain a narrow disagreement on whether the Solar Choice Tariffs eliminate the cost shift "to the greatest extent practicable." Specifically, the Companies developed the Solar Choice Tariffs utilizing methodologies and allocators consistent with those utilized in the Companies' most recent rate cases before the Commission. These include the Summer CP and Cost Duration Method. Utilizing these allocators and methodologies, the Companies' analysis reveals that the Solar Choice Tariffs substantially, if not completely eliminate the cost shift. The ORS suggests that the Companies should utilize a winter allocator and the Loss of Load Expectation ("LOLE")

[8] This interim period also provides the Companies with the necessary time to complete transition to a new billing system. This new billing system will enable the Companies to more efficiently and effectively bill retail customers—including those under the Permanent Tariffs—for electric service.

model to evaluate the cost shift and design rates under the Solar Choice Tariffs. However, the record reveals that there is no "substantial justification" for using any other allocators or methodologies than those currently approved by the Commission. Therefore, the ORS's request is inappropriate.

Even if the Commission were to consider a change of allocators in this proceeding, the Summer CP would remain the Commission-approved allocator for the Companies at this time. ORS challenges the use of the Summer CP only for the purpose of evaluation of the Companies' embedded cost of service studies. Within those studies, the Companies have to allocate historical costs to the customer classes which caused them to incur such costs. The majority of the historical costs incurred by the Companies, as explained in their embedded costs to serve studies, were incurred to serve a summer peaking system. The ORS supported the use of the Summer CP in the Companies' last rate case and utilizing a winter allocator in this docket would fundamentally de-couple ratemaking from well-established cost causation principles. Furthermore, the record does not justify any allocator or data different from the Summer CP.

The ORS's suggestion to exclusively utilize LOLE instead of the Cost Duration Method, is similarly inappropriate in this case. Although the LOLE method may be an appropriate topic for discussion in the avoided cost context, it is not appropriate for utilization in this proceeding because it does not focus upon historical costs, which are a fundamental consideration in a ratemaking proceeding. By contrast, the Cost Duration Method was specifically designed to provide a comprehensive picture of system assets from which to develop TOU rates.

The Commission rejects the challenges to the Companies' methodologies and cost shift numbers. The allocators and methodologies underlying the Solar Choice Tariffs are based upon sound ratemaking principles that have been accepted by the Commission. The Solar Choice Tariffs substantially, if not completely, eliminate any cost shift in accordance with Act 62, while also providing opportunities for solar adoption and market growth in South Carolina. Likewise, solar opportunities are achieved without penalizing customers in violation of Act 62 because customers can continue to offset, on a 1:1 basis, their energy requirements from the Companies via self-consumption. As such, the Companies have fulfilled Act 62's requirement to eliminate cost shift "to the greatest extent practicable."

Further, the Commission believes, as discussed below, the recommendations of ORS' witnesses to completely eliminate the alleged cost shift would increase rates to a point which would disrupt the solar market. A tariff containing such rates would not meet the stated intent and the requirements of Act 62.

Therefore, the Commission finds that the Interim Riders and Non-Residential Riders shall be effective for applications received after May 31, 2021, with the Permanent Tariffs becoming effective on January 1, 2022. These Solar Choice Tariffs shall be offered upon the terms and conditions set forth in this Order.

III. JURISDICTION AND GUIDING LEGAL FRAMEWORK

This Commission has jurisdiction over the Companies, as the Companies are electrical utilities under the laws of South Carolina and their operations are subject to the jurisdiction of this Commission and Act 62, which requires the Commission to approve new Solar Choice tariffs for applications received by the utilities after May 31, 2021.

A. Standard of Proof

1. Evidence in the Record

"The South Carolina Public Service Commission was created by the legislature to supervise and regulate the rates and services of every public utility in the state." *Southern Bell Tel. and Tel. Co. v. Public Service Comm.*, 270 S.C. 590, 597, 244 S.E.2d 278, 282 (1978). However, Commission decisions must be based upon substantial evidence in the record. *See e.g.*, Commission Order No. 2006-593, issued in Docket No. 2006-107-WS on October 16, 2006. The Commission cannot go beyond the record of this proceeding when rendering a decision and all such decisions must be supported by substantial evidence in the record.

2. Customer Rights Identified by Act 62

Section 2 of Act 62 places additional emphasis on customer access to bill savings through rates that promote energy efficiency, demand response efforts, and onsite renewable energy options. The General Assembly made an explicit finding that "there is a critical need to: (1) protect customers from rising utility costs, (2) provide opportunities for customers to reduce or manage electrical consumption . . . and (3) equip customers with the information and ability to manage their electric bills. S.C. Code Ann. § 58-27-845(A)(Supp. 2020). Act 62 then provides an enumeration of electrical utility customer rights to address those critical needs, including that:

> Every customer of an electrical utility has the right to a rate schedule that offers the customer a reasonable opportunity to employ such energy and cost-saving measures as energy efficiency, demand response, or onsite distributed energy resources in order to reduce consumption of electricity from the electrical utility's grid and to reduce electrical utility costs

§ 58-27-845(B). The Commission is further directed to, "[i]n fixing just and reasonable utility rates," abide by the following guidelines:

> [C]onsider whether rates are designed to discourage the wasteful use of public utility services while promoting all use that is economically justified in view of the relationships between costs incurred and benefits received, and that no one class of customers are unduly burdening another, and that each customer class pays, as close as practicable, the cost of providing service to them.
>
> ...[And] ensure that each electrical utility offers to each class of service a minimum of one reasonable rate option that aligns the customer's ability to achieve bill savings with long-term reductions in the overall cost the electrical utility will incur in providing electric service, including, but not limited to, time-variant pricing structures

§ 58-27-845(C)-(D). Although these provisions apply to a broader context than simply the Commission's consideration of the Solar Choice Tariffs, this language requires the Commission to ensure that each utility gives customers reasonable opportunities to reduce their bills through DERs, including rooftop solar and energy efficiency, and to encourage the use of time-variant pricing structures. The Commission finds that the Solar Choice Tariffs address these requirements contained in Act 62. The record reveals that rate structures within the Solar Choice Tariffs provide customer-generators with the tools and information required to significantly reduce their electrical bill via on-site consumption and TOU periods that send price signals to customers. These price signals also discourage wasteful power consumption and further align the cost to serve these customers with the benefits provided to the power system. This alignment of costs and benefits ensures that non-participating customers are not unduly burdened by Solar Choice customers, while also ensuring that all customers have access to customer-generator programs and rate

schedules that offer customers the opportunity to employ cost-saving. Taken together, the Commission finds that the Solar Choice Tariffs directly and appropriately satisfy the requirements of Act 62.

B. Overview of Act 62

On May 16, 2019, the Governor signed into law Act 62, which requires the Commission to approve tariffs for the Solar Choice Program that are reasonable considering the costs and benefits of the program, for applications received on or after June 1, 2021. Act 62 establishes the parameters for the next generation of NEM in South Carolina that builds upon the success of the Existing NEM Programsand sets new goals that were not present under Act 236. Act 62 also includes principles specific to Solar Choice that the Commission must account for when considering the Solar Choice Tariffs. The Commission finds that it is crucial to fulfill all of the applicable tenets of Act 62, without focusing on any one in isolation. In this aspect, the Commission appreciates the Stipulations presented in this proceeding and the challenges in reconciling the various principles within Act 62 to present a compromise position to the Commission. Those various principles are described below:

1. General Assembly's Intent When Enacting Net Energy Metering Statutes

The General Assembly's intent is codified in S.C. Code Ann. § 58-40-20(A), which states:

> (A) It is the intent of the General Assembly to:
>
> (1) build upon the successful deployment of solar generating capacity through Act 236 of 2014 to continue enabling market-driven, private investment in distributed energy resources across the State by reducing regulatory and

administrative burdens to customer installation and utilization of onsite distributed energy resources;

(2) avoid disruption to the growing market for customer-scale distributed energy resources; and

(3) require the commission to establish solar choice metering requirements that fairly allocate costs and benefits to eliminate any cost shift or subsidization associated with net metering to the greatest extent practicable.

The stated intent is to continue the successful deployment of rooftop solar in South Carolina by reducing burdens to installation and avoiding disruption to the growing market. On the other hand, item (3) seeks to limit the impact on non-Solar Choice customers to the greatest extent practicable. Specifically, it requires the Commission to advance the intent in items (1) and (2), while at the same time fairly allocating costs and benefits under the tariffs to reduce cost shift borne by non-Solar Choice customers "to the greatest extent practicable."

2. **Solar Choice Parameters (Sections 58-40-20(F)-(H))**

The broader statements of intent discussed above provide guidance when considering the directives related to the Commission's consideration of Solar Choice in S.C. Code Ann. § 58-40-20(F)-(H).

i. S.C. Code Ann. § 58-40-20(F)

S.C. Code Ann. § 58-40-20(F)(1) requires the Commission to establish Solar Choice Tariffs that "go into effect for applications received after May 31, 2021." S.C. Code Ann. § 58-40-20(F) (2) and (3) prescribe certain considerations that the Commission must account for when establishing such tariffs:

(2) In establishing any successor solar choice metering tariffs, and in approving any future modifications, the commission shall determine how meter information is used for calculating the solar choice metering measurement that is just and reasonable in light of the costs and benefits of the solar choice metering program.

(3) A solar choice metering tariff shall include a methodology to compensate customer-generators for the benefits provided by their generation to the power system. In determining the appropriate billing mechanism and energy measurement interval, the commission shall consider:

(a) current metering capability and the cost of upgrading hardware and billing systems to accomplish the provisions of the tariff;

(b) the interaction of the tariff with time-variant rate schedules available to customer-generators and whether different measurement intervals are justified for customer-generators taking service on a time-variant rate schedule;

(c) whether additional mitigation measures are warranted to transition existing customer-generators; and

(d) any other information the commission deems relevant.

Act 62 directs the Commission to ensure that the Solar Choice Tariffs in this proceeding employ a "metering measurement" or "netting interval" that is "just and reasonable" in light of the "costs and benefits" of the program, while the methodology compensates customer-generators for the "benefits provided by their generation to the power system." The specific items enumerated for the Commission's consideration when determining the appropriate billing mechanism and energy measurement intervalindicate a desire to utilize certain best-practices by specifically identifying "time-variant rate schedules." Also included in the considerations are "whether additional mitigation measures are warranted to transition" current NEM customers to the Solar Choice Tariffs.

ii. S.C. Code Ann. § 58-40-20(G)

S.C. Code Ann. § 58-40-20(G) echoes the cost shift language mentioned above, while setting two other requirements for the Commission's consideration of the Solar Choice Tariffs:

> (G) In establishing a successor solar choice metering tariff, the commission is directed to:
>
> (1) eliminate any cost shift to the greatest extent practicable on customers who do not have customer-sited generation while also ensuring access to customer-generator options for customers who choose to enroll in customer-generator programs; and
>
> (2) permit solar choice customer-generators to use customer-generated energy behind the meter without penalty.

This language makes clear that the elimination of any cost shift must be achieved without penalizing Solar Choice customers. Secondly, the elimination of a cost shift should not foreclose access to the customer-generator programs. Again, the Commission notes that only the cost shift language is qualified with the phrase "to the greatest extent practicable." Another example that Act 62 requires the Commission to balance a broader range of interests to achieve these goals.

iii. S.C. Code Ann. § 58-40-20(H)

Lastly, S.C. Code Ann. § 58-40-20(H) requires the Commission to "establish a minimum guaranteed number of years to which solar choice metering customers are entitled pursuant to the commission-approved energy measurement interval and other terms of their agreement with the electrical utility." Accordingly, the Commission must ensure that the Solar Choice Tariffs remain open to eligible customers for a pre-determined number of years from enrollment.

IV. OVERVIEW OF STAKEHOLDER PROCESS AND SETTLEMENT PROCESS

Act 62 contains two primary NEM-related directives for the Commission—evaluate the Existing NEM Programs and establish a Solar Choice Program for each utility for applications received after May 31, 2021. The Companies hosted a broader stakeholder process to discuss items relevant to both the Generic NEM Docket and the Duke Energy Dockets. From that stakeholder process arose separate Solar-Choice-specific negotiations which ultimately led to the Solar Choice Tariffs proposed in these dockets.

A. Stakeholder Process

As described by Witness Ford, the Companies organized two initial stakeholder workshops to solicit feedback regarding, among other things, the implementation of the NEM-provisions within Act 62—which necessarily included discussion of the Generic NEM Docket and options for future NEM programs in South Carolina. (Tr. p. 100.8, ll. 4-7.) When organizing these initial workshops, the Companies canvassed various stakeholders that have been engaged in prior efforts to explain the goals of the workshops and invite them to attend. (Tr. p. 100.8, ll. 8-11.) To ensure that the stakeholder attendee list included as broad of interests as possible, the Companies again canvassed the stakeholders in attendance at the first workshop to determine whether they felt any other interested parties should be invited to the second workshop. (Tr. p. 100.8, ll. 11-13.) This outreach led to a stakeholder process that has been characterized as "collaborative," representing "multiple points of view," and involving "key stakeholders." (Tr. p. 261, ll. 2-4; Tr. p. 608.5, ll. 16-21; Tr. p. 608.6, ll. 9-13.) The first stakeholder workshop was held on Thursday, March 12, 2020, and included forty-two (42) participants. (Tr. p. 146.6, ll.

12-13) The second stakeholder workshop was held on April 23, 2020, and included forty-seven (47) participants. .(Tr. p. 146.6, ll. 13-15.), A review of the record indicates that the group of stakeholders at these meetings was diverse in their interests, ranging from groups representing business and environmental interests in South Carolina to ORS. (Tr. p. 335.2, ll. 1-6.) Witness Huber noted that the NEM-related discussions at these broader workshops led to spin-off discussions with smaller groups about certain discrete items mentioned during the workshops. (Tr. p. 146.7, ll. 13-17.) Finally, and as described below, the Companies held a third stakeholder workshop on September 23, 2020, to explain the terms of the MOU and solicit feedback on the same. (Tr. p. 100.11, ll. 13-16.)

B. Settlement Process

As explained by Witness Huber, although the stakeholder meetings involved many participants and covered various NEM-related topics under Act 62, certain stakeholders came to the Companies to engage in "more focused discussion." (Tr. p. 146.7, ll. 14-18.) Witness Ford pointed out that not only did the Companies engage various stakeholders on discrete issues outside of the broader workshops, but the Companies "began working with the ORS on Act 62 NEM-related matters on January 10, 2020." (Tr. p. 102.6, ll. 9-19.) Since January of 2020, the Companies and various stakeholders engaged the ORS, as well as its expert, E3, to discuss broad procedural and stakeholder issues which evolved over time to settlement discussions regarding the Companies' tariff proposal. (Tr. p. 102.6, ll. 12-17.) The Companies presented on various topics related to Solar Choice and the Winter-Focused BYOT Program during two of the Companies' quarterly DSM/EE Collaborative meetings, with the ORS in attendance for both. (Tr. p. 102.7, ll. 5-8.) These smaller, more focused conversations led to further engagement among the Companies and certain

stakeholders, including data requests submitted to the Companies, conference calls, and additional meetings. (Tr. p. 102.6, ll. 17-20.) Through these smaller, more focused discussions, the Companies and "key stakeholders" realized that there may be a path to compromise that would benefit the diverse interests at play, while fulfilling the NEM-related goals within Act 62.The Stipulating Parties continued to negotiate and reached an agreement that represented all of the diverse interests at play. (Tr. p. 286, ll. 15-18.) That agreement is memorialized by the MOU.

The MOU itself represents an overarching agreement to advance a clean-energy future in South Carolina and contains provisions ranging from energy efficiency to NEM. As it relates to this proceeding, the MOU outlined the specifics of the residential Solar Choice Tariffs proposed in this proceeding, as well as the general framework for the non-residential offerings. These provisions were first placed before the Commission via the Residential Stipulation, which represents a recitation of the specific MOU provisions applicable to this proceeding. Utilizing the framework set out in the MOU, the subsequent Non-Residential Stipulation provided the specifics of the non-residential offerings that the Companies have proposed in this proceeding.

1. Residential Stipulation

The Residential Stipulation outlined the following tariffs and riders for Commission approval, which the Stipulating Parties have described as serving not only their interests, but also the broader public interest. The Residential Stipulation contains specific provisions related to the residential offerings in this proceeding and lays the general groundwork for the Companies' non-residential offerings.

i. Interim Riders

The Companies' interim solar choice riders (the "Interim Riders") will be available for residential customers who apply for interconnection from June 1, 2021 through December 31, 2021. Residential customers will receive service under their existing rate tariff and an Interim Rider. The Interim Riders will be very similar to the currently approved NEM rider, but will include monthly netting with net exports credited at avoided cost, non-bypassable charges, enrollment caps, and future service provisions. The Residential Stipulation notes that this interim rate period is necessary for the Companies to continue to offer an option for customers to adopt solar while the Companies work to switch over to their new billing system to efficiently bill the new Permanent Tariffs. However, there is no interim period for the non-residential tariffs, which will go into effect on June 1, 2021, as described below. As for the Interim Riders, there will be a monthly cap on solar applications in the amount of 1.2 MW for DEC and 300 kW for DEP. Customers may remain on an Interim Rider until May 31, 2029, at which point they have the option to transition to the Permanent Tariffs.

ii. Permanent Tariffs

Each Permanent Tariff consists of a rider and a rate schedule.

a. Residential

The Companies' permanent solar choice riders (the "Permanent Riders") will be available for residential customers who apply for interconnection on or after January 1, 2022. Residential customers will receive service under the residential solar TOU rate schedule ("Residential Solar Rate Schedules") and the Permanent Riders (together with the Residential Solar Rate Schedules, the "Permanent Tariffs"). The Permanent Riders will be

very similar to the currently approved NEM rider but will include monthly netting within TOU periods with net exports credited at avoided cost and a direct monthly collection of customer and distribution related cost through a minimum bill.

The Companies' Residential Solar Rate Schedules will be available for residential customers who apply for interconnection on or after January 1, 2022. The Residential Solar Rate Schedules are the sole NEM tariffs offered to residential customer-generators and include TOU rates with CPP, a monthly grid access fee for systems larger than 15 kilowatts ("kW"), and non-bypassable charges. Although existing NEM customers can switch to the Permanent Tariffs upon written notice to DEC or DEP, as applicable, existing residential NEM customers could maintain service under their existing tariffs until 2025 or 2029 depending on when their tariffs sunset. If an existing customer or a customer under an Interim Rider chooses not to transition to the Permanent Tariffs once their rider or tariff sunsets, they can stay on the standard residential tariff but any volumetric price increase after their transfer year will be placed in a non-bypassable charge based on the estimated total solar energy production of their system size for the remaining life of the system. The solar customer will also be subject to a minimum bill set at $10 more than the Basic Facilities Charge ("BFC") at that time. This minimum bill will be applied in the same manner as the Monthly Minimum Bill in the Permanent Tariffs, in that it will directly recover some portion of the Companies' estimated customer and distribution costs. The minimum bill charge is reduced by the BFC and the portion of the customer's monthly volumetric energy charges specific to customer and distribution costs.

b. Non-residential

The general framework for the non-residential offering contained in the Residential

Stipulation includes riders (collectively, the "Non-Residential Riders") for non-residential customer-generators applying for interconnection on or after June 1, 2021. Those customers would be served under their existing tariff and a Non-Residential Rider. The Non-Residential Riders mirror the options for non-residential customers under the Existing NEM Programs, with only one modification. Under the Non-Residential Riders, the non-residential customer will still receive the full retail rate for generation used behind the meter but at the end of the billing period any net exports will be applied as a bill credit on the monthly bill. The net exports, in kWh, would be multiplied by the current Commission approved avoided cost rate.

2. **Non-Residential Stipulation**

The Non-Residential Stipulation further clarifies the framework of the Non-Residential Riders that was first provided to the Commission via the Residential Stipulation.

i. Further Details on Proposed Non-Residential Riders

Customers who sign up for a Non-Residential Rider would be eligible to remain on the rider for 10 years from the interconnection approval date, during which time the rate structure for such customer would remain unchanged; provided, however, that the Companies could propose changes in the rate structure on or after June 1, 2026, for future customers. Likewise, the Non-Residential Riders would be available to Small General Service Rate class customers for a period of five years from the date the Commission approves the rider, or until a cap on the total solar capacity for this rate class is met, whichever occurs first, unless a new non-residential customer-generator rider is approved by the Commission. Enrollment for the Non-Residential Riders would be capped at 5 MW-

AC in DEC and 1 MW-AC in DEP. Additionally, the Companies have the option to transition non-residential customer-generators with systems less than 30 kW to a mandatory TOU rate. However, the Companies would also commit to work with interested stakeholders to develop a plan for this transition. In addition to the rate structure described above, the Non-Residential Riders would also include a corporate sustainability component which would permit customer-generators to earn a REC for each MWh produced by such customer-generator's on-site generation in exchange for a REC billing and reporting fee ("REC Fee") of $1.50/REC. However, if the customer installs a production meter and allows the Companies to collect data directly from the meter, this fee is reduced to $0.65/REC. This option is available to the first 300 customers in DEC and first 400 in DEP to take advantage of the production meter option. If a customer wishes to opt-out of the REC program entirely, it may do so by notifying the Companies in writing at the time of applying for interconnection that it will not participate in this initiative. This would result in DEC or DEP, as applicable, retaining all RECs associated with that customer's generation. In addition, the customer may make a one-time election to opt-in to the REC Fee, in writing, at any time during the 10-year period commencing on the interconnection approval date.

V. FINDINGS OF FACT

Having heard the testimony of the witnesses and representations of counsel and after careful review of all evidence in the record, the Commission hereby makes the following findings of fact:

A. Compliance with the General Assembly's Intent When Enacting Act 62

1. The Commission's consideration of the Solar Choice Tariffs must account

for the General Assembly's intent outlined in S.C. Code Ann. § 58-40- 20(A) and cannot focus on one portion of the intent to the exclusion of the others.

2. The express language provided by the General Assembly indicates that the Solar Choice Tariffs must fairly align costs and benefits of serving customer-generators in a way that eliminates cost shift to the extent such elimination can be achieved while also continuing the successful deployment of DER under Act 236 and avoiding disruption to the solar industry.

3. The Stipulating Parties represent a wide range of interests and have determined that the Stipulations are not only in their best interests, but also achieve the intent of the General Assembly within Act 62. By reaching a compromise position among parties with diverse interests, the Stipulating Parties have ensured that numerous interests are accounted for within the Solar Choice Tariffs.

4. The innovative rate structures within the Solar Choice Tariffs preserve the opportunity for solar customers to generate meaningful bill savings by, among other things, allowing consumption behind the meter without penalty, which can drive customer adoption of rooftop solar and help ensure a robust solar market in South Carolina.

5. As for Act 62's broader goal of continuing the deployment of all DERs in South Carolina, the Solar Choice Tariffs properly recognize emerging technologies and the ability to contribute to reductions in utility peak electrical demand and other drivers of electrical utility costs by alsoestablishing a platform for customers to adopt other DERs in the future, including energy efficiency measures and battery storage.

6. Although the ORS focused on the elimination of the cost shift, there was agreement among the Parties that the Commission must account for all of the goals within

Act 62.

B. Compliance with Specific Solar Choice Parameters

1. In addition to fulfilling Act 62's intent, the Solar Choice Tariffs must also achieve the specific Solar Choice parameters found within 58-20-40(F)-(H).

2. One such parameter is that the Solar Choice Tariffs must be for applications received after May 31, 2021. The Companies have proposed an implementation timeline in compliance with Act 62. Likewise, the Commission will revisit the export methodology every five years, while the values under the methodology will be updated annually.

3. The impact of the new tariffs on existing customers is mitigated because existing NEM customers can maintain service under their existing NEM program until December 31, 2025, or May 31, 2029, depending upon their applicable sunset date. Although they can maintain service until those dates, the Companies will also permit existing NEM customers to transfer to a Solar Choice Tariff upon written notice at any time prior, assuming eligibility.

4. The Companies are currently undergoing a transition to a billing system that would permit the Companies to more precisely track and manage billing of the Permanent Tariffs—including their TOU periods. However, implementation will not be complete by Act 62's statutory deadline of June 1, 2021. The Interim Riders provide a stop-gap measure to allow customers access to an NEM program in accordance with the deadline, but would continue to allow the Companies to implement the new billing system and provide the Permanent Tariffs on and after January 1, 2022.

5. The benefits of the TOU rates and periods within the Permanent Tariffs more than justify the need for this interim period, and Act 62 expressly contemplates tariffs

that require a more complex billing system.

6. The netting and export mechanisms embody the specific parameters set forth in S.C. Code Ann. § 58-40-20(F) by fairly compensating customer-generators for the power provided to the Companies' systems. Likewise, customers will be able to net energy sent to the Companies against the energy supplied by the Companies over the monthly billing period.

7. By utilizing monthly netting within TOU periods and crediting excess energy at avoided cost, the Companies have arrived at a workable compromise for valuing exported power. This is a primary component in reducing any potential cost shift, and represents a just and reasonable netting regime that fairly compensates customer-generators for the power exported to the Companies.

8. More accurately aligning costs with benefits via TOU periods for exports as well as rates paid by the customers involves a more precise hardware and billing system to account for the various seasonal and temporal changes in rates.

9. There was general agreement among the Parties on these points, which included agreement that the Solar Choice Tariffs implement a wide-range of best practices that have also been utilized across the country.

C. Elimination of Cost Shift

1. The only material disagreement in this proceeding related to the issue of cost shift. Specifically, how it should be measured and how much of it is required to be eliminated by Act 62.

2. The measurement of cost shift and corresponding rate structures within the Solar Choice Tariffs in this case should rely upon the previously Commission-approved

methodologies and allocators that have been utilized by the Companies. The Commission finds there is no "substantial justification" from moving away from those methodologies and allocators at this time.

3. The Companies presented sound analysis evidencing that the Solar Choice Tariffs eliminate to the greatest extent practicable cost shifts that can occur under the Existing NEM Programs for DEC and DEP.

4. This elimination in potential cost shift is primarily achieved through an alignment of the costs and benefits of serving Solar Choice customers via innovative rate mechanisms such as time-variant pricing.

5. When taken together, the ratemaking structures within the Solar Choice Tariffs reduce cost shift for residential customers by 84% and 100% for DEC and DEP, respectively, from an embedded cost perspective. From a marginal cost perspective, the Solar Choice Tariffs reduce cost shift for residential customers by 88% and 53% for DEC and DEP, respectively.

6. This elimination of potential cost shift still permits access to customer-generator options, while enabling customers to produce meaningful bill savings and ensuring a broader public good. As such, the Solar Choice Tariffs eliminate the cost shift to the greatest extent practicable

VI. EVIDENCE AND CONCLUSIONS

The evidence in support of these findings of fact is found in the verified pleadings, testimony, and exhibits in this docket, and the entire record in this proceeding.

VII. EVIDENCE AND CONCLUSIONS SUPPORTING FINDINGS OF FACT A(1)-(6)

Summary of the Evidence

The General Assembly expressly codified its intent when enacting Act 62 in S.C. Code Ann. § 58-40-20(A). That intent provides a clear directive that diverse interests should be considered when establishing the next generation of NEM via Solar Choice. On the one hand, the Solar Choice Tariffs must eliminate cost shift "to the greatest extent practicable," but that concept is informed by whether it would avoid disruption to the growing market for customer-scale DERs and allow for the continued private investment in onsite DERs, such as rooftop solar, under Act 62.

Witness Huber testified that the Companies' months-long stakeholder process was a key driver in developing Solar Choice Tariffs that ensured the solar industry could continue without disruption in South Carolina. (Tr. p. 146.23, ll. 6-12.) Witness Ford noted that the Companies initiated the stakeholder process by casting a broad net to ensure that the process included a wide range of interests within the spirit of Act 62. (Tr. p. 100.8, ll. 2-7.) Specifically, the Companies reached out via phone and email to stakeholders who were involved in previous stakeholder initiatives and also canvassed stakeholders for any suggestions as to the names of people or entities that were not involved in prior efforts, but that would like to be involved in the NEM stakeholder process. (Tr. p. 100.8, ll. 8-13.) Witness Ford noted that this outreach lead to a diverse range of interests represented throughout the stakeholder process and resulted in a stakeholder process where "all rate classes were represented." (Tr. p. 104, ll. 11-12.) According to Witness Ford, these interests ranged from various industry participants, solar developers, and clean-energy advocates,

to entities representing interests not tied to solar, such as ORS and conservation groups like the SELC and Southern Alliance. (Tr. p. 100.5, ll. 8-15.) Witness Ford also described various customer groups that were represented at these stakeholder workshops, including those on low or fixed incomes. (Tr. p. 104, ll. 10-14.) Witness Ford noted that diverse range of interests represented by the larger stakeholder process was mirrored in the Stipulations arising from the same. (*Id.*) Witness Huber noted that the industry reaction to the stakeholder process and corresponding Residential Stipulation "has been overwhelmingly positive." (Tr. p. 146.22, l.. 15.) Witness Huber went on to describe the process as a "constructive" one that has gotten "a lot of positive attention." (Tr. p. 146.22, ll. 19-20.) However, Witness Huber noted that the Companies did not simply terminate the stakeholder process once the Residential Stipulation was executed. (Tr. p. 146.23, ll. 7-16.)

Witness Huber explained that after the initial stakeholder process, the "Companies listened and continued discussions with Alder in the spirit of the stakeholder engagement that has been the hallmark of these dockets and the other NEM-related dockets." (Tr. p. 148.3-148.4.) As a result, the Companies and Alder executed the Non-Residential Stipulation. (Tr. p. 148.3.) According to Witness Huber, the Residential Stipulation largely focused on the residential tariffs and contained a high-level overview of the non-residential tariffs that would be offered by the Companies. (*Id.*) However, through the additional negotiations and outreach to Alder, the Companies and Alder executed the Non-Residential Stipulation which contained more details on the non-residential offerings, and even included a corporate sustainability aspect that is unique to this class of customers. (*Id.*) According to Witness Huber, this additional outreach to Alder represented the Companies' commitment to ensuring that all customers—not just residential— have a "fair and

economic opportunity to participate in NEM." (Tr. p. 148.8.) Witness Huber explained that the Stipulations ensure that rooftop solar market in South Carolina will continue without disruption as a result of the tariffs, ensuring that the successful deployment of DERs under Act 236 will continue under Act 62. (Tr. p. 142.)

Witness Beach similarly described the stakeholder efforts leading to the Residential Stipulation, and noted that the Residential Stipulation was the "product of extensive dialogue and negotiation between the utilities and important stakeholders." (Tr. p. 265.10.) Witness Beach explained that the Solar Choice Tariffs offered in this docket were developed through "constructive discussions, negotiation, and compromise." (*Id.*) On the compromise point, Witness Beach agreed with Witness Huber that the Solar Choice Tariffs represent "a complicated mix of inter-related concessions and compromises among the involved stakeholders." (Tr. p. 265.11.) However, in total, Witness Beach explained that although the diverse interests represented under the Stipulations may have "different opinions about individual elements . . . there was agreement among these diverse parties that, as a package, the deal is a reasonable and constructive compromise." (Tr. p. 265.11.) (*Id.*) As for the impacts of the compromise on NEM customers, Witness Beach explained that customers under the Solar Choice Tariffs will see only a "moderate reduction in the bill savings available to solar customers when compared with current NEM tariffs, on the order of a 10% decrease for a typical customer. (Tr. p. 265.13.) Similarly, Witness Beach stated that the tariffs "may help customers with smaller homes and lower electricity usage (and presumably lower incomes) to be able to afford to invest in solar or adopt solar through a leasing arrangement."(*Id.*) Witness Beach further described additional opportunities for customers to create bill savings—or offset some of the reductions in bill savings versus the

current NEM programs—which will "benefit the grid and reduce costs for non-participants." (*Id.*) Witness Beach pointed out that the Solar Choice Tariffs achieve not only Act 62's goal of establishing the next generation of NEM, but also the goal of continuing the broader deployment of DERs as a whole. (Tr. p. 265.14.) Specifically, Witness Beach explained that the Solar Choice Tariffs are a "platform that can support deployment of other types of DERs" given their innovative rate structures. (Tr. p. 265.8.) Overall, Witness Beach described the Solar Choice Tariffs as complying with Act 62 by "maintaining a reasonable opportunity for customers to invest in expanding South Carolina's clean energy infrastructure." (Tr. p. 265.7.) (internal quotations omitted).

Witness Barnes echoed Witness Ford's description of the broad range of interests represented within the Residential Stipulation. With respect to Act 62's goal of "continuing the successful deployment" of DERs in South Carolina, Witness Barnes noted that the Solar Choice Tariffs, in conjunction with the Winter-Focused BYOT Program, support "the attractiveness of DERs and the economic impacts associated with the continued private investment in DERs." (Tr. p. 298.8.) Likewise, Witness Barnes explained that the use of "enabling technologies, such as smartthermostats, has been shown to be a key element for improving customers' ability to respond to TOU and CPP rates." (Tr. p. 298.9.) In short, Witness Barnes suggested that the Solar Choice Tariffs, in conjunction with the Winter-Focused BYOT Program, "achieve [Act 62's] goals of enabling continued private investment in DERs [and] avoiding disruption of the DER industry."(Tr. p. 298.21.)

Witness Zimmerman cited the balancing of interests required by Act 62, and described the Non-Residential Solar Choice Tariffs arising from the Non-Residential Stipulation as "the best possible balancing of [Act 62's] various express interests for

success NEM tariffs, given the specific circumstances presented in these dockets and in light of the nuances of [the Companies'] specific rate structures." (Tr. p. 317.5.) Witness Zimmerman further testified that the Non-Residential Stipulation is in the public interest and "continues, you know, solar viability going forward. Access is available. Companies will not necessarily leave the markets because there – there's enough room to sell projects and continue to – to grow, give people options." (Tr. p. 327, ll.18-22.)

No testimony was presented refuting the points made above. Witness Lawyer noted that the ORS did not review or analyze the impacts of the Solar Choice Tariffs on the solar industry in South Carolina. (Tr. p. 335.3.) However, when questioned during the hearing whether "protecting the solar market" and "ensuring access for solar customers"—as required by Act 62—is within the public interest, Witness Lawyer conceded that "absolutely, the consideration of those are in the public interest." (Tr. p. 341 ll. 14-20.) Witness Lawyer further explained that although those considerations are within the public interest, the ORS focused upon the cost shift language within Act 62 because it "most aligned with [the ORS's] mission. (Tr. p. 342, ll. 3-4) Witness Horii noted that he was only "retained by ORS to evaluate the cost shift impacts of the proposed tariffs and identify issues with the proposed tariff designs" rather than assessing whether the Solar Choice Tariffs avoid disruption of the industry. (Tr. p. 393, ll 27.) As such, Witness Horii noted that his recommendation "would change if [he] weren't representing ORS and [he] was concerned about these other aspects" of Act 62. (Tr. p. 435, ll. 10-11.)

On rebuttal, Witness Faruqui challenged the ORS's focus on the elimination of cost shift and the absence of analysis of industry impacts of the ORS Tariffs. Witness Faruqui testified that the ORS Tariffs represent "significant rate hikes" from the proposed Solar

Choice Tariffs that would likely "disrupt the growing market for customer-scale distributed energy resources" in violation of Act 62. (Tr. p. 509.16.) Witness Faruqui further noted that even if Act 62's sole mission was to eliminate cost shift, the "agreement proposed by the Companies in the Stipulation virtually eliminates the cost shift" and does so "without disrupting the growing market for customer-scale distributed energy resources." (Tr. p. 509.15.) Witness Huber echoed Witness Faruqui's testimony by noting that the development process of the Solar Choice Tariffs "necessarily accounted for all the various policy goals within Act 62, something that the ORS clearly did not do with its singular focus on completely eliminating cost shift." (Tr. p. 526.14.) Citing the balancing of interests required by Act 62, Witness Huber explained that the issues addressed by the Stipulations "are some of the most complex [the Commission] will probably be engaged in" due to the wide-ranging topics impacted by Act 62's required balancing act. (Tr. p. 531., ll. 1718.) However, Witness Huber testified that the Stipulations "balance the interest of all customers and represent months-long efforts to solicit feedback and tireless efforts by the parties with strong beliefs in their respective differing views to find a mutually agreeable path forward for NEM in South Carolina." (Tr. p. 525, ll. 1-14.)

Witness Finley described to the Commission that although there are competing objectives in Act 62, "they are compatible, and I think the stipulation that has been proposed balances the competing interests in compliance with Act 62. (Tr. p. 568, ll. 3-6.) Witness Finley specifically pointed to the interests represented by the signatories to the Stipulation as a reason the Commission should take comfort that all such interests are represented. (Tr. p. 574.) Specifically referencing non-participating customers, Witness Finley explained that "I believe the stipulation and the proposal that is before you, and with

the companies and the other people who signed the stipulation, asked you to approve, looked after those interests." (Tr. p. 574, ll. 10-13.) Witness Finley then cited SCCL, Southern Alliance, and Upstate Forever as specific entities that are representing customers "other than those who have solar facilities on their premises." (Tr.p. 574, ll. 17-18.)

As for the ORS Tariffs, Witness Finley echoed Witness Faruqui's testimony and stated that, if adopted, the ORS Tariffs "could very well close the door to continued residential solar development, which is counter to the overall legislative framework of Act 62." (Tr. p. 565.15.) As a result, Witness Finley testified that he believes that the Residential Stipulation "is in the best interests of all non-participating non-solar customers." (Tr. p. 573, ll. 25.)

On surrebuttal, Witness Moore stated that the Solar Choice Tariffs achieve the express goals of Act 62 by enabling solar customers to create bill savings "while also reducing both summer and winter peaks, thereby aligning solar customers' behavior with the greater good for all ratepayers." (Tr. p. 608.11-608.12.) Likewise, Witness Moore pointed out that the Solar Choice Tariffs "can drive customer adoption of rooftop solar and help ensure a robust solar market in South Carolina" while "also establishing a platform for customers to adopt other DERs in the future." (Tr. p. 608.12.) Witness Moore stated that the singular focus of the ORS does not comport with Act 62, which requires "development of rates that will enable customers to provide meaningful bill savings, while serving a broader public good"—goals which are achieved by the Solar Choice Tariffs. (*Id.*)

In response to criticism of its focus, the ORS largely re-iterated its position. Specifically, Witness Lawyer pointed out that the goals of Act 62 are different from the statutorily-mandated mission of the ORS. (Tr. p. 655.5.) Witness Lawyer explained that

the ORS felt constrained to analyze only the cost shift issue rather than account for the other goals of Act 62 which are imposed upon the Commission. (Tr. p. 655.5-655.6)

Commission Determination

Initially, the Commission understands the difficult balancing of interests required by Act 62 and appreciates the broad stakeholder engagement in this proceeding to determine the best way to obtain that balance. The record reveals that the process was robust, inclusive, and effective. Based on the testimony provided, a key part of developing Solar Tariffs was the input received during the stakeholder and settlement processes by industry participants with direct knowledge of the state of the market in South Carolina that allowed them to assess the Solar Choice Tariffs against Act 62's directives to advance the market. Those groups are satisfied that these Solar Choice Tariffs provide benefits to their industry. These benefits arise in a number of ways under the Solar Choice Tariffs, ranging from substantial bill savings to establishing a platform from which other DERs can be utilized, which may encourage broader deployment of DERs in South Carolina. The record reveals that the Solar Choice Tariffs create an attractive economic incentive for both residential and non-residential customers to invest in rooftop solar. On the other hand, the Parties presented convincing evidence that the increased rates associated with the ORS Tariffs could negatively impact the solar industry in South Carolina. As such, the record supports the conclusion that the Solar Choice Tariffs achieve Act 62's market-centric goals found within S.C. Code Ann. § 58-40- 20(A)(1) and (A)(2).

Equally important, the record does not contain any testimony refuting the benefits recited above. The General Assembly made clear that the Commission must adhere to the requirements within Act 62, while fulfilling its intent to eliminate cost shift to the extent

practicable that it does not disrupt the solar industry or prohibit the continued deployment of distributed energy resources in South Carolina. As such, the Commission concludes that the elimination of cost shift does not take priority over the other goals within Act 62.

VIII. EVIDENCE AND CONCLUSIONS SUPPORTING FINDINGS OF FACT B(1)-(9)

Although the broad intent of Act 62 is instructive in the Commission'sconsideration of the Solar Choice Tariffs, Act 62 also provides the Commission with considerations specific to the Solar Choice Tariffs. Those provisions are found within S.C. Code Ann. § 58-40-20(F), (G), and (H). The cost shift language that has been the topic of much debate in this proceeding is found again in S.C. Code Ann. § 58-40-20(G). In this section, the Commission will evaluate the Solar ChoiceTariffs against the directives contained in S.C. Code Ann. § 58-40-20(F) and (H).

A. S.C. Code Ann. § 58-40-20(F).

Summary of the Evidence

S.C. Code Ann. § 58-40-20(F)(1) requires the Commission to establish solar choice tariffs for "applications received after May 31, 2021." Likewise, (F)(2) and (F)(3) of that same section enumerate certain items that the Commission must consider when establishing the netting intervals and export credits within those tariffs. Specifically, (F)(2) requires the netting interval to be "just and reasonable in light of the costs and benefits of the solar choice metering program." As for (F)(3), it requires that the Commission establish an export methodology that compensates customer-generators for "the benefits provided by their generation to the power system," while establishing a billing mechanism and netting interval that accounts for:

(a) current metering capability and the cost of upgrading hardware and billing systems to accomplish the provisions of the tariff;
(b) the interaction of the tariff with time-variant rate schedules available to customer-generators and whether different measurement intervals are justified for customer-generators taking service on a time-variant rate schedule;
(c) whether additional mitigation measures are warranted to transitionexisting customer-generators; and
(d) any other information the commission deems relevant.

S.C. Code Ann. § 58-40-20(F)(3)

Witness Huber noted that the Interim Riders and Non-Residential Riders will be available on June 1, 2021, in accordance with Act 62, with the Permanent Tariffs available for customers that apply for interconnection after December 31, 2021. (Tr. p. 146.9-146.10.) Witness Huber explained that the Interim Riders are necessary to ensure that the Companies have the appropriate billing system to accurately and efficiently bill customers under the new rate structures within the Solar Choice Tariffs. (Tr. p. 146.10.) Witness Brown explained that the Companies also heeded the call of Act 62 by implementing mitigation measures to transition existing customer-generators. (Tr. p. 32.13.) Specifically, Witness Brown noted that not only would the customers on the Interim Riders be able to transition to the Permanent Tariffs, but so too would existing customer-generators. (*Id.*) Although existing NEM customers can switch to the Permanent Tariffs upon written notice to DEC or DEP, as applicable, existing residential NEM customers could maintain service under their existing tariffs until 2025 or 2029 depending on when their tariffs sunset. (*Id.*) Upon the expiration of the Existing NEM Programs, the Companies plan to implement transition tariffs for those customers that would mitigate any adverse financial impact to those customers as a result of the switch. (*Id.*) However, Witness Harris made clear that

whatever bill increases may occur under the Solar Choice Tariffs when compared to Existing NEM Programs, "current net-metering customers would not experience that pricing [or] bill increase" given the various glide paths to the Permanent Tariffs provided by the Companies. (Tr. p.638, ll. 8-9.) In this way, Witness Brown stated that the Companies considered the express mandate of Act 62 to consider whether mitigation measures for these customers are appropriate. (Tr. p. 27.)

As for the netting interval, the Solar Choice Tariffs contain monthly netting within TOU periods.[9] (Tr. p. 32.7-32.8.) Witness Huber explained net exports within those netting periods will be credited to customer-generators at the Companies' most-recently approved avoided cost rate in the form of a bill credit. (Tr. p. 146.18.) According to Witness Huber, that avoided cost export credit, coupled with the customer's ability to directly reduce energy charges "by solar production that is consumed on the premises," ensures that customer-generators are fairly compensated for the benefits provided by their generation to the power system in accordance with Act 62. (Tr. p. 146.18.) Witness Brown explained that tying export credits to avoided costs achieves this express goal of Act 62. (Tr. p. 70.) Specifically, these avoided cost rates are the same avoided cost rates developed by the Companies under PURPA. (*Id.*) Witness Brown noted that the value in this approach is that those avoided cost rates "give a value equal to the impact that [exported power] brings" to the system. (*Id.*.) Additionally, Witness Brown stated that since the exports are credited at avoided costs, the Companies believe that such costs are "appropriate for collection

[9] The Interim Riders contain monthly netting, but do not do so within TOU periods, as explained more fully below.

through annual fuel proceedings, consistent with historic treatment under Act 236." (Tr. p. 32.15.) Likewise, Witness Brown testified at the hearing that these avoided cost rates may be updated to reflect the most current avoided cost rates in effect at any given time. (Tr. p. 51.)

No Party presented testimony refuting the Companies' interim period and corresponding transition options. The ORS largely agreed with the monthly netting interval and avoided cost export credit within the Solar Choice Tariffs. In Witness Horii's tariff proposals, he maintained the same avoided cost credits for exports as the Solar Choice Tariffs and noted that the "rationale is that those excess energy exports are compensated at avoided costs, so there should be little cost shift associated with those credits." (Tr. p. 393.30.) Likewise, Witness Horii agreed with the Companies' implementation of monthly netting within TOU periods for the Permanent Tariffs, and only suggested that the Interim Riders and Non-Residential Riders[10] incorporate the monthly netting within TOU periods as well, rather than simply monthly netting. (Tr. p. 393.42.)

On rebuttal, Witness Harris noted that in calling for the Interim Riders to contain monthly netting within TOU periods to further reduce the cost shift, Witness Horii discounted the other parameters within the Interim Riders that offset his concerns, such as caps on the capacity under each rider. (Tr. p. 490.) According to Witness Harris, a move to TOU netting under the Interim Riders is simply unnecessary given that the risk to non-participating customers is mitigated through these caps and the Interim Riders are simply

[10] ORS Witness Horii conceded that the ORS has "no other concern" with the Non-Residential Rider aside from the desire to see TOU netting within the Non-Residential Riders. (Tr. p. 481, ll. 11.)

meant to provide a glide path toward the Permanent Tariffs. (Tr. p. 492.16.) As for Witness Horii's recommendation to move the Non-Residential Riders to TOU netting as well, Witness Harris explained that the Companies simply do not have adequate data at this time to produce meaningful TOU periods for this class of customers given the broad diversity of energy usage among these customers. (Tr. p. 492.17.) Witness Harris stated that to obtain such data and craft TOU periods that are representative of all non-residential customers would be a "large undertaking" and it would be "premature to modify these tariffs without appropriate analysis." (Tr. p. 492.17.) In fact, Witness Harris explained that implementing Witness Horii's suggestion without the appropriate analysis could actually increase the cost shift. (*Id.*) Witness Harris noted that the Non-Residential Riders, similarly to the Interim Riders, place capacity caps on the Small General Service customers who are able to take service under these riders. (*Id.*) According to Witness Harris, those customers are the biggest risk for creating cost shift within the non-residential class, and the caps mitigate that risk. (*Id.*)

On surrebuttal, Witness Horii maintained the ORS's focus on elimination of cost shift, and explained that moving to monthly netting within TOU periods in the Interim Riders would further eliminate any cost shift than the enrollment caps proposed by the Companies Witness Horii indicated that Witness Harris may have misinterpreted the ORS's recommendation with respect to the Non-Residential Riders, explaining that the "large undertaking" cited by Witness Harris is not needed given that the Companies could use existing TOU periods to implement monthly netting within TOU periods. (*Id.*)

Commission Determination

The Commission notes that the only material disagreement between the Stipulating

Parties and the ORS on these issues is whether the Interim Riders and the Non-Residential Riders incorporate monthly netting within TOU periods. Otherwise, there is broad agreement that the monthly netting (within TOU periods for the Permanent Tariffs) and avoided cost export credit comport with Act 62. The Commission agrees. As for the export credit, the shift away from full retail credits for exports is appropriate. As described by the ORS, valuing these exports at the Companies' most recently approved avoided cost rates ensures that the value paid to these customer-generators accurately reflect the benefits provided to the overall power system by those exports. The current retail rate compensation scheme provides customer-generators with a value that is inflated much higher than the Companies' avoided costs, which necessarily means that the value paid for exports under the Existing NEM Programs is de-coupled from the actual value provided to the system by those exports. Given that this new export methodology is tied to avoided costs, the Commission agrees with the Companies that they are appropriate for collection through annual fuel proceedings as a continuation of the current process.[11]

As for the monthly netting intervals, the record reveals that this is a best practice to align costs with benefits of serving NEM customers. As compared to the current annual netting under the Existing Programs, the monthly netting interval better aligns costs with benefits and is a primary driver of the reduced cost shift because customer-generators are not able to accumulate credits during non-peak times to offset more expensive power during peak times in other months. The Permanent Tariffs further alleviate cost shift arising

[11] For the avoidance of doubt—notwithstanding any findings in the Generic Docket that relate solely to Existing NEM Programs for DEP and DEC—the avoided cost rates paid for exported power from customer-generators in DEC and DEP service territory under the new Solar Choice Tariffs effective June 1, 2021, will be established pursuant to S.C. Code Ann. § 58-41-20 as allowed by Act 62.

from netting because those tariffs net within TOU periods. This is an appropriate shift away from the annual netting within the Existing Programs given the new set of NEM requirements imposed by Act 62.

However, the ORS requests that the Interim Riders and Non-Residential Riders also net within TOU periods—rather than simply monthly—to further reduce any cost shift. Although the Commission understands that this is in-line with ORS's focus of eliminating any cost shift, the Commission does not agree with that position. As for the Interim Riders, this option will only be available for a limited time until the Permanent Tariffs become effective. At that point, customers on the Interim Riders can choose to switch to the Permanent Tariffs. In addition to this limited enrolment window and corresponding transition option, the Companies also propose to cap the amount of monthly capacity that can take service under the Interim Riders. These enrollment restrictions will certainly mitigate the risk of cost shift arising from the fact that netting is not done within TOU periods. Likewise, the Commission understands that the Interim Riders are provided as a mitigation measure for existing customers, in accordance with the express requirement within Act 62, such that existing customers can take service thereunder prior to transitioning to the Permanent Tariffs that contain additional innovative rate structures. As discussed above, customers under Existing NEM Programs have several alternatives to the Permanent Tariffs. For example, customers can take service under their existing tariffs until either 2025 or 2029, apply for the Interim Riders, or take service on a yet-to-be filed transition tariff that would be available upon expiration of the Existing NEM Programs. Imposing monthly netting within TOU periods erodes this glide path to the Permanent Tariffs given that the netting options within the Interim Riders and Permanent Tariffs

would be identical. As for the Non-Residential Riders, it has been well-documented in this proceeding and others before the Commission that these customers take service upon more complex rate structures that more accurately align costs to serve those customers with the rates they pay. In this case, the more complex rate structures for these customers include a demand charge for every class of non-residential customer except the Small General Service customer. As such, the cap on enrollment for this class of customers is appropriate to limit the risk of potential cost shift, mitigating the ORS's concern of cost shift absent TOU netting for non-residential customers. Likewise, the Commission understands that the Companies would be unable to develop TOU periods for this entire class of customers in time to meet Act 62's deadline of June 1, 2021, for these tariffs. However, it would be inappropriate to utilize TOU periods that have not been updated recently for customer classes where less data is available for NEM customers. Placing these non-residential customers on TOU periods that do not accurately reflect usage patterns of non-residential customers could exacerbate the cost shift rather than alleviate it.

Taken together, the Commission is convinced that the monthly netting (within TOU periods for the Permanent Tariffs only) and corresponding avoided cost export credit is a just and reasonable alignment of costs and benefits that fairly compensates customer-generators for the benefits provided by their power to the Companies' systems. The inclusion of TOU netting for the Interim Riders and Non-Residential Riders is unnecessary given the other parameters in place to reduce the cost shift and would erode the mitigation measures for existing customers that the Companies propose via the Interim Riders.

B. S.C. Code Ann. § 58-40-20(H).

Summary of the Evidence

S.C. Code Ann. § 58-40-20(H) requires the Commission to "establish a minimum guaranteed number of years" pursuant to which customer-generators are entitled to take service under the Solar Choice Tariffs.

There was little testimony provided on this point. However, the Solar Choice Tariffs permit customer-generators to take service thereunder for a minimum original term of at least one year. Likewise, Witness Huber explained that the Permanent Tariffs and Non-Residential Riders would be available for at least 10 years, during which time the rate structure within those tariffs would remain unchanged. As for the Interim Riders, customers taking service thereunder could do so until May 31, 2029. There was no conflicting testimony submitted on these points.

Commission Determination

The Commission believes that the Companies proposal is appropriate. Customer-generators can take service under the Solar Choice Tariffs for a minimum original term of at least one year. Likewise, customer-generators can take comfort knowing that the rate structures within the Permanent Tariffs and Non-Residential Riders would remain the same for at least 10 years. Although customers eligible for the Interim Riders could take service thereunder until May 31, 2029, they may also switch to the Permanent Tariffs. Finally, in accordance with Act 62, the Commission directs the Companies to update the values within the avoided cost export methodology yearly and revisit the methodology every five years.

IX. EVIDENCE AND CONCLUSIONS SUPPORTING FINDINGS OF FACT C(1)-(6)

Summary of the Evidence

As discussed above, Act 62 requires that the Solar Choice Tariffs eliminate cost shift to the "greatest extent practicable" while also advancing the other requirements within Act 62, such as avoiding disruption to the solar industry and not penalizing customer-generators. S.C. Code Ann. § 58-40-20(A). However, the extent to which the cost shift should be eliminated and the way in which it should be measured is the only material disagreement before the Commission. Specifically, the ORS took the position that additional cost shift could be eliminated, under an alternative cost of service methodology that is not used by the Companies, which the ORS alleged would be necessary if eliminating cost shift is the controlling requirement in the Act.[12] The ORS explained that if one assumes that interpretation, and then utilized an alternative allocator and methodology, the embedded cost shift would be greater than what the Companies studied. That additional cost shift only manifests by departing from traditionally accepted practices to adopt a new allocator and methodology under an embedded cost perspective. (Tr. p. 393.7.) The ORS did not materially dispute the Companies' analysis of cost shift from marginal cost perspective.

On this topic, Witness Brown testified that the Companies utilized cost of service studies—employing Commission-approved allocators and generally-accepted methodology—to determine the degree to which the Solar Choice Tariffs reduced the cost

[12] As discussed above, the Commission finds that Act 62 does not require the elimination of cost shift to be prioritized above all other goals within Act 62.

shift when compared to the Existing NEM Programs. (Tr. p. 46.) These cost of service studies utilized the Summer CP to allocate certain costs to customers, just as the Companies relied upon it in their most recent rate case. (*Id.*) Witness Harris stated that, when taken together, these analyses revealed that the Solar Choice Tariffs reduce cost shift for residential customers by 84% and 100% for DEC and DEP, respectively, from an embedded cost perspective. (Tr. p. 492.1.) From a marginal cost perspective, the Solar Choice Tariffs reduce cost shift for residential customers by 88% and 53% for DEC and DEP, respectively. (*Id.*) Mr. Harris noted that the Companies used a well-established methodology—the Cost Duration Method—to determine the pricing appropriate for the TOU periods in the Permanent Tariffs. (Tr. p. 213.5.) Witness Harris explained that, at a high level, the Cost Duration Method simply "provides improved linkage between recovery of system costs and the time periods during which system assets are being utilized." (Tr. p. 213.9.) The method does this by allocating costs for assets across generation, transmission, and distribution "based on anticipated utilization." (*Id.*) For example, "cost for assets used during only peaking hours are concentrated in those hours." (*Id.*) Witness Harris notes that this granularity ensures that the TOU rates "reflect the hourly costs" of the Companies' cost to serve and sends more accurate, time-differentiated pricing signals to customers to encourage behavior that benefits the entire system. (*Id.*)

Witness Beach testified that the reduction in cost shift set forth by Witness Harris fulfills Act 62's goal of eliminating the cost shift "to the greatest extent practicable" from both an embedded and marginal cost perspective. (Tr. p. 265.14.) Mr. Beach noted that from an embedded cost perspective, the cost of service studies provided by Witness Harris prove that "the reduction in solar customers' cost of service more than offsets the revenues

lost." (*Id.*) Witness Beach noted that even if the Solar Choice Tariffs result in a small cost shift, "the structure of the new Solar Choice Tariffs has a number of elements that will limit any such remaining cost shift." (Tr. p. 265.15.)

As for the embedded cost analyses, Witness Horii alleged that the Companies' analyses were "too generous," and Witness Horii disagreed as to the actual amount of cost shift that is reduced under the Permanent Tariffs. (Tr. p. 393.7.) However, Witness Horii noted that this disagreement is based upon a narrow issue within the cost of service study—whether the embedded cost analyses should utilize the Commission-approved allocators and methodologies or use allocators and methodologies that have not been used to set any of the Companies' rates in South Carolina. (Tr. p. 393.8.) Witness Horii testified that even though the Summer CP was utilized in the cost of service studies performed in the Companies' most recent rate setting in 2018, those cost of service studies are "outdated," and that the Summer CP allocator is not "an accurate reflection of the Duke system" given that it peaks primarily in the winter morning. (*Id.*) Witness Horii alleged that the embedded cost of service studies should evaluate the share of future costs that are allocated to these customer-generators, which depends upon various factors, including how that future usage coincides with the "Duke system peak." (*Id.*) Witness Horii suggested that the Companies should utilize their 2016 Resource Adequacy Studies to set rates rather than the embedded cost to serve studies at issue. (Tr. p. 393.15.) Witness Horii argued that although the Summer CP is the basis upon which all current rates were developed and costs were allocated, going forward, NEM rates and costs should be separately allocated (at least for now) using a winter allocator. (Tr. p. 393.18.) In fact, Witness Horii suggested that rather than waiting on the Companies' next base rate case for updated cost of service studies,

that the Commission should require the Companies to perform new embedded cost of service studies for this NEM proceeding to allow the Commission to more fully consider whether a change in allocators is appropriate. (Tr. p. 393.43.) Witness Horii opined that a shift to a winter allocator under such studies would reveal an even greater cost shift under the Permanent Tariffs. (Tr. p. 393.11.) As such, Witness Horii proposed new rates for the Solar Choice Tariffs that would eliminate this reduced cost shift entirely. (Tr. p. 393.30.)

Under the ORS's so-called "Zero Cost Shift Tariffs," which were developed utilizing the winter allocator that Witness Horii suggested, rates for DEP would be increased by 40.8% and rates for DEC would increase by 77.3%, when compared to the proposed Permanent Tariffs. (*Id.*) Witness Horii noted that such an increase would "remove 100% of the estimated cost shift from [his] corrected embedded COS results." (Tr. p. 393.31.) However, ORS Witness Horii noted that the Commission should only adopt the ORS Tariffs "if the Commission determines that the elimination of cost shift takes priority over the goal of Act 62 to minimize disruption of the solar industry in South Carolina." (Tr. p. 393.32.)

Additionally, Witness Horii argued that one other aspect of the embedded cost of service analyses should change—specifically, the Companies should move away from the Commission-approved Cost Duration Method to allocate capacity costs, and instead should use the novel LOLE model. (Tr. p. 393.15.) Witness Horii alleged that LOLE more appropriately accounted for grid-connected solar resources and allocates less costs to hours when solar is operating. (*Id.*) However, according to Witness Horii, because the Cost Duration Method does not account for grid-connected solar resources, the Companies' analysis provides "excessive bill reductions for solar" when compared to LOLE. (Tr. p.

393.34.) As a result, Witness Horii again suggests an increase in the TOU rates. (Tr. p. 393.35.) Despite these concerns, Witness Horii described the Permanent Tariffs as containing reasonable "form and components." (Tr. p. 393.33.)

On rebuttal, Witness Harris noted that, although Witness Horii's testimony focused exclusively on the embedded cost analyses performed by the Companies, the marginal cost analyses "should also carry significant weight to ensure that customers only pay their fair share for costs." (Tr. p. 492.6.) As for Witness Horii's claim that the Companies relied upon "outdated" analyses when developing the Solar Choice Tariffs, Witness Harris noted that the embedded cost studies utilized to develop the tariffs served as the basis for rates that were implemented as recently as 2019. (*Id.*) Moreover, the Summer CP was utilized to set retail prices in each of the Companies' South Carolina jurisdictions and any shift away from that methodology would require a fundamental rethinking of all the retail rates in this NEM docket. (Tr. p. 492.7.)

Witness Huber echoed the testimony of Witness Harris, noting that the Companies utilized the Summer CP to develop the Solar Choice Tariffs because it "represents the only cost allocator that serves as the basis for all of the Companies' South Carolina, Commission-approved retail electric rates." (Tr. p. 526.5.) Witness Huber explained that although the manner in which revenue is recouped from customer classes may vary, the Companies "always start from that original cost-of-service principle and allocators." (Tr. p. 173, ll.7-9.) On this point, Witness Huber stated that although the rates within the Solar Choice Tariffs represent a new structure to better tie cost recovery with those customers that cause such costs to be incurred, they do not represent "extra" revenue to the Companies. (Tr. p. 537.) Instead, Witness Huber described it in terms of the goals of Act

62, and noted that the rates simply reduce the cost shift and "in reducing the cost shift, [the Companies] lose less money." (*Id.*) In providing an example for the Commission, Witness Huber noted that under the Existing NEM Programs, where the Companies may have lost $125 dollars a month as a result of a customer switching to solar, the Solar Choice Tariffs better align costs such that the Companies may only lose $85 a month. (Tr. p. 538.) Witness Huber explained that the new rates within the Solar Choice Tariffs "just [mean] our losses are – are a bit less than they were before." (Tr. p. 538, ll. 14-15.) Witness Huber noted that the regulatory model in South Carolina does not permit the Companies to recoup this lost revenue in its base rate case proceedings. (Tr. p. 540.) Rather, South Carolina looks at historical test years and the revenue lost in such years. (*Id.*) According to Witness Huber, rates are then adjusted to achieve better cost recovery going forward.(*Id.*)

Witness Huber maintained that the Summer CP remains the correct allocator for the Companies because the "majority of the costs reflected in the Companies' embedded (historical) cost of service study utilized in this proceeding reflect production and transmission costs that were intended to serve a summer peak." (Tr. p. 526.10.) Witness Huber noted that because of this, allocating costs based upon a winter peak would simply not reflect the Companies' embedded costs. (Tr. p. 526.10-526.11.)

Likewise, Witness Huber explained that Witness Horii's concerns regarding the Cost Duration Method are misplaced. (Tr. p. 526.15.) Witness Huber noted that Witness Horii's argument essentially claims that the Cost Duration Method "provides too large of a bill reduction for generation capacity because it incorrectly allocates capacity costs to every hour of the year." (Tr. p. 526.16.) However, Witness Huber notes that the Cost Duration Method "was specifically designed to identify appropriate TOU pricing" and in

doing so, provides the Companies with a comprehensive picture of utilization across each hour of the day. (*Id.*) Contrary to Witness Horii's assertion, Witness Huber testified that the Cost Duration Method actually provides the Companies a more complete, and accurate picture of system utilization than LOLE. (*Id.*) Although Witness Huber noted that in other proceedings he has designed rates "using net peak to allocate generation capacity costs" as Witness Horii suggested, Witness Huber did not do so here because including the non-dispatchable generation inherent in gross load would have resulted in an over-correction of any cost shift and presented "extreme" rate impacts—such as possibly eliminating any cost shift to such an extent that it actually creates a subsidy to non-NEM customers via dramatically increased rates. (*Id.*)

While Witness Huber and Witness Harris explained why the Summer CP and Cost Duration Method better reflect the realities of the Companies' systems, Witness Hager and Witness Faruqui testified that—regardless of whether such methodologies are appropriate—moving away from either Commission-approved methodology in this NEM docket would violate fundamental principles of ratemaking. (Tr. p. 474.16; Tr. p. 509.20.) Witness Hager drew upon her experience with the Duke Energy Corporation to explain the consequences that would result from moving away from the Commission-approved methodologies utilized by the Companies in performing the embedded cost to serve studies. (Tr. p. 474.15.) To explain these consequences, Witness Hager first walked the Commission through the purpose of cost of service studies in the ratemaking context. (Tr. p. 474.5.) Witness Hager explained that these studies align total costs incurred by the Companies during a test period with the jurisdictions and customer classes responsible for those costs. (*Id.*) The Companies then utilize these studies to set rates that accurately

recover those costs from those customers that caused such costs—in other words, cost-causation principles are the fundamental bedrock of these studies. (*Id.*) In this context, all costs must be allocated or else the Companies risk under recovery of the Companies' operating expenses. (Tr. p. 474.6.) To allocate these costs and determine which customers necessitated such costs, Witness Hager explained that the cost of service studies utilize allocators based upon Production and Transmission Demand, as well as Distribution Demand. (Tr. p. 474.9.) As for Witness Horii's specific suggestion to move away from the Summer CP, Witness Hager noted that this methodology has been utilized by the Companies for years and was supported by the ORS in the Companies' most recent rate case. (Tr. p. 470.) Witness Hager explained that changing the allocator in this NEM proceeding would completely disconnect the analysis from theCommission-approved rates, which violates the fundamental principles of ratemaking. (Tr. p. 474.13.) Witness Hager argued that utilization of the Summer CP is grounded in cost-causation principles and any "change in the cost allocation method for demand-related production costs will need to be carefully considered and fully vetted by the Companies, interested parties, and this Commission." (Tr. p. 474.15.) Witness Hager noted that Witness Horii's suggestion to move away from the Summer CP "would likely be strongly debated because of the large cost shifts between rate classes which can lead to concerns about rate shock." (Tr. p. 474.16.) Witness Hager stressed that this is the very reason why the Commission should not change the allocator for one rate class outside of a base rate case. (*Id.*) As for Witness Horii's argument that LOLE should be used to measure cost shift, Witness Hager explained that although it was used in the Companies' avoided cost proceeding, those proceedings have a different goal than ratemaking proceedings. (Tr. p. 474.19.) For example, calculation of

avoided costs seek to determine the "**incremental cost** to the electric utility of electric energy." (*Id.*) (emphasis in original). However, ratemaking seeks to recover historical embedded costs which are simply not addressed in avoided cost proceedings. (*Id.*) In fact, Witness Hager testified that she was only able to identify two utilities in the entire country that have utilized LOLE for "allocation of demand-related production costs for general rate cases" and those two utilities were ordered to submit alternatives to LOLE in their next rate case in addition to the LOLE calculations. (Tr. p. 474.19.)

Similarly, Dr. Faruqui claimed that Witness Horii's suggestion to move away from these Commission-approved methodologies simply "ignores" the full context of the rate design and cost of service methodologies utilized by the Companies to develop the Solar Choice Tariffs. (Tr. p. 509.3.) Dr. Faruqui explained that the methodologies for which Witness Horii advocates have "not been vetted with any intervenors or approved by the Commission." (Tr. p. 509.15.) In fact, Dr. Faruqui noted that he has never seen a different allocator utilized for NEM customers and believes that doing so would be "a fundamental ratemaking mistake." (Tr. p. 509.20.) According to Dr. Faruqui, the utilization of anything other than Commission-approved methodologies in this proceeding would "create an imbalance of cost recovery and could lead to the Companies over- or under- collecting their revenue requirement." (*Id.*) Dr. Faruqui explained that not only should such changes only be made in a rate case, but it is still uncertain whether the methodologies suggested by Witness Horii would even be proposed and accepted in such a rate case. (*Id.*) As such, Dr. Faruqui characterized Witness Horii's response as "not reasonable and . . . a direct contradiction to ratemaking principles." (Tr. p. 509.21.) Witness Brown echoed the testimony of Witness Faruqui and Witness Hager and explained that "if you pick and choose

allocators for different customer groups, then you end up with the total revenue requirement [that] wouldn't necessarily equal the approved revenue requirement, because you would be allocating the revenue requirement to different customer groups based on different allocation methodologies." (Tr. p. 48, ll. 16-22.) According to Witness Brown, choosing a different allocator for this subset of customers would violate ratemaking principles bycreating an inconsistent allocation, which must necessarily "be consistent in order for it all to come together . . . in an aggregate manner." (Tr. p. 48, ll. 23-24.)

On rebuttal, Witness Finley noted that the use of allocators is the topic of "heated debate in rate adjustment proceedings." (Tr. p. 565.9.) Witness Finley testified that "[c]ountless hours of hearing time have been consumed over the years where these issues have been debated" given the inherent subjectivity in selecting appropriate allocators. (Tr. p. 565.17.) However, Witness Finley stated that deference in these decisions should be given to the utilities given that they are responsible for planning "to meet the demand on its system, not representatives of the various customer classes" that may have self-interested reasons for arguing that a certain allocator should apply over another. (*Id.*)

Witness Moore described Witness Horii's approach as "singl[ing] out solar customers alone" by imposing "an entirely different cost of service methodology" upon them. (Tr. p. 608.15.) Witness Moore testified that such an arrangement would violate the Commission's "affirmative duty to root out unreasonable discrimination in rates and service" as well as the express language of Act 62 that notes any treatment of solar customers as a different rate class is meant for "analytical purposes only." (*Id.*) Witness Barnes expressed similar concerns, noting that he "endorse[s] the critique of Witness Horii's methodological recommendations" set forth in the testimony of Dr. Faruqui,

Witness Harris, Witness Hager, Witness Huber, and Witness Finley. (Tr. p. 634.3.)

In response, Witness Lawyer conceded that the ORS, in the Companies' last rate case, described the Summer CP as "a reasonable assessment and allocation of the company's revenues, operating expenses, and rate-based items." (Tr. p. 661, ll. 13.) Witness Lawyer further testified that the prior rate cases in which the ORS supported the Companies' use of the Summer CP involved "hundreds of millions of dollars of generation and transmission costs," but that such support does not bind the ORS to utilize the same allocator in this limited NEM proceeding. (Tr. p. 661, ll. 25.) When questioned as to whether the ORS would also recommend that the Companies utilize a winter allocator and LOLE to set rates in their next rate case—as it has unwaveringly done in this proceeding—Witness Lawyer refused to support the use of these methodologies in future rate cases, stating that "I'm not committing to anything at this point." (Tr. p. 659, ll. 4.) As for Witness Horii, he interpreted Act 62 differently than the other Parties, and alleged that the "for analytical purposes only" language within Act 62 was actually intended to give the Commission flexibility to change the methodologies utilized for NEM customers in this proceeding without changing the methodologies for any other customer. (Tr. p. 681.) During the hearing, Witness Horii acknowledged that although Act 62 intended for the analysis to be "hypothetical," he developed his rates off of that hypothetical analysis, which translates into utilizing that hypothetical analysis as restricting the results of the analysis to just the solar customer-generators." (Tr. p. 682, ll. 8-13.) During the hearing, Witness Horii acknowledged that there is no precedent for requiring LOLE as the sole methodology to develop rates, and that only one jurisdiction has accepted it as part of a suite of alternatives. (Tr. p.682.)

Commission Determination

At the outset, the Commission is encouraged that this issue is the only material disagreement among the Stipulating Parties and the ORS—particularly given that it relates to the narrow issue of an embedded cost of service allocator.[13] However, although the disagreement is narrow in scope, it is profound in impact. The Commission appreciates the broad consequences that could result from shifting away from Commission-approved allocators and methodologies for this subset of retail customers. In light of these consequences and the analyses presented by the Stipulating Parties in this proceeding, the Commission finds there is not substantial justification for moving away from these allocators and methodologies at this time.[14]

As for the cost of service studies presented by the Companies, the Commission finds it appropriate and reasonable to utilize those studies rather than Resource Adequacy Studies to develop NEM rates in this proceeding. Although the ORS criticized the Companies' cost of service studies as "outdated," the Commission notes that those studies actually contain more recent data than the Resource Adequacy Studies cited by Witness Horii. Additionally, the Companies' use of the Summer CP within those cost of service studies is appropriate and reasonable for several reasons. As described by Witness Huber, the Summer CP is the only cost allocator that serves as the basis for all of the Companies' Commission-approved retail rates in South Carolina. Therefore, making a change in this proceeding would mean that these NEM customers take rates based upon a completely

[13] As discussed above, Witness Horii did not similarly challenge the Companies' marginal cost analyses.
[14] As discussed above, the Commission Directive issued on April 28, 2021, in the Generic NEM Docket, requires that any such departure from Commission-approved cost of service allocators and methodologies must be supported by "substantial justification."

different allocator than all other customers in South Carolina. Witness Hager's testimony is instructive as to the consequences of such a move. For example, the Summer CP is an allocator that is used to determine the customers that cause the Companies to incur costs and how much costs the Companies should recover from those customers. This allocation method is based upon sound cost-causation principles that are common in electric ratemaking.

In the normal course, rate cases – not NEM proceedings – are the opportunity for parties to litigate the propriety of adopting allocators. In South Carolina, these proceedings typically involve numerous intervenors, days of hearings, volumes of testimony, and detailed scrutiny of proposed methodologies and allocators. Those rate cases stand in stark contrast to the procedural posture of this docket, which was opened for the limited purpose of establishing new Solar Choice NEM tariffs—not reviewing the appropriateness of the allocator underlying all of the Companies' retail rates in South Carolina.

However, even if the Commission deemed it appropriate to question the Summer CP allocator used by the Companies in this proceeding, the record reveals that the Summer CP would remain the Commission-approved allocator for the Companies at this time. To be clear, the ORS only challenges the use of the Summer CP in the Companies' embedded cost of service studies. Within those studies, the Companies have to allocate historical costs to the customer classes which caused them to incur such costs. The record reveals that the majority of the historical costs incurred by the Companies, as explained in their embedded costs to serve studies, were incurred to serve a summer peaking system. . Furthermore, the record is essentially void of any analysis or data which would substantially justify that any allocator or data would be more appropriate than the Summer CP.

Additionally, the ORS's request to measure the cost shift via LOLE is without precedent as the record reveals that no jurisdiction has exclusively utilized LOLE to allocate costs rather than the Cost Duration Method utilized by the Companies While avoided cost proceedings generally focus upon the "incremental cost" of energy, ratemaking focuses heavily on recovering historical costs. As such, no substantial justification exists in this proceeding for moving away from the Cost Duration Method utilized by the Companies. The Cost Duration Method is the appropriate mechanism to allocate costs in this proceeding and was specifically designed for the purpose of providing a comprehensive picture of the Companies' systems from which TOU rates could be developed.

Likewise, the impact of utilizing a winter allocator and LOLE, as the ORS suggests, would result in dramatically increased rates compared to those in the Solar Choice Tariffs. Specifically, the ORS's suggested methodology and corresponding ORS Tariffs would result in at least a $448 annual bill increase for DEP customer-generators and at least a $570 annual bill increase for DEC customer-generators.[15] Witness Horii's analyses do not follow standard ratemaking practices. For these reasons, the ORS Tariffs must be rejected.

As such, the Commission finds there is no substantial justification to move away from the Summer CP and Cost Duration Method and therefore rejects the challenges to the Companies' methodologies and cost shift numbers. The methodologies underlying the Solar Choice Tariffs are based upon sound ratemaking principles and have been accepted by the Commission time and again. The Solar Choice Tariffs resulting from those

[15] Revised Late-Filed Exhibit No. 14 contains two sets of proposed ORS rates. In either scenario, rates increase dramatically. In the most extreme scenario, bills increase by over $620 annually for DEC customers.

methodologies substantially, if not completely, eliminate cost shift in accordance with Act 62, while also providing opportunity for solar adoption and market growth in South Carolina. Likewise, it is achieved without penalizing customers in violation of Act 62 given that customers can continue to offset, on a 1:1 basis, their energy requirements from the Companies via self-consumption. As such, the Companies have fulfilled Act 62's requirement to eliminate cost shift "to the greatest extent practicable while ensuring access to customer-generator options."

X. ORDERING PARAGRAPHS

NOW, THEREFORE, IT IS HEREBY ORDERED THAT:

1. Based upon the testimony and exhibits received into evidence at the hearing and the entire record of this proceeding, the Commission hereby adopts each and every finding of fact enumerated herein. The Commission's conclusions of law are fully stated above.

2. Any motions not expressly ruled upon herein are denied.

3. Act 62 contains NEM requirements that were not present within Act 236.

4. These requirements are set forth within Act 62 in the form of specific Solar Choice requirements as well as broader legislative intent. The Commission must necessarily give weight to all provisions related to Solar Choice and attempt to balance this broad range of interests within Act 62. The Commission cannot focus on one goal to the exclusion of the others.

5. The Solar Choice Tariffs significantly, if not completely, eliminate the cost shift through the use of innovative best practices—such as a minimum bill directly collecting customer and distribution costs, Grid Access Fees, non-bypassable charges,

TOU rates, CPP periods, TOU and monthly netting, and avoided cost export credits. This elimination is achieved without penalizing Solar Choice customers given that customer-generators may continue to offset energy required from the Companies on a 1:1 basis through self-consumption.

6. The Solar Choice Tariffs permit customer-generators to achieve bill savings. This opportunity to achieve bill savings will incentivize the adoption of solarin South Carolina, thereby avoiding disruption of the market and continuing the successful deployment of DERs under Act 236. This continued industry presence in South Carolina, coupled with the opportunity for significant bill savings under the Solar Choice Tariffs, ensures that customer-generators have access to NEM programs in accordance with Act 62.

7. When taken together, the ratemaking structures within the Solar Choice Tariffs reduce cost shift for residential customers by approximately 84% and 100% for DEC and DEP, respectively, from an embedded cost perspective. From a marginal cost perspective, the Solar Choice Tariffs reduce cost shift for residential customers by approximately 88% and 53% for DEC and DEP, respectively.

8. In this way, the Solar Choice Tariffs achieve Act 62's goal of eliminating cost shift "to the greatest extent practicable" because they achieve this reduction in cost shift by accounting for the other goals within Act 62 and do not penalize customers in violation of Act 62.[16]

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[16] Customers can continue to offset, on a 1:1 basis, their energy requirements from the Companies via self-consumption.

9. The Interim Riders and Non-Residential Riders will be effective June 1, 2021, in accordance with Act 62's timeline. The Permanent Tariffs will be effective January 1, 2022. This represents an appropriate mitigation measure for existing customers given that the Interim Riders act as a glide path to the Permanent Tariffs. Even in the absence of the Permanent Tariffs, the Interim Riders and Non-Residential Riders contain sufficient ratemaking tools to mitigate the risk of cost shift in accordance with Act 62.

10. The rate structures within the Permanent Tariffs and Non-Residential Riders shall remain unchanged for 10 years. However, the Companies shall update the values within the tariffs annually and revisit the export methodology every five years. Customers taking service under the Interim Riders can do so until May 31, 2029.

11. Customers under Existing NEM Programs and Interim Riders can take service under those programs until their applicable sunset date, or can switch to the Solar Choice Tariffs (or Permanent Tariffs for customers under the Interim Riders) with prior notice to the Companies. For customers that reach the applicable sunset date and do not wish to take service under the Solar Choice Tariffs, the Companies shall propose a transition tariff for those customers to this Commission prior to those sunset dates.

12. This Order shall remain in full force and effect until further Order of the Commission.

BY ORDER OF THE COMMISSION:

Justin T. Williams, Chairman
Public Service Commission of
South Carolina

ELECTRONICALLY FILED - 2020 November 2 5:25 PM - SCPSC - Docket # 2020-265-E - Page 1 of 15

BEFORE

THE PUBLIC SERVICE COMMISSION OF

SOUTH CAROLINA

DOCKET NO. 2020-__-E
DOCKET NO. 2020-__-E

November 2, 2020

IN RE:	)	**STIPULATION**
Duke Energy Carolinas, LLC's Establishment of Solar Choice Metering Tariffs Pursuant to S.C. Code Ann. Section 58-40-20	)	
Duke Energy Progress, LLC's Establishment of Solar Choice Metering Tariffs Pursuant to S.C. Code Ann. Section 58-40-20	)	

This Stipulation is made by and among Duke Energy Carolinas, LLC ("DEC"); Duke Energy Progress, LLC ("DEP" and together with DEC, the "Companies"); North Carolina Sustainable Energy Association; Southern Environmental Law Center on behalf of South Carolina Coastal Conservation League, Southern Alliance for Clean Energy, and Upstate Forever; and Vote Solar (collectively referred to as the "Stipulating Parties" or sometimes individually as a "Stipulating Party").

WHEREAS, the above-captioned proceedings have been established by the Public Service Commission of South Carolina (the "Commission") pursuant to S.C. Code Ann. § 58-40-20;

WHEREAS, the Stipulating Parties have varying positions regarding the issues in this case;

ELECTRONICALLY FILED - 2020 November 2 5:25 PM - SCPSC - Docket # 2020-265-E - Page 2 of 15

WHEREAS, the Stipulating Parties have engaged in discussions to determine whether a stipulation to the following issues would be in their best interests;

WHEREAS, following these discussions the Stipulating Parties have each determined that their interests and the public interest would be best served by stipulating the below issues in the above-captioned cases under the terms and conditions set forth below, which are all conditioned upon the Commission's approval of the same in its entirety.

A. RESERVATION OF RIGHTS

A.1 The Stipulating Parties expressly reserve the right to engage in (i) cross-examination of any witnesses testifying on behalf of other Stipulating Parties and (ii) re-direct of their own witnesses.

B. STIPULATION TERMS

B.1 The Stipulating Parties aver that the proposal set out immediately below complies with applicable South Carolina laws and regulations—including the requirements and the spirit of S.C. Act No. 62 of 2019 ("Act 62"). Specifically, the Stipulating Parties agree that the proposal achieves the goals set forth in Act 62 for the next generation of net energy metering ("NEM"), in part, through the use of innovative rate-making structures—including "time-variant"[1] pricing—to ensure that any estimated cost-shifts and subsidizations are "eliminated to the greatest extent practicable,"[2] while also permitting the use of behind the meter customer-generation "without penalty."[3] Therefore, such proposal is hereby adopted, accepted, and acknowledged as the stipulation of the Stipulating Parties.

Interim Riders

[1] S.C. Code Ann. § 58-40-20(F)(3)(b).
[2] S.C. Code Ann. § 58-40-20(G)(1).
[3] S.C. Code Ann. § 58-40-20(G)(2).

ELECTRONICALLY FILED - 2020 November 2 5:25 PM - SCPSC - Docket # 2020-265-E - Page 3 of 15

B.2 The Stipulating Parties agree for purposes of this stipulation and without prejudice to the position of any Stipulating Party in any future proceeding that the Companies' proposal for the interim solar choice riders for DEC and DEP (collectively, the "Interim Riders") is just and reasonable and complies with the requirements of Act 62, including S.C. Code Ann. § 58-40-20(G).

B.3 The Companies agree to offer the Interim Riders to residential customers submitting applications received from June 1, 2021, through and including December 31, 2021. These customers will remain on their existing rate schedule (e.g. RS, RES, R-TOUD, etc.) until May 31, 2029, and will be placed on a new NEM rider, which will include monthly netting with net excess energy credited at avoided cost (i.e. the new netting policy) and non-bypassable charges for costs not directly related to the provision of electric service for each applicant. This includes costs such as energy efficiency costs, cyber security costs, and storm cost recovery.

B.4 This interim rate period is necessary for the Companies to continue to offer an option for customers to adopt solar while the Companies work to switch over to their new billing system to efficiently bill the new Permanent Tariffs (as defined below) effective January 1, 2022. NEM under the Interim Riders will be billed manually for applications received during that interim period.

B.5 Between June 1, 2021, and December 31, 2021, there will be a monthly cap on solar applications of 1.2 MW for DEC and 300 kW for DEP per month. If the monthly cap is reached and a customer still wants to install solar under an Interim Rider through 2029, the customer must withdraw its application and submit it again the next month, but there is no assurance that capacity will be available.

B.6 Customers under the Interim Riders will be allowed on this structure until May 31, 2029, at which point they will be given the option to switch to the Permanent Tariffs. If they

ELECTRONICALLY FILED - 2020 November 2 5:25 PM - SCPSC - Docket # 2020-265-E - Page 4 of 15

elect not to be on the Permanent Tariffs, they can stay on the standard residential tariff but any volumetric price increase after their transfer year will be placed in a non-bypassable charge based on the estimated total solar energy production of their system size for the remaining life of the system. The solar customer will also be assessed a minimum bill set at $10 more than the Basic Facilities Charge ("BFC") at that time. This minimum bill will be applied in the same manner as the Monthly Minimum Bill in the Permanent Tariffs, in that it will recover some portion of the Companies' estimated customer and distribution costs. The minimum bill charge is reduced by the BFC and the portion of the customer's monthly volumetric energy charges specific to customer and distribution costs.

Permanent Tariffs

B.7 The Stipulating Parties agree for purposes of this stipulation and without prejudice to the position of any Stipulating Party in any future proceeding that the Companies' proposal—as shown on **Stipulation Exhibit 1**—for the permanent solar choice riders and rate schedules for DEC and DEP (collectively, the "Permanent Tariffs") is just and reasonable and complies with the requirements of Act 62, including S.C. Code Ann. § 58-40-20(G).

B.8 The Companies agree to offer the Permanent Tariffs to residential customers submitting applications for the Solar Choice Program after December 31, 2021.

B.9 The Companies agree that existing residential NEM solar customers would be given the option to switch to the Permanent Tariffs in 2025 or 2029 depending upon the year in which their existing tariffs sunset. If the existing NEM solar customer elects not to be on that rate, they could stay on the standard residential tariff but any volumetric price increase after the transfer year would be placed in a non-bypassable charge based on their system size for the remaining life of the system, and will include monthly netting of excess energy. The existing NEM customer would also be assessed a minimum bill set at $10 more than the Basic Facilities

ELECTRONICALLY FILED - 2020 November 2 5:25 PM - SCPSC - Docket # 2020-265-E - Page 5 of 15

Charge at that time. This minimum bill will be applied in the same manner as the Monthly Minimum Bill in the Permanent Tariffs, in that it will recover customer and distribution costs. The minimum bill charge is reduced by the BFC and the portion of the customer's monthly volumetric energy charges specific to customer and distribution costs.

Non-Residential Customer-Generators

B.10 The Stipulating Parties agree for purposes of this stipulation and without prejudice to the position of any Stipulating Party in any future proceeding that each Companies' proposal for a non-residential Solar Choice Program rider (collectively, the "Non-Residential Riders") is just and reasonable and complies with the requirements of S.C. Act No. 62 of 2019, including S.C. Code Ann. § 58-40-20(G).

B.11 The Companies agree to offer the Non-Residential Riders to non-residential customer-generators applying for interconnection after June 1, 2021. Those customers will be served under their existing tariff and a Non-Residential Rider, which will include monthly netting of excess energy.

B.12 Monthly net excess energy will be applied as a bill credit at the same rate as residential customer-generators.

Commitment to Address Additional Items Within Act 62

B.13 In furtherance of Act 62's goal to "support access to solar energy options for all South Carolinians, including those who lack the income to afford the upfront investment in solar panels or those who do not own their homes or have suitable rooftops,"[4] the Stipulating Parties shall, within 180 days of the Commission issuing a final order in these dockets, initiate a stakeholder process whereby the Stipulating Parties, in consultation with other interested

[4] S.C. Code Ann. § 58-41-40(A).

ELECTRONICALLY FILED - 2020 November 2 5:25 PM - SCPSC - Docket # 2020-265-E - Page 6 of 15

stakeholders, would explore a Residential Solar Choice Program option tailored to low-income customers as a potential future energy efficiency or demand response program.

B.14 In furtherance of Act 62's goal to "provide opportunities for customer measures to reduce or manage electrical consumption from electrical utilities in a manner that contributes to reductions in utility peak electrical demand and other drivers of electrical utility costs,"[5] the Companies will work with stakeholders to ensure broad technology inclusion and identify other peak load reduction technologies that can be used in conjunction with the Solar Choice Program. As a step toward achieving this goal—as well as Act 62's intent to employ "energy and cost-saving measures"[6]—the Companies will develop and soon file EE/DSM programs for customer generators for consideration in the Companies' EE/DSM dockets in South Carolina and North Carolina.

C. REMAINING STIPULATION TERMS AND CONDITIONS

C.1 The Stipulating Parties agree that this Stipulation is reasonable, is in the public interest, and is in accordance with law and regulatory policy. This Stipulation in no way constitutes a waiver or acceptance of the position of any Stipulating Party concerning the subject matter herein in any future proceeding.

C.2 The Stipulating Parties agree to cooperate in good faith with one another to obtain all necessary approvals—including approval of this Stipulation by the Commission—in South Carolina and North Carolina to implement the proposal across the Companies' service territories. The Stipulating Parties, including their agents, further agree that communications regarding the Stipulation, either between the Stipulating Parties or with non-signatories hereto, shall be supportive of the terms agreed to in this Stipulation.

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[5] S.C. Code Ann. § 58-27-845(A)(2).
[6] S.C. Code Ann. § 58-27-845(B).

ELECTRONICALLY FILED - 2020 November 2 5:25 PM - SCPSC - Docket # 2020-265-E - Page 7 of 15

C.3 This Stipulation contains the complete agreement of the Stipulating Parties regarding the terms and conditions of proposed tariffs filed in the above-referenced dockets. This Stipulation integrates all discussions among the Stipulating Parties regarding the terms and conditions of the filed tariffs into the terms of this written document. The Stipulating Parties agree that this Stipulation will not constrain, inhibit or impair their arguments or positions held in future proceedings, nor will this Stipulation or any of the matters agreed to in it be used as evidence or precedent in any future proceeding.

C.4 This Stipulation shall be interpreted according to South Carolina law.

C.5 This Stipulation does not establish any precedent with respect to the issues resolved herein, and in no way precludes any Stipulating Party herein from advocating an alternative approach or position in any future proceedings that are not within the scope of, or otherwise contemplated by, this Stipulation.

C.6 This Stipulation shall bind and inure to the benefit of each of the signatories hereto and their representatives, predecessors, successors, assigns, agents, shareholders, officers, directors (in their individual and representative capacities), subsidiaries, affiliates, parent corporations, if any, joint ventures, heirs, executors, administrators, trustees, and attorneys.

C.7 The Stipulating Parties represent that the terms of this Stipulation are based upon full and accurate information known as of the date this Stipulation is executed. If, after execution, but prior to a Commission decision on the merits of this proceeding, a Stipulating Party is made aware of information that conflicts, nullifies, or is otherwise materially different than that information upon which this Stipulation is based, that Stipulating Party may withdraw from the Stipulation with written notice to every other Stipulating Party.

C.8 The above terms and conditions represent the agreement of the Stipulating Parties in these dockets. Therefore, each Stipulating Party acknowledges its consent and agreement to

this Stipulation by authorizing its counsel to affix his or her signature to this document where indicated below. Counsel's signature represents his or her representation that his or her client has authorized the execution of the agreement. Facsimile signatures and e-mail signatures shall be as effective as original signatures to bind any Stipulating Party. This document may be signed in counterparts, with the various signature pages combined with the body of the document constituting an original and provable copy of this Stipulation.

[STIPULATING PARTY SIGNATURES TO FOLLOW ON SEPARATE PAGES]

ELECTRONICALLY FILED - 2020 November 2 5:25 PM - SCPSC - Docket # 2020-265-E - Page 8 of 15

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ELECTRONICALLY FILED - 2020 November 2 5:25 PM - SCPSC - Docket # 2020-265-E - Page 9 of 15

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ELECTRONICALLY FILED - 2020 November 2 5:25 PM - SCPSC - Docket # 2020-265-E - Page 10 of 15

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ELECTRONICALLY FILED - 2020 November 2 5:25 PM - SCPSC - Docket # 2020-265-E - Page 11 of 15

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ELECTRONICALLY FILED - 2020 November 2 5:25 PM - SCPSC - Docket # 2020-265-E - Page 12 of 15

ELECTRONICALLY FILED - 2020 November 2 5:25 PM - SCPSC - Docket # 2020-265-E - Page 13 of 15

STIPULATION EXHIBIT 1

Permanent Tariff for DEC and DEP

- The Permanent Tariff for residential solar PV customer generators is a Critical Peak Pricing ("CPP") Time of Use ("TOU") tariff and residential solar customer generators must receive service under this tariff (with the exception of the Interim Riders outlined above). This rate schedule will only apply to partial requirements rooftop solar customers.

	Prices without Riders and before future fuel cost adjustments (c/kWh)	
	DEC SC	DEP SC
Peak	15.1760	15.843
Off-Peak	8.7586	9.529
Super-Off-Peak	6.0268	6.994
Critical Peak*	25	25

* Price for peak hours on up to 20 Company-designated Critical Price days per year

- TOU Periods (all times in Eastern Prevailing Time)
  - Annual On-peak period will be from 6:00 pm – 9:00 pm
  - Additional December-February On-peak from 6:00 am – 9:00 am
  - March-November Super Off-peak from 12:00 am – 6:00 am

- A Monthly Grid Access Fee ("GAF") is intended to recover distribution costs of customers with system sizes greater than 15 kW-dc, which are larger than for the average customer. To design the GAF, the average maximum demand for customers with greater than 15 kW-dc systems was determined and applied the distribution unit cost to estimate the total distribution cost. The GAF was then set to the level that would recover this cost minus the portion already recovered in through the minimum bill. The GAF would be applied to the nameplate capacity in excess of 15 kW-dc. The GAF until the implementation of any future rate cases in DEC-SC or DEP-SC will be:
  - DEC GAF: $5.86/kW - dc/month
  - DEP GAF: $3.95/kW - dc/month

- Monthly Minimum Bill ("MMB") recovers customer and distribution costs applied after riders but before GAF, any non-bypassable charges, or excess energy credit. The MMB would be $30 to ensure recovery of customer and distribution costs from solar choice customers. The $30 MMB is reduced by the Basic Facilities Charge ("BFC") and the portion of the customer's monthly volumetric energy charges specific to customer and

distribution costs. If the combination of the BFC, specific volumetric energy charges, and bypassable riders is less than $30, then the MMB charge is equal to the difference. Any avoided cost bill credits for net excess energy can be used to reduce a customer's bill after the MMB has been applied.

- BFC of $13.09 for DEC and $14.63 for DEP and will change in accordance with any future changes in the BFC for the residential TOU rate schedules. The Stipulating Parties are not limited in their ability to litigate issues related to the amount or calculation of the BFC.
- Monthly excess net exports are credited at an annualized rate (weighted average rate for all hours assuming a fixed block of energy) for avoided energy cost as specified by the per kWh rates and charges in Schedule PP - Purchased Power (DEC) and SC Schedule PP – Purchased Power (DEP).
    - The Companies will maintain the fixed block of energy methodology that is used in Rider RNM but reserves the right to use a solar energy profile instead.
    - The Companies will maintain the practice of using an annualized rate but reserve the right to use different rates for each month instead.
- All costs related to Demand Side Management/Energy Efficiency, storm cost recovery, and cyber security are non-bypassable with the option of proposing new components to the non-bypassable list of charges with no direct link to customer kWh usage. Inclusion of additional possible Solar Choice Program costs would be handled in separate proceedings and rate cases.
    - Non-bypassable cost recovery would be a monthly non-volumetric charge based on customer-generator system capacity with a modeled annual capacity factor representing the system's entire output.
- Imports and exports will be netted within each TOU pricing period initially, and net exports during that pricing period are credited at avoided cost as explained above. CPP applies to all imports during the CPP hours. Any energy exports during the CPP hours will be netted against peak imports, not the Critical Peak imports
- Renewable energy certificate for all solar generation will be transferred to the Companies upon being placed on the rate for the length of time the customer enrolls in a Permanent Tariff.
- The designation of critical peak pricing days and hours will be set daily and will be posted daily on the Companies' website as the official customer notification. Additionally, the designation of CPP will be communicated to Customers by other means, including but not limited to email if desired and optionally through text message, again as desired by such Customers.

ELECTRONICALLY FILED - 2020 November 2 5:25 PM - SCPSC - Docket # 2020-265-E - Page 14 of 15

- The Companies could shift the CPP hours (but not the TOU hours) by 1 hour if it becomes necessary to avoid snap-back. The total number of CPP hours per day would remain the same regardless of any shift.
    - The peak hours would be used to provide flexibility for system operations.
- The Companies will maintain the TOU hours as defined above for enrolled customers (re: peak/off-peak/super-off-peak) for at least 10 years.
- The Companies will keep the general rate structure consisting of volumetric time varying rates and no demand charges described in this Permanent Tariff open to customers for at least 10 years.

ELECTRONICALLY FILED - 2020 November 2 5:25 PM - SCPSC - Docket # 2020-265-E - Page 15 of 15

ELECTRONICALLY FILED - 2020 December 10 3:06 PM - SCPSC - Docket # 2020-265-E - Page 4 of 4

JOINDER AGREEMENT

The undersigned, Solar Energy Industries Association (the "Joining Party"), hereby acknowledges receipt and an opportunity to review that certain Stipulation entered into by and among Duke Energy Carolinas, LLC; Duke Energy Progress, LLC; North Carolina Sustainable Energy Association; Southern Environmental Law Center on behalf of South Carolina Coastal Conservation League, Southern Alliance for Clean Energy, and Upstate Forever; and Vote Solar dated November 2, 2020 (the "Stipulation"). The undersigned further agrees to be bound by the terms of the Stipulation in accordance with its terms in consideration for the terms and conditions set forth therein. As such, the Joining Party shall be considered a "Stipulating Party" under the Stipulation.

This Joinder Agreement is made effective this 2nd day of December, 2020.

SOLAR ENERGY INDUSTRIES ASSOCIATION

By: _____
Name: Sean Gallagher
Title: VP, State Affairs

ACKNOWLEDGED AND AGREED:

DUKE ENERGY CAROLINAS, LLC

By Heather Shirley Smith
Name: Heather Shirley Smith
Title: Deputy General Counsel

DUKE ENERGY PROGRESS, LLC

By: Heather Shirley Smith
Name: Heather Shirley Smith
Title: Deputy General Counsel

ACCEPTED FOR PROCESSING - 2021 February 8 3:28 PM - SCPSC - 2020-264-E - Page 1 of 9

BEFORE

THE PUBLIC SERVICE COMMISSION OF

SOUTH CAROLINA

DOCKET NO. 2020-264-E
DOCKET NO. 2020-265-E

February 7, 2021

IN RE: Duke Energy Carolinas, LLC's Establishment of Solar Choice Metering Tariffs Pursuant to S.C. Code Ann. Section 58-40-20 Duke Energy Progress, LLC's Establishment of Solar Choice Metering Tariffs Pursuant to S.C. Code Ann. Section 58-40-20	**STIPULATION**

This Stipulation is made by and among Duke Energy Carolinas, LLC ("DEC"); Duke Energy Progress, LLC ("DEP" and together with DEC, the "Companies"); and Alder Energy Systems, LLC ("Alder") (collectively referred to as the "Stipulating Parties" or sometimes individually as a "Stipulating Party").

WHEREAS, the above-captioned proceedings have been established by the Public Service Commission of South Carolina (the "Commission") pursuant to S.C. Code Ann. § 58-40-20;

WHEREAS, Alder and the Companies have differing positions regarding certain issues in this case related to commercial and industrial customers;

WHEREAS, the Stipulating Parties have engaged in discussions to determine whether a stipulation to the following issues would be in their best interests;

ACCEPTED FOR PROCESSING - 2021 February 8 3:28 PM - SCPSC - 2020-264-E - Page 2 of 9

WHEREAS, the Stipulating Parties believe the terms and conditions outlined herein satisfy S.C. Act No. 62 of 2019's ("Act 62") requirements and implement the next generation of net energy metering ("NEM") for customers in the Companies' South Carolina service territories;

WHEREAS, following these discussions the Stipulating Parties have each determined that their interests and the public interest would be best served by stipulating the below issues in the above-captioned cases under the terms and conditions set forth below, which are all conditioned upon the Commission's approval of the same in its entirety.

A. RESERVATION OF RIGHTS

A.1 The Stipulating Parties expressly reserve the right to engage in (i) cross-examination of any witnesses testifying on behalf of other Stipulating Parties and (ii) re-direct of their own witnesses.

B. STIPULATION TERMS

B.1 The Stipulating Parties aver that the proposal set out immediately below complies with applicable South Carolina laws and regulations—including the requirements and the spirit of Act 62. Specifically, the Stipulating Parties agree that the proposal achieves the goals set forth in Act 62 for the next generation of NEM, in part, by "ensuring access to customer-generator options for customers who choose to enroll in customer-generator programs"[1] while also permitting the use of behind the meter customer-generation "without penalty."[2] Therefore, such proposal is hereby adopted, accepted, and acknowledged as the stipulation of the Stipulating Parties.

[1] S.C. Code Ann. § 58-40-20(G)(1).
[2] S.C. Code Ann. § 58-40-20(G)(2).

ACCEPTED FOR PROCESSING - 2021 February 8 3:28 PM - SCPSC - 2020-264-E - Page 3 of 9

Solar Choice for Non-Residential Customer-Generators

B.2 The Stipulating Parties agree for purposes of this stipulation and without prejudice to the position of any Stipulating Party in any future proceeding that each Companies' proposal for a non-residential Solar Choice Program rider as outlined herein (collectively, the "Non-Residential Riders") is just and reasonable and complies with the requirements of Act 62.

B.3 The Companies agree to offer the Non-Residential Riders to non-residential customer-generators applying for interconnection after June 1, 2021. Those customers will be served under their existing tariff and a Non-Residential Rider, which will contain only the rate-making tools outlined herein.

B.4 Monthly excess net exports will be applied as a bill credit at the same rate as residential customer-generators which are derived from the Companies' avoided cost docket.

B.5 Customers who sign up for a Non-Residential Rider will be eligible to remain on the rider for 10 years from the interconnection approval date, during which time the rate structure for such customer will remain unchanged.

B.6 The Non-Residential Riders available to Small General Service Rate class customers will be offered for a period of 5 years from the date the Commission approves the rider or until a cap on the total solar capacity for this rate class is met, whichever occurs first, unless a new non-residential customer-generator rider is approved by the Commission outside of this stipulation. The cap shall be 5 MW-AC in DEC-SC and 1 MW-AC in DEP-SC under this Rider.

B.7 On or after June 1, 2026, the Companies may propose changes to the rate structure (which may include an adjustment to the rate-making tools) within the Non-Residential Riders for new customers or place existing customers on the customer-generator rider in effect at the end of their 10-year grandfathering period. Unless ordered or instructed, the Companies shall not propose

ACCEPTED FOR PROCESSING - 2021 February 8 3:28 PM - SCPSC - 2020-264-E - Page 4 of 9

to the Commission changes to the rate structure within the Non-Residential Riders prior to June 1, 2026.

B.8 Notwithstanding any restrictions related to the Non-Residential Rider, at the Companies' discretion, non-residential customer-generators with systems less than 30 kW may be transitioned to a mandatory TOU rate tariff and the Companies will work with interested stakeholders to develop a plan for this transition prior to filing such rates for approval with the Commission.

Renewable Energy Credits

B.9 Under the Non-Residential Riders, non-residential customer generators shall earn one renewable energy credit (each, a "REC") for each MWh produced by the customer-generator's on-site generation. The customer must pay a REC billing and reporting fee (the "REC Fee") to DEP or DEC, as applicable, in an amount equal to $1.50 per REC (1 MWH). If the customer installs a production meter and allows the Companies to collect data from this production meter, the REC Fee will be reduced to $0.65 per REC (1 MWH). Each customer's REC Fee will not be adjusted for 10 years from such customer's interconnection approval date. At the time of submitting the interconnection application, the customer may elect to opt-out of the REC Fee and, in doing so, all RECs will inure to DEC or DEP, as applicable. The customer may make a one-time election to opt-in to the REC Fee (as defined above in section B.9), in writing, at any time during the 10-year period commencing on the interconnection approval date. The customer will be responsible for registering and retiring any RECs arising under this Rider, and the Companies make no representations or warranties regarding whether the RECs satisfy any requirement or standard, whether legal, regulatory, accounting, or otherwise.

B.10 The data from the non-residential customer's production meter shall be made available, upon request, to the customer on a monthly basis at no additional charge. The customer

ACCEPTED FOR PROCESSING - 2021 February 8 3:28 PM - SCPSC - 2020-264-E - Page 5 of 9

will be responsible for the cost of installing and maintaining the meter base in compliance with the Companies' requirements. The production meter option for RECs will be available to the first 300 customers in DEC and 400 customers in DEP that chose that option. Once those limits are reached, that option will no longer be available.

B.11 Non-residential customer generators must notify DEC or DEP (as applicable), in writing, of their intent to surrender the RECs to DEC or DEP, as applicable, at the time of the interconnection application. If a customer has not surrendered their RECs, such customer must pay the REC Fee for as long as such customer takes service under the Non-Residential Rider. If a customer fails to pay the REC Fee as and when due, with sufficient notice and time to cure, then all RECs attributable to billed, but unpaid, REC Fees and all future RECs shall become the property of the Companies. Existing NEM customers may switch to the Non-Residential Rider and must elect whether to earn or surrender RECs at the time of switching tariffs.

B.12 The Companies will bill non-residential customer-generators for the REC Fee on a periodic basis. For customers with a production meter, the Companies will use the customer's actual production meter data to determine the number of RECs generated by that customer's on-site generation. For those customers without a production meter, the Companies will determine the RECs generated by that customer's on-site generation based upon system size and forecasted output utilizing an industry standard PV modelling tools such as PVSYST.

C. REMAINING STIPULATION TERMS AND CONDITIONS

C.1 The Stipulating Parties agree that this Stipulation is reasonable, is in the public interest, and is in accordance with law and regulatory policy. This Stipulation in no way constitutes a waiver or acceptance of the position of any Stipulating Party concerning the subject matter herein in any future proceeding.

ACCEPTED FOR PROCESSING - 2021 February 8 3:28 PM - SCPSC - 2020-264-E - Page 6 of 9

C.2 The Stipulating Parties agree to cooperate in good faith with one another to obtain all necessary approvals—including approval of this Stipulation and the Companies' residential tariffs by the Commission in this proceeding—in South Carolina and North Carolina to implement the proposal across the Companies' service territories. The Stipulating Parties, including their agents, further agree that communications regarding the Stipulation, either between the Stipulating Parties or with non-signatories hereto, shall be supportive of the terms agreed to in this Stipulation.

C.3 This Stipulation contains the complete agreement of the Stipulating Parties regarding the terms and conditions of proposed tariffs outlined herein and filed in the above-referenced dockets. This Stipulation integrates all discussions among the Stipulating Parties regarding the terms and conditions of the filed tariffs into the terms of this written document. The Stipulating Parties agree that this Stipulation will not constrain, inhibit or impair their arguments or positions held in future proceedings, nor will this Stipulation or any of the matters agreed to in it be used as evidence or precedent in any future proceeding.

C.4 This Stipulation shall be interpreted according to South Carolina law.

C.5 This Stipulation does not establish any precedent with respect to the issues resolved herein, and in no way precludes any Stipulating Party herein from advocating an alternative approach or position in any future proceedings that are not within the scope of, or otherwise contemplated by, this Stipulation.

C.6 This Stipulation shall bind and inure to the benefit of each of the signatories hereto and their representatives, predecessors, successors, assigns, agents, shareholders, officers, directors (in their individual and representative capacities), subsidiaries, affiliates, parent corporations, if any, joint ventures, heirs, executors, administrators, trustees, and attorneys.

C.7 The Stipulating Parties represent that the terms of this Stipulation are based upon full and accurate information known as of the date this Stipulation is executed. If, after execution,

but prior to a Commission decision on the merits of this proceeding, a Stipulating Party is made aware of information that conflicts, nullifies, or is otherwise materially different than that information upon which this Stipulation is based, that Stipulating Party may withdraw from the Stipulation with written notice to every other Stipulating Party.

C.8 The above terms and conditions represent the agreement of the Stipulating Parties in these dockets. Therefore, each Stipulating Party acknowledges its consent and agreement to this Stipulation by authorizing its counsel to affix his or her signature to this document where indicated below. Counsel's signature represents his or her representation that his or her client has authorized the execution of the agreement. Facsimile signatures and e-mail signatures shall be as effective as original signatures to bind any Stipulating Party. This document may be signed in counterparts, with the various signature pages combined with the body of the document constituting an original and provable copy of this Stipulation.

[STIPULATING PARTY SIGNATURES TO FOLLOW ON SEPARATE PAGES]

ACCEPTED FOR PROCESSING - 2021 February 8 3:28 PM - SCPSC - 2020-264-E - Page 7 of 9

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ACCEPTED FOR PROCESSING - 2021 February 8 3:28 PM - SCPSC - 2020-264-E - Page 8 of 9

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ACCEPTED FOR PROCESSING - 2021 February 8 3:28 PM - SCPSC - 2020-264-E - Page 9 of 9