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E. Brett Breitschwerdt



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August 5, 2021

VIA Electronic Filing

Ms. Antonia Dunston, Interim Chief Clerk North Carolina Utilities Commission **Dobbs Building** 430 North Salisbury Street Raleigh, North Carolina 27603

> Re: Petition for Approval of Revisions to Generator Interconnection Standards Docket No. E-100. Sub 101

Dear Ms. Dunston:

Enclosed for filing in the above-referenced proceeding are the *Reply Comments of* Duke Energy Carolinas, LLC and Duke Energy Progress, LLC in Support of Inspections for Legacy Solar Generating Facilities.

Please do not hesitate to contact me should you have any questions. Thank you for your assistance with this matter.

Very truly yours,

/s/E. Brett Breitschwerdt

EBB:kjg

Enclosure

STATE OF NORTH CAROLINA UTILITIES COMMISSION RALEIGH

DOCKET NO. E-100, SUB 101

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

)	REPLY COMMENTS OF DUKE ENERGY
)	CAROLINAS, LLC AND DUKE ENERGY
)	PROGRESS, LLC IN SUPPORT OF
)	INSPECTIONS FOR LEGACY SOLAR
)	GENERATING FACILITIES
))))

NOW COME Duke Energy Carolinas, LLC ("DEC") and Duke Energy Progress, LLC ("DEP" and together with DEC, the "Companies"), pursuant to the North Carolina Utilities Commission's ("Commission") March 9, 2021 *Order Seeking Comments Regarding Generator Inspection Provisions of the North Carolina Generator Interconnection Standards* and June 25, 2021 *Order Granting Extension of Time* issued in the above-captioned docket, and hereby submit these Reply Comments for the Commission's consideration.

The issue before the Commission is whether Sections 6.5.2, 6.5.3, and 6.5.4 of the revised 2019 North Carolina Interconnection Procedures ("2019 NCIP"), authorizing the Companies to periodically inspect the medium voltage AC side of each Generating Facility, apply to Generating Facilities that executed an Interconnection Agreement prior to June 14, 2019, the effective date of the 2019 NCIP (the "Uninspected Facilities"). As addressed in Initial Comments, the Companies believe that the plain language of the revised 2019 NCIP and the Commission's clearly-stated intent in the *Order Approving Revised Interconnection Standard and Requiring Reports and Testimony* (the "2019 NCIP Order") confirm that the Uninspected Facilities are subject to the inspection requirements of

Sections 6.5.2, 6.5.3, and 6.5.4 (the "Inspection Provisions"). Inspection of medium voltage equipment at the Uninspected Facilities is necessary and appropriate to ensure compliance with the terms of the NCIP as well as to ensure the Companies "are in a position to ensure the safety and integrity of the grid."

In a letter filed in lieu of Comments, the Public Staff indicated that it shares the Companies' concerns about maintaining the safety and reliability of grid in the absence of the Inspection Provision's periodic inspection requirements applying to Uninspected Facilities. Carolina Clean Energy Association ("CCEBA") and Strata Solar, LLC ("Strata"), on the other hand, took the position that Uninspected Facilities are exempt from these inspection requirements because their Interconnection Agreements predate the June 14, 2019 NCIP Order.

The Companies continue to believe that the Inspection Provisions of the NCIP should apply to all Uninspected Facilities to ensure the safety and integrity of the grid. This clearly-stated intent of the 2019 Order is seemingly not in dispute, and the Commission should order all Uninspected Facilities to be subject to the Inspection Provisions of the NCIP and, if deemed necessary by the Commission for the purposes of clarity, order the minor changes to the 2019 NCIP noted in the Companies' Initial Comments.

The Companies also recognize that Interconnection Customers owning and operating Uninspected Facilities have an interest in ensuring the safety and integrity of the grid, consistent with the requirements of the 2019 NCIP Order and the Inspection Provisions. Since filing initial Comments in this proceeding, the Companies have worked

¹ 2019 NCIP Order, at 21.

in good faith to develop and execute a Memorandum of Agreement (the "MOA") with Strata Interconnection Customers,² presented as Attachment A, which memorializes a framework for Strata to develop a "self-administered compliance program" that commits Strata's Uninspected Facilities to adhere to the Inspection Provisions. The self-inspection procedures outlined in the MOA comport with good utility practice and will promote the Commission's objectives in approving the Inspection Provisions for Uninspected Facilities to assure the continued safety and integrity of the grid. While the MOA is binding only on Strata Interconnection Customers and the Companies, it also provides a pathway forward for other solar developers who own Uninspected Facilities to develop similar self-administered compliance programs in order to meet the 2019 NCIP Inspection Provision requirements as an alternative to inspection by the Companies under the Inspection Provisions.

Accordingly, for reasons discussed herein and as set forth in the Companies' Initial Comments, the Companies respectfully request that the Commission clarify the 2019 NCIP Order and instruct that all Uninspected Facilities are subject to Sections 6.5.2 and 6.5.3, and 6.5.4 of the 2019 NCIP or, in the alternative, modify the 2019 NCIP as proposed in the Companies' Initial Comments to mandate compliance with the Inspection Provisions.

I. The 2019 NCIP Inspection Provisions Should Apply to Uninspected Facilities

As explained in the Companies' Initial Comments, it is clear from the face of Sections 6.5.2, 6.5.3, and 6.5.4 that the Commission intended to require both new *and already operating facilities* to submit to regular inspections of medium voltage equipment.

² As defined in MOA Section 2.b, the Strata Interconnection Customers comprise Interconnection Customers affiliated with Strata Solar with fully executed Interconnection Agreements prior to June 14, 2019, who are parties to the MOA. Strata is currently developing the list of such Interconnection Customers.

In particular, Section 6.5.2, explicitly authorizes utilities to inspect the medium voltage AC side of any "Generating Facility that was not inspected prior to commencing parallel operation." The Commission's adoption of new Section 6.5.2 would be rendered meaningless if read to include only Generating Facilities that executed an Interconnection Agreement after June 14, 2019, as those facilities were already subject to a precommissioning inspection requirement. CCEBA's unreasonable interpretation also necessarily suggests that the Commission did not intend to authorize the Companies to inspect Generating Facilities with suspected or known compliance issues under Section 6.5.4 simply because they executed an Interconnection Agreement before June 14, 2019. Limiting the Companies' rights to inspect Uninspected Facilities in either of these circumstances would be contrary to the Commission's objective in approving the Inspection Provisions to ensure DEC and DEP are "in a position to ensure the safety and integrity of the grid."

Notwithstanding the uncontroverted logic of the Companies' reading of these Inspection Provisions, CCEBA is correct to note that Section 1.1.3 creates ambiguity by stating that the 2019 revisions to the NCIP "shall not apply to Generating Facilities having a fully executed Interconnection Agreement as of [June 14, 2019]." However, CCEBA's position would frustrate the Commission's intent in approving the post-commissioning

³ 2019 NCIP § 6.5.2 (emphasis added).

⁴ 2019 NCIP § 6.5.4 (authorizing inspection where "the Utility identifies or becomes aware of any condition that (1) has the potential to either cause disruption or deterioration of service to other customers served from the same electric system or cause damage to the Utility's System or Affected Systems, or (2) is imminently likely to endanger life or property or cause a material adverse effect on the security of, or damage to the Utility's System, the Utility's Interconnection Facilities or the systems of others to which the Utility's System is directly connected").

⁵ 2019 NCIP Order, at 21.

⁶ 2019 NCIP § 1.1.3.

Inspection Provisions. Accordingly, the Commission should make clear that the Inspection Provisions apply to all Uninspected Facilities.

II. The Practical Arguments Advanced by CCEBA Do Not Outweigh the Need for Post-Commissioning Inspection of Uninspected Facilities

In their Initial Joint Comments, CCEBA and Strata make two practical arguments against requiring post-commissioning inspections for the Uninspected Facilities, neither of which override the compelling safety and reliability interests served by the new Inspection Provisions approved in NCIP Sections 6.5.2-6.5.4: (1) that post-commissioning inspections are unnecessary because the Uninspected Facilities are already incentivized to ensure safe and reliable operations and the Companies have not "presented evidence of widespread problems" at the Uninspected Facilities; and (2) that there is an insufficient supply of third-party inspectors available to perform the inspections contemplated by Sections 6.5.2-6.5.4 and the implementing self-inspection program developed through the Technical Standards Review Group.⁷

With respect to the first issue, CCEBA's argument downplays or dismisses the potential safety concerns and reliability issues identified by Advanced Energy in its pilot inspections of Uninspected Facilities, as described in the Companies' Initial Comments and raised by the Public Staff.⁸ Advanced Energy's pilot inspections at nine Uninspected Facilities between 2018 and 2019 identified a number of safety concerns and reliability issues related to the quality of the medium voltage construction and inverter settings.⁹ While CCEBA correctly notes that many of the issues Advanced Energy identified involved differences between installed equipment and the Companies' internal

⁷ CCEBA Comments, at 9-12.

⁸ DEC/DEP Comments, at 4-6; Public Staff Letter, at 1.

⁹ DEC/DEP Comments, at 2-3.

construction standards, ¹⁰ other safety and reliability issues were also identified. ¹¹ Indeed, CCEBA recognized that the issues Advanced Energy identified with respect to inverter settings could "impact power quality and reliability." ¹² The Companies' Initial Comments detailed a number of additional specific safety concerns and reliability risks that should be addressed through both initial and periodic medium voltage inspections, as contemplated in NCIP Sections 6.5.2 and 6.5.3. ¹³ Given that there are approximately 300 Uninspected Facilities, the potential safety concerns and risks to the grid are not insignificant, as also recognized by the Public Staff. ¹⁴

CCEBA's second practical argument—that there are insufficient third-party inspectors available to conduct the inspections—is likewise unpersuasive. While it is true that Advanced Energy was the sole bidder to conduct inspections for the pilot program, CCEBA overstates the scarcity of qualified inspectors. Even if this were a real impediment, the Companies believe that it can be resolved over time and, potentially, rendered moot if more owners of Uninspected Facilities pursue developing a self-administered compliance program similar to the framework adopted in the MOA between the Companies and Strata Interconnection Customers discussed *infra* Section III. In addition, the Companies are currently proactively working with the Institute of Electrical and Electronics Engineers Standards Association ("IEEE SA") to create a credentialing program that will evaluate and identify individuals who can verify any installed DER Interconnection for compliance with the IEEE Standard No. 1547-2018 and local

¹⁰ CCEBA/Strata Joint Comments, at 10.

¹¹ DEC/DEP Comments, at 4-6; Public Staff Letter, at 1.

¹² CCEBA/Strata Comments, at 11.

¹³ DEC/DEP Comments, at 4-5.

¹⁴ Public Staff Letter, at 2.

jurisdictional requirements. The Companies believe that this IEEE SA effort will address many of CCEBA's concerns as the industry continues to move forward.

III. The Memorandum of Agreement Provides a Self-Administered Inspection Compliance Pathway and Remediates the Concerns Identified by CCEBA

Following submission of initial Comments, the Companies and Strata engaged in good faith discussions to resolve concerns regarding implementation of the post-commissioning Inspection Provisions of the NCIP. In an effort to balance the Companies' safety and reliability concerns and Strata's desire to develop a workable and potentially more cost-effective path for adherence to the Inspection Provisions, the Companies have agreed to the MOA.

The MOA memorializes the Companies' agreement to offer Strata (and potentially other Interconnection Customers) a self-administered procedure to implement periodic inspection requirements for Uninspected Facilities in order to verify such Uninspected Facilities' medium voltage construction in a manner that would comply with the requirements of Sections 6.5.2 and 6.5.3. ¹⁵

The MOA specifically maps out a process for Strata to develop a "self-administered compliance program" through which to conduct both initial and periodic self-inspections of its Uninspected Facilities and to collaborate with the Companies to ensure any deviations from the Companies' construction standards are identified and that they do not create a "material impact on safety or reliability" of the grid. In addition, the Companies agreed to develop a compliance document to establish minimum acceptable standards for distributed energy resource inverter and interconnection devices function settings that will inform Strata's self-administered compliance program.

¹⁵ A copy of the executed Memorandum of Agreement is attached hereto as Exhibit A.

Importantly, the self-administered compliance program will be submitted to the interconnecting utility for review and acceptance. The MOA also gives the Companies the right to require a compliance audit in the event of any adverse operating effects or customer complaints, as well as a process for addressing identified deficiencies in a self-administered compliance program.

The Companies believe that the self-administered compliance program framework described in the MOA achieves the Commission's goals in implementing the postcommissioning inspection requirements and complies with the requirements of Sections 6.5.2 and 6.5.3. Given the robust framework for utility acceptance of the program followed by self-administered implementation, the Companies also believe the MOA framework comports with good utility practice and can serve as a path forward for other owners of Uninspected Facilities to implement post-commissioning inspections and take action to ensure the safety and reliability of the grid. Importantly, however, without initial action by this Commission clearly mandating that the Inspection Provisions shall apply to Uninspected Facilities, owners of Uninspected Facilities may not be incentivized (and certainly will not be compelled) to adopt any self-administered compliance program under the framework set forth in the MOA or to continue to engage with the Companies through the Technical Standards Review Group to reach an appropriate process for implementing post-commissioning inspections as contemplated by Sections 6.5.2, 6.5.3, and 6.5.4 of the 2019 NCIP. For that reason, the Companies respectfully reemphasize their request that the Commission should issue an order making clear that the Inspection Provisions approved in the 2019 NCIP shall be applicable to all Uninspected Facilities. ¹⁶

¹⁶ The Companies are submitting the MOA for informational purposes, and do not believe it is necessary for the Commission to formally approve the MOA or future self-administered compliance programs developed by Strata or, potentially, other Interconnection Customers that conform to its requirements.

IV. Conclusion

The 2019 NCIP Order and the Advanced Energy pilot inspections provide clear and compelling evidence that inspection of the Uninspected Facilities is necessary to ensure the safety and reliability of those facilities and to maintaining the integrity of the Companies' grid. Section 1.1.3 provides that the Utility and the Interconnection Customer may agree to the applicability of these new standards in writing, which is the path Strata has agreed to take by entering into the MOA and committing to develop a self-administered compliance program. However, because there still remains a significant number of Uninspected Facilities owned by entities other than Strata, regulatory action by the Commission is necessary to ensure the Commission's intent in enacting these provisions is achieved.

Accordingly, the Companies respectfully request that the Commission provide clarification that Sections 6.5.2, 6.5.3, and 6.5.4 of the 2019 NCIP apply to Uninspected Facilities, and, if necessary, modify the 2019 NCIP as proposed in the Companies' Initial Comments.

Respectfully submitted, this 5th day of August, 2021.

/s/E. Brett Breitschwerdt

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ATTACHMENT A

Memorandum of Agreement on Optional Procedure to
Implement Periodic Medium Voltage Construction Safety
and Reliability Inspection Requirements under
NCIP Sections 6.5.2 and 6.5.3

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Memorandum of Agreement on Optional Procedure to Implement Periodic Medium Voltage Construction Safety and Reliability Inspection Requirements under NCIP Sections 6.5.2 and 6.5.3

This Memorandum of Agreement is entered into and agreed to by and between Duke Energy Carolinas, LLC ("DEC"), Duke Energy Progress, LLC ("DEP" and collectively with DEC, "Duke" or "Utilities"), and Strata Interconnection Customers as defined herein and listed on Attachment A, and together with Duke (the "Parties") (the "MOA"). The MOA memorializes the Parties' agreement regarding a reasonable optional self-administered procedure to implement periodic medium voltage construction safety and reliability inspection requirements under Sections 6.5.2 and 6.5.3 of the North Carolina Interconnection Procedures effective on June 14, 2019 ("NCIP").

1. Background

- a. Duke is responsible for ensuring safe and reliable power system operations, including ensuring reliable power delivery to retail customers as well as reliable interconnection and parallel operation with Interconnection Customers. This includes overseeing the Generating Facility commissioning inspection as well as certain periodic postcommissioning inspections of interconnected Generating Facilities' medium voltage equipment under NCIP Sections 6.5.2 and 6.5.3.
- b. NCIP Section 6.5.2 provides that the Utilities are authorized to conduct an initial inspection of the medium voltage AC side of each Generating Facility (including assessing that the anti-islanding process is operational) that was not inspected prior to commencing parallel operation ("Initial Inspection"). NCIP Section 6.5.3 provides that the Utilities shall also be entitled, on a periodic basis, to inspect the medium voltage AC side of each interconnected Generating Facility on a reasonable schedule determined by the Utility in accordance with the inspection cycles applicable to its own distribution system ("Periodic Inspections"). Interconnection Customers are responsible for Duke's costs of implementing Initial Inspection and Periodic Inspection requirements of the NCIP.¹
- c. Duke believes that Sections 6.5.2 and 6.5.3 apply to Legacy Facilities, as further defined herein, whereas Strata Interconnection Customers believe that Sections 6.5.2 and 6.5.3 do not apply to Generating Facilities that have executed Interconnection Agreements prior to June 14, 2019, the effective date of the NCIP. Despite those differences of opinion, the Parties wish to enter into this MOA to resolve the issues between the Parties.
- d. Since January 2020, Duke, Strata Solar, LLC ("Strata Solar") on behalf of Strata Interconnection Customers, and other Technical Standards Review Group ("TSRG") participants have been developing procedures to implement the inspection and commissioning processes. Technical representatives of Duke and Strata Solar on behalf of Strata Interconnection Customers have engaged in further discussions

¹ These provisions were incorporated into the NCIPs as of June 14, 2019. See Order Approving Revised Interconnection Standard and Requiring Reports and Testimony, Docket No. E-100, Sub 101 (June 14, 2019).

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outside of the TSRG regarding an optional self-administered procedure to meet the objectives and requirements of NCIP Sections 6.5.2 and 6.5.3. The Parties agree that a properly implemented "Self-Administered Compliance Program" designed to ensure the operational integrity of Legacy Facilities will meet the Initial Inspection and Periodic Inspection requirements of the NCIP.

e. The Utilities support the optional Self-Administered Compliance Program agreed to with Strata Interconnection Customers in this MOA as representative of Good Utility Practice for Legacy Facilities. Through the TSRG, Duke will inform other Interconnection Customers of the option to commit to a Self-Administered Compliance Program substantially similar to, but in no event with lesser requirements than that agreed to in and pursuant to this MOA.

2. Definitions

- a. Terms used in this MOA that are not defined herein shall be interpreted consistent with Attachment 1 of the NCIP.
- b. "Strata Interconnection Customers" Interconnection Customers affiliated with Strata Solar with fully executed Interconnection Agreements ("NC IA") prior to June 14, 2019 that agree in writing to operate under this MOA by being included on Attachment A to the MOA and adhere to the Self-Administered Compliance Program requirements. Strata Interconnection Customers will provide Attachment A to Duke within 10 Calendar Days after the date that the Parties execute the MOA. The Parties agree that Strata Interconnection Customers can update Attachment A in the event that the list of Legacy Facilities is incomplete or incorrect.
- c. "Legacy Facilities" Distribution-connected Generating Facilities owned by Strata Interconnection Customers.
- d. "Outside-The-Fence Facilities" Interconnection Facilities and related equipment which are owned by Strata Interconnection Customers and are located in areas accessible to the general public or local landowners. This does not include Strata Interconnection Customers' facilities located inside fenced or controlled areas.

3. General Principles of Agreement

- Adherence to NCIP Sections 6.5.2 and 6.5.3. Duke and the Strata Interconnection Customers agree that the terms of this MOA will satisfy compliance with NCIP Sections 6.5.2 and 6.5.3.
- b. <u>Self-Administered Compliance Program.</u> Duke agrees that a reasonable Periodic Inspection program for Outside-The-Fence Facilities, as proposed by Strata Interconnection Customers and upon written acceptance by Duke, can provide the Utilities with reasonable assurance of the continued safe and reliable operations of medium voltage equipment at Legacy Facilities interconnected to the DEC and DEP distribution systems. Strata Interconnection Customers agree to develop a Self-Administered Compliance Program meeting the objectives and requirements

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described in Sections 4 through 8 of this MOA within 180 Calendar Days, and Duke agrees to continue to work with Strata Interconnection Customers to implement the Self-Administered Compliance Program. The Self-Administered Compliance Program will provide that in the event that Duke identifies any deficiencies in the execution and administration of the Self-Administered Compliance Program, Duke will provide Strata Interconnection Customers with written notice and a reasonable period of not less than 30 Calendar Days to cure any such deficiencies before terminating Duke's acceptance of this Self-Administered Compliance Program as meeting the requirements of NCIP Sections 6.5.2 and 6.5.3.

c. <u>Interconnection Agreements not modified.</u> Duke and Strata Interconnection Customers agree that the terms and conditions of each Strata Interconnection Customer's NC IA shall remain in full force and effect and shall not be modified or superseded by the terms of this MOA. The Utilities reserve all rights under the NC IA to disconnect the Generating Facility should DEC or DEP determine, at any time consistent with Good Utility Practice, that disconnection is warranted to address an Emergency Condition or an adverse operating effect, as those terms are defined or used in the NC IA.

4. DER Functional Settings Guidance Document

- a. Within 120 Calendar Days after the date that the Parties execute this MOA, Duke, in good faith collaboration with Strata Interconnection Customers, will develop a distributed energy resource ("DER") inverter and interconnection devices functional settings compliance document ("DER Functional Settings Guidance Document") to establish minimum acceptable standards for purposes of DER functional settings compliance as a subset of the overall Self-Administered Compliance Program. This DER Functional Settings Guidance Document shall encompass the following elements:
 - Detail generally applicable requirements for settings of inverters and other interconnection devices as specified in the NC IA for purposes of Initial Inspections and Periodic Inspections.
 - ii. Define the Interconnection Customer's responsibility for (a) maintaining proper settings in inverters and other interconnection devices in accordance with the DER Functional Settings Guidance Document's requirements, (b) reporting setting changes, and (c) maintaining data or evidence of compliance.
 - iii. Define minimum standards for DER functional settings inspections as a component of an acceptable Self-Administered Compliance Program monitoring and assessment process.

5. Adherence to Duke Construction Specifications for POI Facilities

a. Within 120 Calendar Days after the date that the Parties execute this MOA, Duke will provide comprehensive construction specifications in effect on July 1, 2021 to Strata Interconnection Customers for the Legacy Facilities' points of interconnection

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- ("POI") Outside-The-Fence Facilities, which is a subset of the Duke Energy Distribution Standards Manual.
- b. Strata Interconnection Customers will evaluate adherence to Duke's comprehensive construction specifications and identify any needed corrective actions in its Outside-The-Fence Facilities inspections. In adhering to Duke's specifications, Strata Interconnection Customers may use components from any manufacturer which meet or exceed the specifications of Duke-specified components. Strata Interconnection Customers will perform Outside-The-Fence Facility inspections as soon as practicable, with a target completion timeframe of 5 years after the date that the Parties execute this MOA.

6. Initial Inspections under Self-Administered Compliance Program

- a. Strata Interconnection Customers will perform Initial Inspections of applicable inverter and interconnection device settings for all Legacy Facilities, as soon as practicable, with a target completion timeframe of 3 years after the date that the Parties execute this MOA. Within 120 Calendar Days after the date that the Parties execute this MOA, Strata Interconnection Customers shall provide to Duke an initial schedule for these Initial Inspections during the target 3-year timeframe and shall issue updates on the status of the Initial Inspections to Duke twice annually until the Initial Inspections have been completed. For each Legacy Facility, the Strata Interconnection Customer shall provide reasonable written supporting documentation, attested to by the Strata Interconnection Customer, to Duke of compliance with the applicable inverter and interconnection device settings set forth in the NC IA within 30 Calendar Days of completion of the Initial Inspection.
- b. As part of the Initial Inspection process, Strata Interconnection Customers will perform a one-time effort to (a) validate the single-line diagram ("SLD") of all Legacy Facilities, and (b) document the Duke POI right-of-way access for Duke personnel. When validating the SLD of all Legacy Facilities, Strata Interconnection Customers shall consider installed critical components which differ from what is shown on the SLD, but for which the difference in specifications from what is indicated on the SLD do not constitute a material impact on safety or reliability of the Utility's system, in compliance with the NCIP. Duke, in good faith collaboration with, Strata Interconnection Customers will define a list of the critical components to be validated on the SLDs ("Critical Components List"). Duke and Strata Interconnection Customers commit to completion of this Critical Components List within 120 Calendar Days after the date that the Parties execute this MOA.

7. Periodic Inspections under Self-Administered Compliance Program

a. Periodic Inspections shall be completed after the Initial Inspections for the Outside-The-Fence Facilities at least once every 5 years. Strata Interconnection Customers will perform Periodic Inspections to ensure that the Outside-the-Fence Facilities continue to meet Duke construction specifications for Strata Interconnection August 3, 2021 Page 5 of 8

Customers' POI Outside-The-Fence Facilities and requirements for maintenance of rights-of-way access for Duke POI facilities, as otherwise provided in this MOA.

- b. Strata Interconnection Customers will adhere to the DER Functional Settings Compliance Document in completing Periodic Inspections, including confirming through remote query or direct field acquisition, settings of the Legacy Facility's inverters, relays, and grid control devices.
- c. Strata Interconnection Customers will perform a "cease-to energize test" (aka an "anti-islanding test") as part of the scope of its Periodic Inspection of Outside-The-Fence Facilities. Duke and Strata Interconnection Customers will work together to further identify the best approach of requiring and performing this anti-islanding test. Duke and Strata Interconnection Customers commit to completion of such best approach within 120 Calendar Days after the date that the Parties execute this MOA.

8. Maintenance of Right-Of-Way Access for Duke POI facilities

- a. Within 120 Calendar Days after the date that the Parties execute the MOA, Duke shall provide Strata Interconnection Customers with guidance documentation for right-of-way access and maintenance for Duke POI facilities. The right-of-way guidance documentation shall be consistent with the access and maintenance requirements applicable to Duke facilities and rights-of-way for Duke facilities.
- b. Strata Interconnection Customers will provide one-time photographic documentation to Duke that right-of-way access for Duke POI facilities is being properly maintained in a manner consistent with Duke standards and requirements. Strata Interconnection Customers will complete the validation process within 5 years after the date that the Parties execute this MOA.
- c. As part of Strata Interconnection Customers' Self-Administered Compliance Program, Strata Interconnection Customers will include information about preventive maintenance for rights-of-way access for which Strata Interconnection Customers have legal control for Duke POI facilities, consistent with Duke's standards and requirements set forth in the guidance documentation to be provided pursuant to Section 8.a. above. Strata Interconnection Customers commit to completion of this task within 120 Calendar Days after the date that Duke provides its guidance documentation pursuant to Section 8.a. above.

9. Compliance Audit Procedures under Self-Administered Compliance Program

In addition to all rights under the NC IA, Duke has the right to require a compliance audit of any Outside-the-Fence Facilities for Strata Interconnection Customers participating in the Self-Administered Inspection Program in the event of adverse operating effects or customer complaints based on adverse operating effects, as that term is used in Section 3.4.4 of the NC IA. Strata Interconnection Customers shall fully cooperate with Duke to resolve any identified deficiencies in Strata Interconnection Customers' Self-Administered Inspection Program within 30 Calendar Days of written notice from Duke. Strata Interconnection Customers will be

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responsible for Duke's costs of any compliance audit required under this Section, as provided for in NCIP Sections 6.5.3 and 6.5.4.

10. Enforceability

This MOA requires several executory tasks to fully implement the terms and conditions of this MOA, including (a) Strata Interconnection Customers to develop the Self-Administered Compliance Program subject to Duke's review and acceptance, (b) Duke to develop the DER Functional Settings Guidance Document in good faith collaboration with Strata Interconnection Customers, (c) Duke to provide comprehensive construction specifications in effect on July 1, 2021 to Strata Interconnection Customers for Outside-The-Fence Facilities, (d) Duke to develop the Critical Components List in good faith collaboration with Strata Interconnection Customers, (e) Duke and Strata Interconnection Customers to work together to identify the best approach to performing anti-islanding testing, and (f) Duke to provide Strata Interconnection Customers with guidance documentation for right-of-way access and maintenance of Duke POI facilities. In the event that the Parties are unable to reach agreement, where agreement is required, or the resulting document or requirement is not acceptable to the recipient party, where agreement is not required, either party may, by written notice to the other party, terminate this MOA, and the Parties will be released from all obligations thereunder.

11. Limitation

This MOA is limited to meeting the objectives and requirements of NCIP Sections 6.5.2, 6.5.3, and 6.5.4 and shall not be used or cited for any other purpose. For the avoidance of doubt, nothing in this MOA or in any document or agreement contemplated by this MOA shall be deemed to subject Strata Interconnection Customers or any Legacy Facilities to the 2019 NCIP or any portion thereof to which such Legacy Facility has not otherwise been made subject as provided for in this MOA.

IN WITNESS WHEREOF, the Parties have signed, executed, and agreed to the foregoing Memorandum of Agreement on this 3rd day of August, 2021.

Duke Energy Carolinas, LLC and Duke Energy Progress, LLC

By: Y

Jack E. Jirak Deputy General Counsel

Strata Solar, LLC, in its authorized capacity on behalf of the Strata Interconnection Customers identified in Attachment A

By: Strata Manager, LLC, the Manager of each

SFFICIAL COPY

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By:

Markus Wilhelm, Manager

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ATTACHMENT A

Strata Interconnection Customers Participating in Self- Administered Compliance Program

Interconnection Customer:	Interconnecting Utility:	Queue Number:	Target Date for
			Initial Inspection
	I		l ————————————————————————————————————

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing <u>Reply Comments of Duke Energy</u>

<u>Carolinas, LLC and Duke Energy Progress, LLC in Support of Inspections for Legacy</u>

<u>Solar Generating Facilities</u>, as filed in Docket No. E-100, Sub 101, was served via electronic delivery or mailed, first-class, postage prepaid, upon all parties of record.

This, the 5th day of August, 2021.

/s/E. Brett Breitschwerdt

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Attorney for Duke Energy Carolinas, LLC and Duke Energy Progress, LLC