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December 28, 2021

**VIA ELECTRONIC FILING**

Ms. A. Shonta Dunston  
Chief Clerk  
North Carolina Utilities Commission  
4325 Mail Service Center  
Raleigh, North Carolina 27699-4300

**RE: Response to Commission Questions and CPRE Tranche 3 RFP  
Docket Nos. E-2, Sub 1159 and E-7, Sub 1156**

Dear Ms. Dunston:

In accordance with the North Carolina Utilities Commission's ("Commission") *Order Determining Adjusted CPRE Program Procurement Solicitation, Approving Resource Solicitation Cluster, and Requiring Response to Commission Questions Regarding Pro Forma PPA* ("Order") issued on December 20, 2021, in the above-referenced proceedings, Duke Energy Carolinas, LLC ("DEC") and Duke Energy Progress, LLC ("DEP" and together with DEC, "Duke Energy" or the "Companies") hereby respond to the Commission's questions regarding the Competitive Procurement of Renewable Energy ("CPRE") Program Tranche 3 Renewable Power Purchase Agreement ("RPPA") and provide a copy of the CPRE Tranche 3 Request For Proposal ("RFP"), as directed by the Order. The Companies also provide the Commission an update on the CPRE Program Independent Administrator, Accion Group, LLC's, ("IA") fee estimate for administering CPRE Tranche 3.

**Response to Commission Questions**

The Commission's Order requests the Companies provide responses to two questions regarding the Limited Termination Right in RPPA Section 20.1.2. The Commission's first question asks:

In the event that DEC exercises its Limited Termination Right pursuant to Section 20.1.2 of the Renewable Power Purchase Agreement, are the Winner's Fees subject to refund if [DEC] and the seller fail to reach an agreement on the seller's payment obligation for the Excess Network Upgrades?

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Dec 28 2021

In response, in the event that DEC exercises its Limited Termination Right pursuant to RPPA Section 20.1.2, the Winners' Fees are not subject to refund if DEC and Seller fail to reach agreement on the Seller's payment obligation for the Excess Network Upgrades.

As background, the new Limited Termination Right and Right to Cure provisions in RPPA Sections 20.1.2 and 20.1.3 were proposed by the IA to facilitate a more expedited proposal selection and contracting process early in the Resource Solicitation Cluster study process while also ensuring that selected proposals remain below the avoided cost threshold once the more detailed Facilities Study is completed later in the study process.<sup>1</sup> As detailed in RPPA Section 20.1.2, DEC can only exercise the Limited Termination Right where the Seller's estimated network upgrades specified in a completed Facilities Study Report exceed the "Excess Network Upgrade Costs." This amount is determined by the IA in its initial bid evaluation as the "amount that Seller's facility's total project costs could increase without exceeding the avoided cost threshold identified in the RFP." The winning proposal's Excess Network Upgrade Costs amount will be specifically identified in RPPA Section 20.1.2. Further, if assigned network upgrades increase above the Excess Network Upgrade Costs threshold and DEC exercises its Limited Termination Right, the Seller will then have a Right to Cure by paying the amount of network upgrade costs exceeding the allocated Excess Network Upgrade Cost amount. *See* RPPA Section 20.1.3. Where a Seller exercises its Right to Cure, DEC and Seller will enter into a reimbursement agreement assigning Seller the allocated Excess Network Upgrade Cost and the executed RPPA will remain in full force and effect.

The Companies believe the structure of the Limited Termination Right, together with the Seller's Right to Cure, appropriately balance the interests of market participants, DEC, and the Companies' customers, and also meets the requirements of N.C. Gen. Stat. § 62-110.8(d) (providing for recovery of IA costs from market participants through administrative fees) and N.C. Gen. Stat. § 62-110.8(b)(2) (capping Duke Energy's procurement obligation by the public utility's current forecast of its avoided cost). Accordingly, previously-paid Winners' Fees will not be refunded if Seller does not exercise its Right to Cure.

The Commission's second question asks:

If the Winner's Fees are subject to refund, does the Tranche 3 program fee structure ensure that all Tranche 3-related IA fees will be recovered from Tranche 3 Market Participants?

In response, and as explained above, previously-paid Winners' Fees are not subject to refund where DEC exercises the Limited Termination Right and the Seller elects not to exercise its Right to Cure pursuant to RPPA Section 20.1.3.<sup>2</sup> Notably, the Companies have

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<sup>1</sup> Under the Tranche 3 design, the contracting period will occur during Phase 1 of the RSC and prior to the more detailed Facilities Study; however, the more detailed cost estimate for a proposal will not be determined until the Facilities Study. *See* Order at 6 (summarizing December 2, 2021 Report of the Independent Administrator).

<sup>2</sup> A winning market participant will be assigned its allocated Winners' Fee following the close of the RFP, and the Winners' Fee is required to be paid within 30 days of invoice.

made the following clarifying revision to RFP Section II.E, to more transparently explain to market participants that Winners' Fees are not subject to refund:

The "Winners' Fee" is the amount to be determined as described below in order to recover any remaining IA costs not covered by the Proposal Fee. The Winners' Fee will be determined upon conclusion of the RFP and shall be paid by each winning Proposal to DEC within thirty calendar days of invoice receipt. Any such Winners' Fee costs will be allocated among all winning Proposals on a pro-rata basis on a per MW basis and will be non-refundable. The total of the Winners' Fees shall not exceed \$1.5 million.

The Companies have discussed this clarifying revision to the CPRE Tranche 3 RFP with the IA, and the IA supports the final RFP as revised.

### **CPRE Tranche 3 RFP**

The Commission's Order also directs the Companies to file a copy of the CPRE Tranche 3 RFP with the Commission. A final copy of the CPRE Tranche 3 RFP is attached hereto as Attachment A. Contemporaneously with this filing, the Tranche 3 RFP is also being posted by the IA to the IA Tranche 3 Website in preparation for the January 5, 2022 issuance of the CPRE Tranche 3 RFP.

### **Update on IA Fee Estimate Due to Increased CPRE Tranche 3 Procurement Amount**

The Order determines the final CPRE Program procurement target and directs Duke Energy to initiate a Tranche 3 RFP seeking to procure the remaining 596 MW. The Commission previously directed Duke Energy to work with the IA to develop a Tranche 3 scope of work and an IA fee estimate based on the IA's proposed scope of work, in order to ensure that the proposed Tranche 3 program fee structure is reasonably designed to recover all Tranche 3-related IA fees from market participants. On November 24, 2021, the Companies filed the IA scope of work and Tranche 3 fee estimate developed by the IA with the Commission. A general parameter identified in the IA's scope of work was the expectation that approximately 300 MW of CPRE resources would be procured in Tranche 3. Subsequent to the IA's development of the Tranche 3 scope of work and associated fee estimate, the Companies determined that a material increase in the targeted Tranche 3 procurement was needed to achieve the total CPRE Program procurement target, as identified in the Companies' December 3, 2021 Petition for Determination of Final CPRE Program Procurement Amount, which has now been accepted by the Commission.

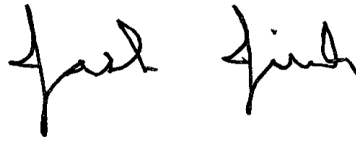
Recognizing the materiality of this change in the Tranche 3 procurement, the Companies have communicated with the IA to determine the impact on the IA's previously developed scope of work and Tranche 3 fee estimate. As a result of the increased capacity to be procured in the Tranche 3 solicitation, the IA has advised the Companies that its estimated fees would likely increase by 40% to approximately \$943,839.

Assuming the IA's updated fee estimates are reasonably accurate and there are no significant post solicitation expenses (identified as Exclusions in the IA's scope of work

filed November 24, 2021), the Tranche 3 program fee structure of Proposal Fees and Winners' Fees continues to be reasonably designed to recover all Tranche 3-related IA fees from Tranche 3 market participants.

If you have any questions, please do not hesitate to contact me. Thank you for your attention to this matter.

Sincerely,

A handwritten signature in black ink, appearing to read "Jack E. Jirak". The signature is written in a cursive style with a large initial "J".

Jack E. Jirak

Enclosure

cc: Parties of Record

**REQUEST FOR PROPOSALS  
FOR THE  
COMPETITIVE PROCUREMENT OF  
RENEWABLE ENERGY PROGRAM  
TRANCHE 3**

**DUKE ENERGY CAROLINAS, LLC**

**Dated: 1/05/2022  
Proposals Due: 02/03/2022**

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## I. PROGRAM OVERVIEW

Duke Energy Carolinas, LLC (“DEC” or “Duke”) and Duke Energy Progress, LLC (“DEP” and, together with DEC, the “Companies”) have jointly determined that the final Tranche 3 procurement under the Companies’ Competitive Procurement of Renewable Energy (“CPRE”) Program (“Program”) will be a DEC-only procurement. The CPRE Program is being implemented in accordance with N.C. Gen. Stat. § 62-110.8, as enacted by North Carolina Session Law 2017-192 (“HB 589”) and the North Carolina Utilities Commission’s (“Commission” or “NCUC”) Rule R8-71 (“CPRE Rule”).<sup>1</sup> Capitalized terms not otherwise defined herein shall have the meaning set forth in NCUC Rule R8-71(b).

This Tranche 3 Request for Proposals (“RFP”) is soliciting proposals for approximately 596<sup>2</sup> megawatts (“MW”) of new renewable energy resources in DEC (“Proposals”).<sup>3</sup> Eligible Market Participants (“MPs”) for this RFP include third-party renewable developers (“Third-Party MPs”), and any affiliate of the Companies that elects to submit a Proposal.

Proposals submitted into the RFP (“Proposals”) must be submitted in one of the following Proposal categories (as further described herein): (1) a Power Purchase Agreement (“PPA”) or (2) Utility Self-Developed Facility (as further described herein).<sup>4</sup>

Tranche 3 is soliciting Proposals for electric generating facilities (each a “Facility”) that meet all of the following requirements:

1. Located in the DEC North Carolina or South Carolina service territory and Facility will physically interconnect with the DEC transmission or distribution systems.
2. Placed in service after July 10, 2018, and be capable of completing Facility construction (not completion of interconnection) within three years following the end of the contract phase.<sup>5</sup>
3. Sized between 1 MW and 80 MW (based on the inverter nameplate rating). A Facility must have a single point of interconnection (“POI”).
4. Use a renewable energy resource identified in N.C. Gen. Stat. § 62-133.8(a)(8) and have demonstrated an adequate fuel supply from a qualifying resource.<sup>6</sup>

<sup>1</sup> Session Law 2021-195 recently modified N.C. Gen. Stat. § 62- 110.8. However, these modifications do not impact this Tranche 3 RFP.

<sup>2</sup> On December 20, 2021, the Commission issued its *Order Determining Adjusted CPRE Program Procurement Solicitation, Approving Resource Solicitation Cluster, and Requiring Response to Commission Questions Regarding Pro Forma PPA* in NCUC Docket Nos. E-2, Sub 1159 and E-7, Sub 1156 determining that 596 MW is the final Tranche 3 procurement amount, pending certain limited adjustments addressed in the Companies’ December 3, 2021 Petition for Determination of Final CPRE Program Procurement Amount.

<sup>3</sup> Allocation for Tranche 3 will be limited to projects in DEC.

<sup>4</sup> DEC is not soliciting asset acquisition proposals in this RFP.

<sup>5</sup> For the avoidance of doubt, an MP is not required to obtain a certificate of public convenience and necessity (“CPCN”) to construct the Facility prior to submitting a Proposal, but will be required to establish a reasonable plan for obtaining all necessary permits and certificates (including a CPCN, if required) in a timely manner. Also, for the avoidance of doubt, an MP may not submit a Proposal for a Facility that has an existing off-take agreement.

<sup>6</sup> Renewable energy resource" means a solar electric, solar thermal, wind, hydropower, geothermal, or ocean current or wave energy resource; a biomass resource, including agricultural waste, animal waste, wood waste, spent pulping liquors, combustible residues, combustible liquids, combustible gases, energy crops, or landfill methane; waste heat derived from a renewable energy resource and used



5. Commit to sell 100% of its renewable electrical energy, capacity, and environmental and renewable attributes to DEC.
6. Have submitted Form 556 to the Federal Energy Regulatory Commission on or before the date of submission of the Proposal to obtain qualifying facility (“QF”) certification.
7. Have submitted an interconnection request during the Tranche 3 RFP open bid window [01/05/2022 – 02/03/2022] and elected to participate in the Resource Solicitation Cluster (“RSC”) described in Appendix H established under the North Carolina Interconnection Procedures (“NCIP”) Section 4.4.2 or the South Carolina Generator Interconnection Procedures (“SC GIP”) Appendix Duke CS Section 5.3.2.<sup>7</sup> Or, alternatively, have a fully executed Interconnection Agreement with DEC prior to 8/20/2021 and not be in default under such Interconnection Agreement but not also having executed a PPA. MPs participating in Tranche 3 having the aforementioned fully executed Interconnection Agreement shall be solely responsible for the cost of any System Upgrades assigned to it under its Interconnection Agreement and shall bid accordingly as participation in Tranche 3 will not alter any contractual obligations included in the MP’s executed Interconnection Agreement. Note that in the event that, during the Tranche 3 evaluation process, a default on the part of the Interconnection Customer occurs under the relevant Interconnection Agreement or the relevant Interconnection Agreement is terminated, the MP shall be removed from the evaluation process and, if applicable, forfeit the Step 2 Proposal Security.
8. In the case of Facilities that include energy storage, have all storage located on the DC side of the inverter and charged solely from the applicable Facility.

#### **A. INDEPENDENT ADMINISTRATOR**

This RFP will be administered by an Independent Administrator, the Accion Group, LLC (“Accion” or the “IA”). Accion is responsible for developing and utilizing the CPRE Program Methodology to evaluate all Proposals in accordance with the evaluation process established under NCUC Rule R8-71(f)(3)(iii), as further described herein, and ensuring that all Proposals are treated equitably throughout the RFP.

#### **B. RFP ACCESS AND INSTRUCTIONS**

Accion hosts a website (“IA RFP Website”) that serves as the required vehicle for all RFP communications. Respondents and interested parties must be registered on the IA RFP Website to access further information related to the RFP. The IA RFP Website may be accessed at <https://decprerfp2021.accionpower.com>.

to produce electricity or useful, measurable thermal energy at a retail electric customer's facility; or hydrogen derived from a renewable energy resource. “Renewable energy resource” does not include peat, a fossil fuel, or nuclear energy resource.

<sup>7</sup> Interconnection Requests for Facilities where the MP plans to contractually commit to sell the full output of the Facility to the interconnected utility, as required under the CPRE Program, are subject to the jurisdiction of, and interconnection procedures and agreements established by either the NCUC and South Carolina Public Service Commission.

Registered parties may submit questions concerning the RFP on the “Q&A” page of the IA RFP Website. The questions and responses will be posted for viewing by all persons registered on the IA RFP Website. Finally, the IA RFP Website also has a confidential “message board” available to registered MPs to facilitate project-specific questions to the IA that should not be disclosed to all MPs. The IA will review all questions and messages and solicit information from the Evaluation Team, as necessary, without disclosing the identity of the MP posing the request. Questions and responses that the IA determines are appropriate for disclosure to all registered MPs will be posted in the Q&A page. After the Proposal submission date, the confidential message board will only be used should the IA need clarification concerning any Proposal.

Proposals and all associated documentation must be submitted to the IA through the IA RFP Website on or before **12:00 pm EDT (Noon) on 02/03/2022.**

### C. TRANCHE 3 RFP SCHEDULE

The table below presents the planned Tranche 3 RFP schedule. As provided in the CPRE Rule, the Tranche 3 RFP schedule may be modified after consultation with and approval by the IA. MPs will receive notification of any schedule changes through the IA RFP Website.

Milestone	Date
First Stakeholder Meeting	09/17/2021
Draft PPA and RFP documents posted to IA RFP Website	09/20/2021
Comment period #1 on draft RFP documents closes	10/01/2021
Second Stakeholder Meeting	9/24/2021
Third Stakeholder Meeting	10/14/2021
Fourth Stakeholder Meeting	11/04/2021
Release updated RFP documents for comments	11/11/2021
Comment period #2 on updated draft RFP documents closes	11/22/2021
PPA filed with NCUC	12/02/2021
Duke’s Final determination of MW quantity	12/3/2021
IA report re: RFP documents	12/8/2021
Final RFP documents posted to IA RFP Website and available to MPs	12/28/2021
RFP Issuance Date – Bid window for submission of Proposals opens	01/05/2022
Deadline for submission of RSC CPRE Tranche 3 Proposals	02/03/2022
RFP Step 1 ranking	03/31/2022
RSC Customer Engagement Window (30 days)	04/30/2022
Projected RSC Phase 1 Study Start <sup>8</sup>	05/17/2022
Projected RSC Phase 1 Study Results provided to IA	07/01/2022

<sup>8</sup> Contingent upon timing of Transitional Cluster Study Phase 2 Power Flow Restudy completion. Dates subsequent to this step are "projected" and subject to change.

Projected Conclusion of Step 2 and winning MPs notified	14 days after T&D Sub-Team provides IA updated estimates from a re-run of power flow studies in Phase 2, (approx. 07/14/2022)
Projected CPRE Winners announced	07/15/2022
Projected Contract negotiation	30 days after winning bids notified, (approx. 08/15/2022)

**D. SEPARATION PROTOCOLS**

The IA will ensure compliance with the communication restrictions and other requirements set forth in NCUC Rule R8-71(e) (the “Separation Protocols”). Pursuant to such CPRE Rule, DEC and DEP have collectively established a team that is responsible for preparing bids on behalf of the soliciting utility, DEC (such team, the “DEC Proposal Team”), and Duke Energy Renewables, Inc. (“DER”) has established a separate team that is responsible for preparing bids on behalf of DER (such team, the “DER Proposal Team” and together with the DEC Proposal Team, the “Proposal Teams”). In addition, DEC and DEP have established a team that is responsible for assisting the IA in developing the RFP and evaluating Proposals (the “Evaluation Team”). Finally, the Evaluation Team has a sub-team responsible for assessing and assigning System Upgrade costs to Proposals (the “T&D Sub-Team”). All members of the Proposal Team(s) and the Evaluation Team have been separately identified in writing to the IA and physically segregated for purposes of all activities that are part of the Tranche 3 RFP solicitation process. All Proposal Team and Evaluation Team members have also been required to execute acknowledgements regarding compliance with the Separation Protocols, which have been provided to the IA. As shown in the Tranche 3 RFP Schedule above, the IA will require that the Proposal Teams submit any Proposals no less than 24 hours before the RFP window closes.

**E. CONFIDENTIALITY**

The IA will not publicly disclose the identity of all MPs during the Step 1 and Step 2 evaluation process. However, at the conclusion of the Step 2 evaluation, upon selection of winning MPs, the IA and/or Duke shall be permitted to publicly identify all CPRE participants that submit Proposals in response to any Commission-directed reporting requirements. MPs are instructed to identify information they desire to be treated as confidential by marking each page of each document “CONFIDENTIAL”.

**II. GENERAL TERMS**

**A. PROPOSAL CATEGORIES**

Proposals may be structured using one of the two proposal categories (“Proposal Categories”) defined in the following table:

Proposal Type	Proposal Cost Structure
PPA	Levelized (non-escalating) payments for capacity, energy, and environmental and renewable attributes in \$/MWh terms for 20 years from the commercial operation date. The pro forma PPA is attached as <b>Appendix A</b> .
Utility Self-Developed Facilities	Utility owns or controls the property and offers Renewable Resource facility(s) into the CPRE RFP in \$/MWh terms for 20 years from the commercial operation date.

**B. PROPOSAL ALTERNATIVES AND SIZE FLEXIBILITY**

MPs may submit Proposals for the same Facility proffering different sizing, pricing or technology. (e.g., a Facility that is proposed both with and without energy storage must submit separate Proposals for each Facility configuration). Each Proposal will be a separate submission subject to a separate Proposal Fee and will require a separate Interconnection Request.

MPs will be permitted to identify the minimum size of the Facility (up to a 10% maximum reduction)<sup>9</sup> that the MP is willing to provide at the same \$/MWh price. For example, for a 50 MW Proposal, the MP could indicate that it is willing to deliver a Facility sized anywhere between 45-50 MW for the same \$/MWh price.

**C. MARKET PARTICIPANTS AND PROPOSAL SPONSORS**

DEC and DEP recognize that MPs may utilize partners or sponsors (“Proposal Sponsors”) for Proposal development. Proposals that rely on Proposal Sponsors to meet RFP requirements must provide evidence that is satisfactory to the IA of a binding legal partnership or similar relationship with such Proposal Sponsor.

Historically underutilized businesses are encouraged to participate in the RFP. The definitions to be employed for such purposes are set forth in **Appendix B** to this RFP. MPs shall not discriminate based upon race, religion, color, national origin, age, sex, or handicap.

**D. PROPOSAL FEES**

Each MP is required to submit with each Proposal a non-refundable “Proposal Fee” of \$500/MW, based on the Facility’s nameplate capacity, up to a maximum of ten thousand dollars (\$10,000). In addition, successful MPs will be responsible for a pro-rata share of the Winners’ Fee (as hereinafter defined).

Proposal Fees are non-refundable and for the avoidance of doubt, will not be refunded in the case of any modification of this RFP schedule, rejection of any Proposal, or failure by a winning MP to execute a PPA. Proposal Fees must be paid via electronic payments through Accion’s website: <https://decprerfp2021.accionpower.com/>. Payment is due at the time of Proposal submission and

<sup>9</sup> The maximum reduction percentage is based on Section 1.6.1.7 of the NCIP and Attachment 1 of the SC GIP.

must be received no later than 12:00 PM EDT (Noon) on the Proposal due date. Failure to submit the Proposal Fee will result in automatic disqualification of the Proposal from further consideration.

### **E. WINNERS' FEE**

The “Winners’ Fee” is the amount to be determined as described below in order to recover any remaining IA costs not covered by the Proposal Fee. The Winners’ Fee will be determined upon conclusion of the RFP and shall be paid by each winning Proposal to DEC within thirty calendar days of invoice receipt. Any such Winners’ Fee costs will be allocated among all winning Proposals on a pro-rata basis on a per MW basis and will be non-refundable. The total of the Winners’ Fees shall not exceed \$1.5 million.

### **F. STEP 2 PROPOSAL SECURITY**

#### **1. Third-Party MPs and DER Proposal Team**

Security in the amount of \$20/kW minus the M1 security to enter RSC Phase 1<sup>10</sup>, based on the Facility’s inverter nameplate capacity, must be posted by all Third-Party MPs and the DER Proposal Team submitting PPA Proposal(s) that are selected to move into Step 2 of the evaluation process (“Step 2 Proposal Security”). This Step 2 Proposal Security can be in the form of (i) cash; (ii) a Surety Bond; or (iii) a Letter of Credit (“LOC”), in each case, in a form acceptable to the Companies and issued by an entity that meets the Companies’ issuer requirements and naming DEC as the sole beneficiary. An issuing bank for the LOC must have a minimum credit rating of A- from S&P and A3 from Moody’s and a surety must be rated A.M. Best “A- VII” or higher. Surety bonds must be irrevocable and require payment by the surety within ten calendar days of demand. Interest will not be paid on cash deposits. An example of acceptable LOC is provided in **Appendix C** and an acceptable surety bond is provided in **Appendix D**.

It is recommended that MPs provide draft forms of Proposal Security, if not posting cash, to the IA prior to March 21, 2022, to allow sufficient time for the IA and the Companies to review and confirm the Proposal Security materially conforms to the forms provided in **Appendix C** and **Appendix D**, respectively. The IA will notify the MPs the day after the Step 1 RFP results are completed (approximately April 1, 2022) if they have been invited to formally move into the Step 2 Evaluation, at which point, the MP must post the Step 2 Proposal Security within and no later than 14 calendar days after the notification date.<sup>11</sup> If a Proposal does not timely provide the Step 2 Proposal Security, then IA may identify additional replacement Proposals to be evaluated in Step 2 and allow any such replacement Proposals to provide Proposal Security by no later than the close of the Customer Engagement Window.

<sup>10</sup> See Appendix(H).

<sup>11</sup> As indicated in the schedule in Section I(c), the IA currently expects that Step 1 of the evaluation process will be completed on or around 04/14/2022.

## **2. DEC/DEP Proposal Team**

In the case of Utility Self-Developed Facilities, the DEC/DEP Proposal Team will be required to acknowledge that in the event such Proposal is selected as a winner and fails to execute the Acknowledgment Form, an amount equal to \$20/kW will be disallowed from the applicable CPRE Rider recovery.

## **3. Step 2 Proposal Security Administration**

The amount of the Step 2 Proposal Security will be released (i) if the Proposal is eliminated by the IA due to failure to meet any required RFP criteria or action; (ii) if the Proposal is not selected as a winning proposal, upon closure of the contracting period; or (iii) if the Proposal is selected as a winning Proposal, upon completion of the contracting phase of the RFP, including execution of the PPA and posting of security as required in the applicable agreement. DEC will be entitled to draw on the full amount of the Step 2 Proposal Security in the event that the MP (a) withdraws its Proposal during Step 2 of the Evaluation Process; or (b) if the Proposal is selected as a winning Proposal but the MP fails to complete the contracting phase.

# **III. ADDITIONAL PROPOSAL REQUIREMENTS**

## **A. SELF-DEVELOPED, SUBSIDIARY, AND AFFILIATE PROPOSALS**

Utility Self-Developed Proposals will be bid using the same templates, forms, and pricing requirements applicable to PPA Proposals. Proposals submitted by the DER Proposal Team will be made via the IA RFP Website and meet the same requirements as Proposals from Third-Party MPs. In accordance with N.C. Gen. Stat. § 62-110.8(b)(4), no more than thirty percent (30%) of the total CPRE procurement requirements can be awarded to Facilities in which DEC, DEP, or any subsidiary or affiliate holds an ownership interest at the time of Proposal submission.

Utility Self-Developed Proposals will be priced based on the assumption that these facilities will continue to receive market-based revenues based on a pricing mechanism to be established by the Commission at the conclusion of the initial 20- year term of the PPA.

## **B. PPA PROPOSALS**

All PPA Proposals must meet the technical specifications set forth in the PPA, as determined by the IA (in consultation with the Evaluation Team, as necessary). The pro forma PPA is provided as Appendix A. After closure of the RFP comment period, and subsequent filing of the PPA with the NCUC, the pro forma PPA is not subject to negotiation or adjustment for purpose of Tranche 3.

# **IV. AVOIDED COST THRESHOLD AND PROPOSAL PRICING**

All PPA and Utility Self-Developed Facility Proposals must be submitted using levelized 20-year dollar per megawatt-hour (\$/MWh) pricing.

All Proposals (including the cost of System Upgrades as described herein) must be at or below the applicable 20-year dollar per megawatt-hour (\$/MWh) avoided cost rates specified in the tables below (“Avoided Costs Threshold”).

**Avoided Costs Threshold for Tranche 3**

The Avoided Cost Thresholds identified above for solar resources include a reduction to account for the Solar Integration Services Charge (“SISC”) in accordance with the Commission’s January 24, 2020 Order Approving Form PPA and August 13, 2021 Order Establishing Standard Rates and Contract Terms for Qualifying Facilities issued in Docket No. E-100, Sub 167. The PPA includes protocols by which an MP would have the opportunity to earn a credit equal to the SISC to the extent that the MP is able to reduce the intra-hour volatility of its project. For the avoidance of doubt, the IA will only evaluate the as-bid price and will not make any assumption regarding the ability of the MP to reduce intra-hour volatility and thereby earn credits under the PPA.

Proposal pricing must be in the same format of 20-year avoided cost pricing periods as shown in the tables above. Proposal pricing must be stated as a fixed dollar per MWh decrement that is applied equally to all energy pricing periods. For example, an MP could propose pricing that is \$2.00/MWh less than the avoided cost in each energy pricing period (for clarity, the decrement does not apply to capacity pricing periods). This format for pricing will be required for the bid entry on the IA RFP Website and will be the basis for the pricing in the PPA. Translating this \$2.00/MWh proposed pricing decrement example into a levelized form of pricing, the following would be the result for a transmission connected solar project in DEC:

DEC 20 Year CPRE - Solar Only												
Capacity Pricing (\$/MWH)			Energy Pricing (\$/MWH)									
Summer Months PM	Winter AM	Winter PM	DEC Summer Prem-Peak	DEC Summer PM-Peak	DEC Summer Off Peak	DEC Winter Prem-Peak	DEC Winter AM-Peak	DEC Winter PM-Peak	DEC Winter Off Peak	DEC Shoulder Peak	DEC Shoulder Off Peak	
Distribution	23.81	110.61	35.79	41.8	41.2	35.9	65.9	50.7	52.1	40.2	38.4	29.3
Transmission	23.15	107.57	34.80	40.2	39.8	35.2	63.8	49.3	50.7	39.4	37.6	28.9
DEC 20 Year CPRE - Non-Solar Renewable Generation												
Capacity Pricing (\$/MWH)			Energy Pricing (\$/MWH)									
Summer Months PM	Winter AM	Winter PM	DEC Summer Prem-Peak	DEC Summer PM-Peak	DEC Summer Off Peak	DEC Winter Prem-Peak	DEC Winter AM-Peak	DEC Winter PM-Peak	DEC Winter Off Peak	DEC Shoulder Peak	DEC Shoulder Off Peak	
Distribution	23.81	110.61	35.79	42.9	42.3	37	67	51.8	53.2	41.3	39.5	30.4
Transmission	23.15	107.57	34.80	41.3	40.9	36.3	64.9	50.4	51.8	40.5	38.7	30
<b>EXAMPLE</b>	DEC 20 Year CPRE Solar Proposal with \$2/MWh pricing decrement (on energy only)											
Capacity Pricing (\$/MWH)			Energy Pricing (\$/MWH)									
Summer Months PM	Winter AM	Winter PM	DEC Summer Prem-Peak	DEC Summer PM-Peak	DEC Summer Off Peak	DEC Winter Prem-Peak	DEC Winter AM-Peak	DEC Winter PM-Peak	DEC Winter Off Peak	DEC Shoulder Peak	DEC Shoulder Off Peak	
Transmission	23.15	107.57	34.80	40.2	39.8	35.2	63.8	49.3	50.7	39.4	37.6	28.9
<b>Proposal</b>				<b>38.2</b>	<b>37.8</b>	<b>33.2</b>	<b>61.8</b>	<b>47.3</b>	<b>48.7</b>	<b>37.4</b>	<b>35.6</b>	<b>26.9</b>

PPA pricing must include all project costs to the POI, including the cost to directly connect to the existing DEC transmission/distribution system (“Interconnection Facilities”). Interconnection Facilities costs at the POI will include all DEC’s costs to connect the Facility to the existing transmission/distribution system delivery point, but shall not include the costs of upgrades to the transmission or distribution system beyond the POI. For transmission interconnections, evaluation

will assume the most cost-effective communication method that meets the Transmission Provider's requirements in their transfer trip scheme. The MP has cost responsibility for the transfer trip scheme. MP-owned equipment up to the POI often includes equipment such as the generator step-up transformer (for conversion up to the interconnecting voltage level), facility side generator breaker (as needed), and all station service equipment. Utility-owned equipment typically includes metering, protective equipment, relays, and other new electrical infrastructure and specific configurations for transmission connections as discussed in more detail below.

MPs with successful Proposals will be responsible for all Interconnection Facilities costs, even if the actual costs exceed the amount estimated by the MP. The IA will review the estimated Interconnection Facilities costs included in each proposal for reasonableness and reserves the right to impute a larger amount of Interconnection Facilities costs where it determines that the Interconnection Facilities costs assumed by the MP are unreasonably low. Should the IA determine imputed Interconnection Facilities costs should be used, the MP will be advised and provided the opportunity to review the revised cost estimates with the IA and advise the IA of whether the imputed estimate is accepted by the MP.

The costs of transmission/distribution grid improvements and upgrades ("System Upgrade") should not be incorporated in the MP's PPA price. System Upgrade costs will be identified during Step 2 of the evaluation process as set forth in NCUC Rule R8-71(f)(3)(iii). For the avoidance of doubt, for purposes of determining the satisfaction of the Avoided Cost Threshold, the System Upgrade costs determined by the T&D Sub-Team shall be converted to 20-year \$/MWh pricing and incorporated into the Proposal price by the IA.

## **V. PROPOSAL EVALUATION**

### **A. OVERVIEW**

Proposals will be evaluated by the IA in accordance with the evaluation process set forth in NCUC Rule R8-71(f)(3). A copy of the CPRE Rule is provided on the IA RFP Website. As specified in NCUC Rule R8-71(f)(3), in Step 1 of the evaluation process, the IA will perform the initial ranking of Proposals based on a combination of economic and non-economic criteria. As a part of the Step 1 evaluation, the IA may allow a market participant an opportunity to modify or clarify its proposal to cure a non-conformance or non-substantive deficiency that would otherwise require elimination of the Proposal.<sup>12</sup> The IA will provide the MP with written notice of the deficiency and the MP shall then have five (5) business days after receiving the written notice to cure the deficiency, where failure to cure the deficiency shall result in withdrawal of the Proposal from further consideration.

<sup>12</sup> MPs will not be permitted to change pricing after the bid submission closes on February 3, 2022. For the avoidance of doubt, this includes solar Facilities' obligation to comply with future regulations established Department of Environmental Quality to ensure adequate financial resources for the decommissioning of utility-scale solar projects pursuant to Section 3 of Session Law 2021-165. Any expense incurred to comply with the requirements will be the responsibility of the MP and neither the Proposal pricing nor PPA pricing will be revised to accommodate any expense.



Proposal Fees for a Proposal that fails to timely cure any deficiency identified by the IA shall not be returned and Proposals found by the IA to be non-conforming will not be evaluated.

Each conforming Proposal will be evaluated on its net benefit to the DEC system over the twenty-year analysis period on a \$/MWh basis (where the net benefit equals the accumulated net present value) (“20-year NPV Analysis”). The evaluation will be conducted on a \$/MWh (benefit to DEC) basis and therefore will not favor a Proposal based on Facility size. In order to assess a Proposal’s net benefit under the 20-year NPV Analysis, the evaluation must determine both the Proposal’s cost and the Proposal’s benefit to the DEC system. The cost of the Proposal is determined by taking the MP submitted \$/MWh rate and applying the rate to the Facility’s projected output (8760 hours x 20 years). The benefit to the DEC system is determined using two metrics: (1) the Proposal’s output contributes toward the ability to defer future DEC generating unit capacity and (2) the Proposal’s energy output replaces energy that would have been supplied at DEC system cost for that particular hour.

Proposals must include a set of 8760 hour output projections each of the 20 years of the term. Proposals must be accompanied by PVSyst inputs/outputs and supporting workpapers and calculations demonstrating the basis for the energy profiles proposed. Proposals that include storage must submit two sets of 8760 hour output projections (for the twenty years) for the facility design. The first set is the output projection assuming that the storage capability is not utilized (i.e., turned off) and the second set of output projections is the Facility output after utilizing the storage capability. It is assumed that the post-storage output projections reflect that the MP has optimized the use of the storage capability. The IA will review both the pre-storage and post-storage Facility output in order to determine that the post-storage projections are reasonable.

Note that under the terms of the Tranche 3 PPA, DEC has the right to curtail energy from the Facility up to 5% of the Facility’s annual energy production, without compensation to the Facility owner. For purposes of the evaluation, it will be assumed that DEC fully exercises the energy curtailment to the 5% limit. Note that the energy curtailment reduces the Facility’s revenue (in that less energy is sold to the DEC grid).

In the Proposal evaluation, the curtailment methodology will optimize energy costs for DEC. In other words, the methodology will begin curtailing the Facility’s output when the cost of the Facility’s energy is most costly when measured against the DEC system cost for that hour. This methodology will continue (as the cost difference is reduced) until the full allotment of curtailment is reached (5%).

With Facilities that include storage, it is recognized that some of the Facility’s energy that is “lost” during curtailment can be stored and sold into the DEC system several hours later. For purposes of the evaluation, the following limitations will be taken into account: the overall roundtrip efficiency of energy storage, the MW capability of the storage system (which may be smaller than the facility output), and the MWh (energy) capability of the storage system.

In Step 1 of the evaluation process, all compliant Proposals will be ranked in order of the Proposal's net benefit to the DEC system. The non-economic criteria specified in Section V(B) below will also be evaluated by the IA and scored in accordance with the scoring sheet attached hereto as **Appendix F**, which has been developed by the IA and sets forth the weighting the IA will use in determining the Step 1 ranking of all Proposals. During the Step 1 evaluation, the IA will determine the amount of additional cost that could be imputed to a Proposal before it would exceed the Avoided Cost Threshold and may solicit information from the DEC T&D Sub Team regarding the potential for System Upgrades to be assigned to a Proposal based upon Known Interconnection Contingencies as described in Section V(B)(5). At the conclusion of Step 1, the IA will develop and deliver to the DEC T&D Sub Team a list of proposals for Step 2 evaluation ranked in order from most competitive to least competitive.

Recognizing the financial commitment required to demonstrate readiness and to enter the RSC, the RFP Proposal Security required under Section II(F)(1) is reduced by the required amount of the RSC M1 security compared to prior CPRE RFPs. For the avoidance of doubt, the RFP Proposal Security and RSC M1 security are intended to be provided separately and both must be provided by the due dates identified in the Section I(C) Schedule for a Proposal to enter Step 2.

In Step 2 of the evaluation process, the DEC T&D Sub Team shall utilize the RSC process outlined in Appendix H and administered under NCIP Section 4.4.2 and SC GIP Appendix Duke CS Section 5.3.2. The DEC T&D Sub Team will study grid impacts and assign System Upgrade costs to the Proposals identified by the IA to be evaluated in Step 2. The Transitional Cluster Phase 2 power flow restudy shall be used as the base case for the RSC Phase 1 study. The RSC Phase 1 study estimates will be used by the IA in Step 2 for the final ranking of Proposals. The IA will rank Proposals using the 20-year NPV Analysis.

Each RSC project that is contingent upon System Upgrades identified in the Transitional Cluster Phase 2 power flow restudy will have the full cost of System Upgrades upon which it is contingent included in their RSC Phase 1 system upgrade estimate. Duke will also undertake the limited Affected System Review described in section VII of Appendix H. If the DEC T&D Sub Team determines that an Affected System study is required or identifies that the Proposal is contingent on a TCS Affected System study that will not be concluded by the end of RSC Phase 1 Study, then Duke will notify the IA and the proposal will be withdrawn from the RSC and will not be eligible to proceed in the RFP. Any Proposals that the IA releases or that fail to meet the requirements to continue participation in any stage of the RSC or RFP will be notified and the Generating Facility shall lose the Queue Position it held as part of the Tranche 3 RSC.

For the avoidance of doubt, all requirements of the RSC described in Appendix H and under NCIP Section 4.4.2 and SC GIP Appendix Duke CS Section 5.3.2 shall apply to Interconnection Customers being considered as Proposals in the RFP and MPs agree to be subject to all applicable readiness and financial requirements of the RSC, including potential Withdrawal Penalties if the Proposal withdraws its Interconnection Request after signing their PPA and moving into the RSC Phase 2 study.

At the end of the Step 2 evaluation, the T&D Sub Team shall provide the results of its study to the IA for use in its evaluation process. The IA shall review the assigned System Upgrade costs provided by the T&D Sub-Team, determine whether such System Upgrade costs have been appropriately assigned and then determine whether the original ranking of proposals needs to be modified to recognize the System Upgrade costs assigned to each proposal. During Step 2 the IA will incorporate the estimated transmission cost to be borne by customers into the total cost of each Proposal. If the projected transmission costs do not exceed the value derived from the bid decrement (the annual value equals the decrement multiplied by the annual energy output net of curtailment) measured on an NPV basis, the proposal is retained for further consideration. Any proposal that exceeds the Avoided Cost Threshold or does not provide positive net benefits under the 20-year NPV Analysis will be eliminated from consideration. Upon determination of the final ranking of Proposals, the IA shall deliver to the Evaluation Team the final ranking of Proposals, and identification of proposals that do not provide positive net benefits under the 20-year NPV Analysis, in the order ranked by the IA until the total capacity sought in the RFP is satisfied.

For each Proposal that is ranked by the IA at the conclusion of Step 2, the IA will provide to Duke the calculation of cost that could be imputed to the Proposal before it would exceed the Avoided Cost Threshold (inclusive of the Solar Integration Service Charge). This amount will be identified in the PPA as the “Excess Network Upgrade Costs” that would trigger Buyer’s Limited Termination Right under Section 20.1.2 of the pro forma PPA.<sup>13</sup>

Selected Proposals shall be notified of their status within fifteen calendar days after the T&D Sub Team provides the RSC Phase 1 study results to the IA (approximately July 15, 2022). After this announcement, the winning bidders will have 30 calendar days to negotiate contracts and sign the PPAs. This time period will also serve as the RSC Engagement Window 2, in which the project must meet the requisite M2 milestones under the applicable Interconnection Procedures (See NCIP § 4.4.7.2; SC GIP Appendix Duke CS § 5.3.7.3) to continue to progress through the RSC and ultimately receive their Interconnection Agreement.

## **B. NON-ECONOMIC SCORING CRITERIA**

The following non-economic criteria will be evaluated for each Proposal and scored in accordance with the scoring sheet.

### **1. Facility Permitting**

MPs should disclose all permits that will have to be obtained and the status of each permit along with a timeline for the completion of all permits that relate to the Proposal. The site evaluation and

<sup>13</sup> In the event that the Facilities Study Report identifies System Upgrade costs that would cause the Facility’s total cost to exceed the Avoided Cost Threshold (due to cost reallocation under the Resource Solicitation Cluster study or otherwise), Section 20.1.2 of the pro forma PPA establish a Buyer’s Limited Termination Right that will allow the Companies to terminate the PPA. However, Section 20.1.3 of the pro forma PPA provides the Seller the right to cure the issue, meaning that the Seller can choose to pay for that portion of the System Upgrade cost that would causes the Facility’s total cost to exceed the Avoided Cost Threshold.

studies conducted to date, as well as a timeline for completion of these studies, should be included in the Proposal.<sup>14</sup>

## 2. Financing Experience

Each Proposal should describe the plans for acquiring the necessary funds for developing, constructing, and operating the Facility. Such plans should include a discussion of the Facility's legal ownership structure and the expected sources and types of capital that the MP has committed to secure. If available, letters of interest or letters of commitment from such financial partners or key sources of funding should be provided.

For PPA proposals, MPs must be able to provide evidence of at least one recent successful facility financing completed of comparable size to the Proposal submitted within the last five years.

MPs must provide the financial and credit information set forth in **Appendix E**.

## 3. Technical Development and Operational Experience

In general, an MP must show experience in developing and operating renewable facilities of comparable size and technology as the Facility submitted in the Proposal. More specifically, an MP must:

- In the case of PPA proposals, have operated a renewable energy project or portfolio of projects >50 MW AC or 3x the nameplate capacity of the Proposal, whichever is less;
- In the case of solar Proposals, have completed or directly managed the completion of the development, engineering, equipment procurement, and construction of >50 MW or 3x the nameplate capacity of the Proposal, whichever is greater, of solar facilities, including at least one project of comparable size to the proposed facility within the United States or Canada; and
- In the case of non-solar Proposals, have completed or directly managed the completion of the development, engineering, equipment procurement, and construction of at least 10 MW of relevant renewable energy facilities within the United States or Canada.

## 4. Historically Underutilized Businesses

Historically underutilized businesses meeting the requirements set forth in **Appendix B** will be scored in accordance with the score sheet.

<sup>14</sup> MPs should take reasonable steps to develop projects in a manner that protects the environment and the communities served by the Companies. According to the North Carolina Wildlife Resources Commission, increasing the availability of native plants at solar facilities can help support pollinators, including birds, bees, and other wildlife, benefiting nearby agricultural fields and community growers. Please consider following the "Solar Site Pollinator Habitat Planning & Assessment Form" provided in **Appendix G**.

## 5. Known Interconnection Contingencies

DEC T&D Sub Team will provide the IA with a preliminary scoping assessment of all conforming bids prior to the completion of Step 1 to flag any projects seeking to interconnect at POIs identified consistent with Good Utility Practice to be reasonably likely to: (i) be contingent on a known potential constraint identified in a prior interconnection study that would result in significant Upgrade Costs (exceeding \$5 million) being assigned to the project; (ii) incur significant Upgrade Costs (exceeding \$5 million) as a result of a local transmission system constraint (e.g., connecting to an inactive line); or (iii) trigger an affected system study. (“Known Interconnection Contingencies”).

## VI. ADDITIONAL INFORMATION

### A. INTERCONNECTION TIMELINE AND PPA TERM

For projects selected in CPRE Tranche 3 that continue to progress in the RSC, Interconnection Agreements are anticipated to be offered in August 2023, but may be delayed if the Transitional Cluster requires a Phase 3 study or experiences unforeseen delays. For transmission-connected projects, commercial operation of the Interconnection Facilities is anticipated to be 26-32 months after execution of an Interconnection Agreement. However, it is important to note that the amount of time required for construction of Interconnection Facilities for transmission-connected projects can be substantially impacted by the number of non-CPRE projects that execute Interconnection Agreements prior to CPRE Tranche 3 winning Proposals or the scope of the System Upgrades. There may also be contingent transmission upgrades associated with the Transmission Provider’s “Ten Year Transmission Addition Plan” that could impact a project’s In-Service Date.

For the avoidance of doubt, the term of all PPAs shall be 20 years from the Commercial Operation Date (as that term is defined in the PPA).

### B. TRANSMISSION GRID LOCATIONAL GUIDANCE

For purposes of the Tranche 3 CPRE RFP, DEC has provided grid locational guidance on the IA RFP Website indicating known transmission and distribution limitations resulting from the amount of existing or proposed renewable energy facilities in a particular area. This grid locational guidance is intended to provide MPs with information regarding areas on the transmission system where System Upgrade costs are likely based upon recent transmission system studies. The Documents Page of the IA RFP Website includes a map and supporting documentation, including tables of constrained circuits and substations to indicate areas of known transmission constraints in which System Upgrade costs will likely be required. Studies will be required to determine the extent and cost, if any, of these System Upgrades.

Transmission areas not identified as zones of known transmission constraints may still require System Upgrades, and transmission studies will be required to determine the extent and cost, if any, of these System Upgrades.

### C. PRODUCTION ESTIMATES

MPs shall include an 8760 production profile for the first year of operation as part of their Proposal. In the case of solar facilities, the required production profile shall be generated in PVSyst. Production profiles should be based on energy delivered at the POI and taking into account all transformation losses to the POI, including final GSU transformation. For example, transmission interconnected projects should include any transformational losses incurred through the GSU to the high-side of the interconnect. For transmission-connected Facilities, utility power factor requirements should also be included in determination of energy delivered to the POI.<sup>15</sup> The production profile provided with the Proposal should not be adjusted for Daylight Standard Time.

All Proposals including on-site storage must submit two production profiles for the facility: one profile with the storage option and one profile without the storage option.

### D. STORAGE

Energy storage devices must be on the DC side of the inverter and charged exclusively by the Facility. Storage devices must be controlled by the Seller in accordance with the Energy Storage Protocols specified in the pro forma PPA, including in Exhibit 10 thereof.

### E. CONTROL INSTRUCTIONS

Section 8.6 to 8.10 of the pro forma PPA addresses DEC system operators' rights to issue instructions to control the renewable generating facilities procured through the CPRE Program in the same manner as DEC's control of the utility's own generating facilities.<sup>16</sup> CPRE Facilities must be designed with control equipment that will facilitate full or incremental instantaneous control over the Facility<sup>17</sup> in order to take any action directed by the Companies' system operators to implement or otherwise effectuate system operator instruction.

The CPRE dispatch control entitlements are in addition to otherwise applicable system emergency condition instructions and force majeure instructions, as defined in the PPA,<sup>18</sup> and may be issued by the DEC system operator for any reason, including planning its security-constrained unit commitment and dispatch for operational efficiency (*e.g.*, avoid taking a large unit off-line for short intra-day durations to avoid operationally excess energy) or to provide for operational flexibility for anticipated operational challenges (*e.g.*, dispatching down facilities to reduce extreme evening ramp rates).

Section 8.9 of the pro forma PPA specifies that the uncompensated, non-force majeure/emergency conditions CPRE dispatch control entitlement is limited to 5% of the facility's annual expected

<sup>15</sup> DEC requires each transmission-connected Facility to be capable of delivering power to the POI within the power factor range of 0.93 lagging to 0.97 leading.

<sup>16</sup> See N.C. Gen. Stat. § 62-110.8(b).

<sup>17</sup> As specified in the Energy Storage Protocols in Exhibit 10 of the PPA, DEC will not have control of the storage resource.

<sup>18</sup> The Companies will manage dispatch control instructions of CPRE resources and system emergency curtailments in accordance with the Operating Procedures filed January 30, 2018, in Docket No. E-100, Sub 148.

output in. Compensation at the full contract price will be provided for each MWh of energy that could have been generated but was not due to dispatch down control instruction(s) exceeding the contracted-for percentage CPRE dispatch control entitlement. Section 8.9 and Exhibit 9 to the pro forma PPA also describe the methodology that will determine whether the CPRE dispatch control entitlement was exceeded during a given year and will be used to calculate any compensation owed to the seller under the PPA.

## **VII. RESERVATION OF RIGHTS**

In submitting a Proposal into this RFP, a MP agrees and accepts that nothing contained in this RFP will be construed to require or obligate DEC to select any Proposal. Per the Commission's CPRE Order, MPs retain the right to initiate a complaint proceeding before the Commission. MPs should be aware that submittals, even if marked "Confidential," may be subject to discovery and disclosure in regulatory or judicial proceedings. The Companies will notify the MP in advance of any required disclosure of confidential information.

**APPENDIX A**  
**FORM OF RENEWABLE POWER PURCHASE AGREEMENT**

[See attached document]



## APPENDIX B HISTORICALLY UNDERUTILIZED BUSINESSES

As an advocate for corporate responsibility, Duke Energy excels among our utility peers in seeking and developing local and diverse businesses, as well as those with environmentally sustainable practices, through our supply chain sourcing strategy. Including Corporate Responsibility as a standard component of the sourcing process creates a standardized approach when evaluating suppliers, while maintaining flexibility based on opportunity and risk avoidance.

### **Diverse Supplier Designations**

The following designations will be utilized in the CPRE program to qualify a Market Participant as a Historically Underutilized Business:

<b>Designation</b>	<b>Description</b>	<b>Requirement</b>
WBE	Women Owned Business Enterprise	At least 51% owned
MBE	Minority Owned Business	At least 51% owned
VBE	Veteran Owned Business	At least 51% owned
SDVBE	Service Disabled Veteran Owned Business	At least 51% owned

Above business concerns must be at least 51% owned by one or more of individuals in the diverse categories or, in the case of any publicly owned business, at least 51% of the stock is owned by individuals within the groups. In addition, the owners must control the management and daily business operations. In case of a permanent or severe disability, the spouse or caregiver of such a service-disabled veteran may control the management and daily operations.

### **Certification**

MP's that meet one or more of the diverse supplier designations above will be required to complete a self-certification form on the website and will be provided the opportunity to upload third party certifications.

APPENDIX C  
FORM OF LETTER OF CREDIT

[LETTERHEAD OF ISSUING BANK]

Irrevocable Standby Letter of Credit No.: \_\_\_\_\_

Date: \_\_\_\_\_

Beneficiary:

Duke Energy Carolinas, LLC  
550 South Tryon Street, DEC40C  
Charlotte, NC 28202  
Attention: Chief Risk Officer

Ladies and Gentlemen:

By the order of:

Applicant:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

We hereby issue in your favor our irrevocable letter of credit No.: \_\_\_\_\_ (“Letter of Credit”) for the account of \_\_\_\_\_ (the “Applicant”) for an amount or amounts not to exceed \_\_\_\_\_ US Dollars in the aggregate (US\$ \_\_\_\_\_) available by your drafts at sight drawn on [Issuing Bank] effective \_\_\_\_\_ and expiring at our office on [*insert date which is one year from issuance*] (the “Expiration Date”), unless terminated earlier in accordance with the provisions hereof or otherwise extended.

Funds under this Letter of Credit are available against your draft(s), in the form of attached Annex 1, mentioning our letter of credit number and presented at our office located at [Issuing Bank’s address must be in US] and accompanied by a certificate in the form of attached Annex 2 with appropriate blanks completed, purportedly signed by an authorized representative of the Beneficiary, on or before the Expiration Date in accordance with the terms and conditions of this Letter of Credit. Partial drawings under this Letter of Credit are permitted.

We hereby undertake to promptly honor your drawing(s) presented in compliance with the terms of this Letter of Credit, up to the amount then available herein, in no event will payment exceed the amount then available to be drawn under this Letter of Credit.

We engage with you that drafts drawn under and in conformity with the terms of this Letter of Credit will be duly honored on presentation if presented on or before the Expiration Date. Presentation at our office includes presentation in person, by certified, registered, or overnight mail.

This Letter of Credit shall automatically terminate on the earliest of the following to occur: (i) the making by you and payment by us of the drawings in an amount equal to the maximum amount available to be made hereunder; (ii) the date we receive from you a Certificate of Expiration in the form of Annex 3 attached hereto; or (iii) the above stated Expiration Date.

Except as stated herein, this undertaking is not subject to any agreement, condition or qualification. The obligation of [Issuing Bank] under this Letter of Credit is the individual obligation of [Issuing Bank] and is in no way contingent upon reimbursement with respect hereto.

This Letter of Credit is subject to the International Standby Practices 1998, International Chamber Of Commerce Publication No. 590 ("ISP98"). Matters not addressed by ISP98 shall be governed by the laws of the state of New York.

We shall have a reasonable amount of time, not to exceed three (3) business days following the date of our receipt of drawing documents, to examine the documents and determine whether to take up or refuse the documents and to inform you accordingly.

Kindly address all communications with respect to this Letter of Credit to [Issuing Bank's contact information], specifically referring to the number of this Letter of Credit.

All banking charges are for the account of the Applicant.

This Letter of Credit may not be amended, changed or modified without our express written consent and the consent of the Beneficiary.

Very truly yours  
[Issuing Bank]

\_\_\_\_\_  
Authorized Signer

\_\_\_\_\_  
Authorized Signer

This is an integral part of letter of credit number: *[irrevocable standby letter of credit number]*

ANNEX 1

FORM OF SIGHT DRAFT

[Insert date of sight draft]

To: *[Issuing Bank's name and address]*

For the value received, pay to the order of \_\_\_\_\_ by wire transfer of immediately available funds to the following account:

*[name of account]*  
*[account number]*  
*[name and address of bank at which account is maintained]*  
*[aba number]*  
*[reference]*

The following amount:

*[insert number of dollars in writing]* United States Dollars  
(US\$ *[insert number of dollars in figures]*)

Drawn upon your irrevocable letter of credit No. *[irrevocable standby letter of credit number]*  
dated *[effective date]*

*[Beneficiary]*

By: \_\_\_\_\_  
Title: \_\_\_\_\_

This is an integral part of letter of credit number: *[irrevocable standby letter of credit number]*

ANNEX 2

FORM OF CERTIFICATE

[Insert date of certificate]

To: *[issuing bank's name and address]*

Duke Energy Carolinas, LLC (the "Beneficiary") is drawing the funds requested under this draft based on the below specified draw condition:

*[check appropriate draw condition]*

[\_\_] [Legal name of bidding entity] (the "Bidder") has withdrawn its proposal in violation of the bidding rules under the Request for Proposals for the Competitive Procurement of Renewable Energy ("RFP") which was issued by [Insert Beneficiary's name] on [insert date of RFP]; or

[\_\_] A proposal submitted by [Legal name of bidding entity] (the "Bidder") has been selected as a winning proposal in the Request for Proposals for the Competitive Procurement of Renewable Energy ("RFP") which was issued by [Insert Beneficiary's name] on [insert date of RFP] and Bidder has failed to execute the *[insert name of required contract]* (the "Agreement") within 90 calendar days of the closing of the RFP; or

[Legal name of bidding entity] (the "Bidder") has received a winning proposal in the Request for Proposals for the Competitive Procurement of Renewable Energy ("RFP") which was issued by [Insert Beneficiary's name] on [insert date of RFP] and has failed to meet the creditworthiness requirements under the *[insert name of required contract]* ("Agreement") or to post performance security as required under the Agreement within 5 business days of the execution of the Agreement.

Duke Energy Carolinas, LLC

By: \_\_\_\_\_

Title: \_\_\_\_\_

ANNEX 3

FORM OF CERTIFICATE OF EXPIRATION

[Insert date of certificate]

To: *[issuing bank's name and address]*

Attention Standby Letter of Credit Unit

Re: irrevocable letter of credit No. *[irrevocable standby letter of credit number]* dated *[effective date]* the "Letter of Credit."

Ladies and Gentlemen:

The undersigned hereby certifies to you that the above referenced Letter of Credit may be cancelled without payment. Attached hereto is the referenced Letter of Credit, marked cancelled.

Duke Energy Carolinas, LLC

By: \_\_\_\_\_

Title: \_\_\_\_\_

Cc: \_\_\_\_\_ [Bidder]

**APPENDIX D  
 FORM OF SURETY BOND**

**SURETY BOND – COMPETITIVE PROCUREMENT OF  
 RENEWABLE ENERGY**

COLLATERAL SECURITY PAYABLE UPON DEMAND

\* \* \* \* \*

*PRINCIPAL / BIDDER (Legal Name and Business Address)*

<i>SURETY (Legal Name and Business Address)</i>	<i>CONTRACT NO.</i>	<i>CONTRACT DATE</i>
<i>OBLIGEE</i>  Duke Energy Carolinas, LLC Attn: Credit Risk Manager 550 South Tryon Street (DEC40C) Charlotte, NC 28202	<i>SURETY BOND EFFECTIVE DATE</i>	
<i>PROPOSAL SECURITY AMOUNT</i>	<i>PENAL SUM OF BOND</i>	

**KNOW ALL PERSONS BY THESE PRESENTS THAT:** PRINCIPAL (herein, “Bidder”) and SURETY are held and firmly bound to [Duke Energy Carolinas, LLC] (“Duke Energy”), a limited liability company organized and existing under the laws of the state of North Carolina, its successors and assigns in the amount of \$[insert Bond Amount] (“Proposal Security Amount”), for the payment of which the Bidder and Surety, their heirs, executors, administrators, successors and assigns are hereby jointly and severally bound.

**WHEREAS,** Bidder has submitted a bid proposal into Duke Energy’s Request for Proposals for the Competitive Procurement of Renewable Energy (“RFP”), which was issued by Duke Energy on [\_\_\_\_\_];

**WHEREAS,** Duke Energy has selected Bidder’s proposal (the “Bid”) for further evaluation in Step 2 of the RFP process (such evaluation referred to herein as the “Step 2 Evaluation Process”) pursuant to the RFP;

**WHEREAS,** Bidder and Surety acknowledge that the RFP process will be delayed and Duke Energy will be harmed if Bidder withdraws the Bid, or if the Bid is selected as a Bid for the Step 2 Evaluation Process and the Bidder does not execute the RENEWABLE POWER PURCHASE AGREEMENT or the ASSET PURCHASE AND SALE AGREEMENT (as applicable, the “Agreement”) associated with the RFP as requested by Duke Energy and/or fails to provide Performance Assurance as required under and as defined in the Agreement; and

**WHEREAS**, Bidder desires to furnish this Bond pursuant to the requirement in Section III of the RFP to provide Proposal Security for a bid selected to continue forward into the Step 2 Evaluation Process;

**NOW THEREFORE**, the condition of this obligation is such that if (i) Duke Energy or the Independent Administrator acting on its behalf notifies Bidder that the Bid has been eliminated from consideration in the RFP, or (ii) Duke Energy subsequently selects the Proposal as a winning Proposal under the RFP and Bidder has executed the Agreement and posted Performance Assurance as required in such Agreement, then this obligation will be null and void; otherwise it will remain in full force and effect, subject to the following additional conditions:

1. Capitalized terms undefined herein will take the meaning or definition provided in the RFP or where indicated, the Agreement. In the event of any conflict between this Bond and the RFP, the terms of this Bond will control.
2. If Bidder withdraws the Bid, or if Duke Energy selects the Bid as a winning Proposal and the Bidder does not execute the Agreement with Duke Energy for the Bid within 90 calendar days of the closing of the RFP or fails to meet the creditworthiness requirements or to post the performance security as required under the Agreement within five (5) business days of the execution of the Agreement, then Duke Energy will issue a demand for payment of the Proposal Security Amount to the Surety (“Demand for Payment”).
3. Surety will, not later than ten (10) days after delivery of a Demand for Payment to the Surety at the address provided below, pay the Proposal Security Amount to Duke Energy. Surety’s obligation for payment of the Proposal Security Amount will be deemed established regardless of the underlying causes for Bidder’s withdrawal of the Bid and irrespective of any other circumstance whatsoever that might otherwise constitute a legal or equitable discharge or defense of the Surety.
4. Bidder and Surety acknowledge that the Proposal Security Amount represents a fair and reasonable pre-estimation of the damages due to Duke Energy under the circumstances existing as of the Surety Bond Effective Date and that such amount represents a reasonable estimate of Duke Energy’s losses in the event of (i) Bidder’s withdrawal of the Bid following its selection for further evaluation in the Step 2 Evaluation Process, or (ii) Bidder’s failure to execute the Agreement with Duke Energy for the Bid if selected as a winning Proposal or failure to provide Performance Assurance as required under the Agreement. The Proposal Security Amount will not be deemed a penalty, and the Bidder and Surety hereby waive and forfeit any right to contest the reasonableness or validity of the liquidated Proposal Security Amount. Duke Energy’s right to recover the Proposal Security Amount will in no way limit its entitlement to other non-monetary remedies to which Duke Energy may be entitled pursuant to the terms of the RFP, the Bond, or applicable law.
5. It is hereby agreed that this obligation is effective beginning on the Surety Bond Effective Date, above, provided that, if this Bond remains in effect after one (1) year following the Surety Bond Effective Date, Bidder may cancel this Bond after such one (1) year period by giving Duke Energy at least forty-five (45) days prior written notice of the cancellation date. Such cancellation notice will be sent by certified mail or by overnight courier with tracking service to:



{Add notice info}

with copy to  
Duke Energy Carolinas, LLC  
Attn: Credit Risk Manager  
550 South Tryon Street (DEC40C)  
Charlotte, NC 28202

Any obligations of the Bidder prior to any such cancellation will survive such cancellation and continue to be a liability of the Surety until paid in full by the Bidder.

This Bond is irrevocable by Surety.

6. Within thirty (30) days following the date of any notice of cancellation of this Bond that is provided to Duke Energy under Paragraph 6, Bidder will provide to Duke Energy a replacement Bond that satisfies the requirements of Section III of the RFP in the amount of the Performance Security required for the pre-COD period. Bidder's failure to provide such replacement Bond in the required timeframe will constitute a default under this Bond and will entitle Duke Energy to issue a Demand for Payment to the Surety for the payment of the Proposal Security Amount.
7. The Surety's liability is limited to the Proposal Security Amount ("Penal Sum of Bond"), unless suit must be brought for enforcement of the within obligations and in which case the Surety will also be liable for all costs in connection therewith, interest and reasonable attorneys' fees, including costs of and fees for appeals.
8. Failure of the Surety to pay the Proposal Security Amount within ten (10) days of Demand for Payment will constitute default of the Surety's obligation under the Bond and Duke Energy will be entitled to enforce against the Surety any remedy available to it.
9. Surety, for value received, hereby stipulates and agrees that no change, modification, omission, addition or change in or to the RFP or the Agreement, and no action or failure to act by Duke Energy will in any way affect the Surety's obligation on this Bond; and Surety hereby waives notice of any and all such modifications, omissions, alterations, and additions to the terms of the RFP or the Agreement.
10. If any part or provision of this Bond will be declared unenforceable or invalid by a court of competent jurisdiction, such determination in no way will affect the validity or enforceability of the other parts or provisions of this Bond.
11. The undersigned Surety and Bidder are held and firmly bound for the payment of all legal costs, including reasonable attorney's fees, incurred in all or any actions or proceedings taken to enforce

this Bond or the obligations created herein, or payment of any award of judgment rendered against the undersigned Surety. Nothing contained herein will be construed to obligate Duke Energy to pay any fees or expenses incurred in connection with the issuance of this Bond.

12. All disputes relating to the execution, interpretation, construction, performance, or enforcement of the Bond and the rights and obligations thereto will be governed by the laws of, and resolved in the State and Federal courts in North Carolina. The rights and remedies of Duke Energy herein are cumulative and in addition to any and all rights and remedies that may be provided by law or equity.
13. The undersigned Surety agent(s) represent that he/she is a true and lawful attorney-in-fact for the Surety and authorized to bind the Surety hereto and to affix the Surety's corporate seal hereunder, as evidenced by the attached power of attorney.

IN WITNESS WHEREOF, this instrument is SIGNED AND SEALED this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

**PRINCIPAL/BIDDER:**

For Bidder: \_\_\_\_\_

Signature: \_\_\_\_\_

(SEAL)

Name and Title: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**SURETY:**

Attorney in Fact: \_\_\_\_\_

Signature: \_\_\_\_\_

(SEAL)

Name and Title: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**AFFIDAVIT AND ACKNOWLEDGEMENT OF ATTORNEY-IN-FACT**

STATE OF \_\_\_\_\_

COUNTY OF \_\_\_\_\_

I hereby certify that I am the attorney-in-fact of \_\_\_\_\_, a [*insert entity type*], which is the surety in the foregoing bond, and that I am authorized to execute on the above Surety's behalf the foregoing bond pursuant to the Power of Attorney dated \_\_\_\_\_ and attached hereto, and on behalf of the Surety, acknowledge the foregoing bond before me as the above Surety's act and deed.

Given under my hand this \_\_\_\_\_ day of \_\_\_\_\_.

\_\_\_\_\_  
*ATTORNEY-IN-FACT*

\_\_\_\_\_  
*PRINT NAME*

(NOTARY SEAL)

APPENDIX E  
**REQUIRED FINANCIAL INFORMATION**

- A. Description of ownership and proposed financing arrangements, including the expected percentage of debt and equity capital that the bidder has committed to secure.
- B. Annual reports for the past three (3) years and any Form 10-K and 10-Q filings since the period covered in the last annual report. If these documents are not available, then audited financial statements for the last three (3) years will be accepted. All financial statements, annual reports, and other large documents may be referenced via a website address. If a bidder has not been in operation for three (3) years, please provide the above information, as applicable, since the commencement of operation.
- C. Dunn and Bradstreet identification number.
- D. Documentation of the bidder's (or parent's if applicable) credit ratings from S&P, Moody's, or Fitch rating services, if rated.
- E. Details related to its banking relationships or liquidity.
- F. Description of plans for acquiring the necessary funds for developing and operating the Facility, including a discussion of the Facility's legal ownership structure, the expected percentage of debt and equity capital that the bidder has committed to secure, and the identity and credit rating or other financial information indicative of the financial strength of firms that are likely to provide such financing.
- G. Any additional documentation needed to determine the bidder's financial strength and the strength of any corporate parents.

**APPENDIX F  
 SAMPLE SCORING SHEET**

Bid Scoring Categories	Bid Score	% of Bid Score	Description	Individual Categories	Maximum Scoring	Section Score
1. Price Score		40%	Includes fixed and variable bid costs	The price score will be calculated on the basis of the bid's projected total cost per MWH	400	400
2. Project Development Criteria		15%	Respondent must show sufficient evidence of ability to provide services included in proposal for the contract term  Evidence of operational capability to provide proposed services	-Demonstrate that permitting will be complete to meet COD -Experience of project team -Project Site control for full term -Site control to POI for full term	25 35 50 50	160
3. Facility Project Characteristics		10%	Evidence of equipment designed to meet specifications	-Equipment to be used -Required control equipment -Quality of project design	30 30 30	90
4. Transmission Characteristics		25%	Interconnection & Transmission Known Cost Risk	Known Interconnection Contingencies	250	250
5. Project Characteristics		4.5%	Value of Project Characteristics	Demonstrates ability to meet performance guarantee and liquidated damages pursuant to the PPA	45	45
6. Historically Underutilized Businesses		.5%	Ownership by Minorities (to be defined)	Ascertain that at least 51% of venture is owned by eligible minority	5	5
7. Credit Worthiness		5%	Financial assurances to meet schedule and milestones in PPA	-Confirms meeting all Duke credit requirements: pass/fail scoring  EXAMPLE -Pass: MP provides acceptable Proposal Security  - Fail: MP does not provide acceptable Proposal Security	50  50  0	50
Total Score		100%			1,000	

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 Dec 28 2021

**APPENDIX G**  
**RECOMMENDATIONS FOR ESTABLISHING NATIVE POLLINATOR HABITAT ON**  
**SOLAR FARMS IN NORTH CAROLINA**

**[See attached document]**



## ☒ North Carolina Wildlife Resources Commission ☒

Gordon Myers, Executive Director

### **Recommendations for Establishing Native Pollinator Habitat on Solar Farms in North Carolina**

Pollinators are a diverse group of animals, including birds, bats, bees, butterflies, moths, beetles and multiple other species of insects. As these animals travel between flowers, they inadvertently distribute pollen that allows for plant fertilization. According to the Pollinator Research Plan, published by the White House in May 2015, pollinators increase the nation's crop values by more than 15 billion dollars annually. Quantifying the value of pollinators in natural systems is a challenge; however, they are vital in the life cycle of plants that play a role in erosion control, water filtration and carbon sequestration. Many pollinators are in serious decline. The Pollinator Research Plan indicated that the number of managed honey bee colonies has dropped from 5.7 million colonies in the 1940s, to 2.7 million colonies, currently. Additional decreases in pollinator species, including wild bees, birds and monarch butterflies, have been documented across the globe.

Solar energy continues to grow in North Carolina and across the country. According to the Renewable Energy Data Book (published by the US Department of Energy), the amount of solar electricity installed capacity in the United States increased by more than 54% in 2014. Compared to other renewable energies, such as hydropower, geothermal and wind, solar energy accounted for more than 48% of total renewable electricity capacity installed. In 2014, North Carolina ranked 4<sup>th</sup> in the nation in photovoltaic cumulative capacity (953 MW). In 2016, North Carolina ranked 2<sup>nd</sup> in the cumulative amount of solar capacity installed (3,016 MW).

It is important to foster the use of renewable, sustainable energies as we enter a future with limited resources. Initially, solar farms were primarily sited on agricultural fields. As the solar farm industry has developed, forested areas are being cleared for use. Agricultural fields and forested lands have value as wildlife foraging areas and habitat. Solar farms can have a positive impact on pollinator decline. By establishing pollinator habitat and encouraging additional habitat restoration and enhancement practices, it is possible to offset the loss of valuable habitat.

The North Carolina Wildlife Resources Commission (NCWRC) offers the following recommendations to establish pollinator habitat on solar farms:

1. There are multiple approaches that can be used for creating pollinator habitat:
  - Plant a short-growing, low maintenance, native or naturalized seed mix underneath and around the panels.
  - Plant a diverse pollinator seed mix in between the rows of panels.
  - Establish and manage buffers (outside of the solar panel area) with vegetation that benefits pollinators and early successional species.

### Pollinator Habitat (Solar Farm) Recommendations

- Plant native shrubs and/or trees along the property boundary (See **Appendix A** for suggested shrubs/trees).
2. When choosing seeds for flowers and grasses, the following parameters should be observed:
  - A minimum of nine species of native flowers should be included; more than nine is optimal.
  - A minimum of two grass species should be included.
  - At least three flower species from each bloom period (early, mid and late) should be chosen: **early**, April-June; **mid**, June-August; and **late**, August-September.
  - **Appendix B** includes a list of companies and local nurseries where seeds and seed mixes may be purchased.
3. The ideal planting window is either the month of October or late April to early May. However, early April to early June is also feasible. Planting can be completed both before and after solar panels are installed. Creating pollinator habitat in already established solar farms is also feasible; site assessments by NCWRC staff at each property will determine the appropriate course of action and suitable seed mixes.
4. Before planting, eliminate existing exotic and non-native vegetation; herbicide application prior to planting may be needed. No-till planting is preferred for establishment to reduce soil erosion potential. If necessary, smooth the area and firm the soil with a cultipacker to ensure seeds are not planted too deeply. NCWRC staff are available for site-specific recommendations and planting guidance.
5. The first year of maintenance will require repeated mowings to eradicate weedy growth. During this first year, mow the site when the weeds have reached 12-18 inches in height. Mow to a 6-8 inch height. Mowing lower than this height may stunt the growth of the pollinator plants. Repeat mowings every time weeds get to an approximate height of 12-18 inches. Once established, maintenance in proceeding years will be greatly reduced.
6. Some form of disturbance, likely mowing, will be needed every 2-3 years to prevent woody vegetation from establishing. Mow only in late winter (or early spring) to alleviate adverse impacts to wildlife; an ideal window is March 1 to March 31. Be aware that it can take 2-3 years to establish pollinator habitat. Spot-spraying unwanted (woody) vegetation may be necessary on an annual basis.
7. Additional wildlife-friendly recommendations include the following: install permeable fencing that will allow passage for herps and small mammals; create brush piles that will provide shelter and potential breeding habitat for numerous species; add bird and/or bat boxes to provide additional shelter. Recommendations for creating bee habitat can be found at [www.xerces.org/enhancing-habitat-for-native-bees/](http://www.xerces.org/enhancing-habitat-for-native-bees/).
8. The United Kingdom Solar Trade Association published a list of 10 Best Management Practices that were compiled by leading solar developers to offer guidance on establishing solar farms with a minimized impact to the natural environment: <http://www.renewableenergyworld.com/articles/2013/08/ten-best-practice-guidelines-for-solar-development.html>

Thank you for the opportunity to provide these recommendations. If I can be of further assistance, please do not hesitate to contact me at (910) 409-7350 or [gabriela.garrison@ncwildlife.org](mailto:gabriela.garrison@ncwildlife.org).



## Pollinator Habitat (Solar Farm) Recommendations

The following sources provided information that was used in this document:

- Minnesota Department of Natural Resources: correspondence with Megan Benage, Regional Ecologist
- North Carolina State University, Biological Control Information Center  
([http://www4.ncsu.edu/~dorr/Habitat\\_Information/Example/habitat\\_example.html](http://www4.ncsu.edu/~dorr/Habitat_Information/Example/habitat_example.html))
- North Carolina Cooperative Extension, Pollinator Conservation Guide  
(<https://growingsmallfarms.ces.ncsu.edu/growingsmallfarms-pollinatorconservation/>)
- USDA/NRCS Conservation Cover: Wildflower Meadow for Wildlife and Pollinators  
([http://plants.usda.gov/pollinators/Conservation\\_Cover\\_Wildflower\\_Meadow\\_for\\_Wildlife\\_and\\_Pollinators\\_327a.pdf](http://plants.usda.gov/pollinators/Conservation_Cover_Wildflower_Meadow_for_Wildlife_and_Pollinators_327a.pdf))
- US Department of Energy, Renewable Energy Data Book  
(<http://www.nrel.gov/docs/fy16osti/64720.pdf>)
- The White House Executive Report: Pollinator Research Action Plan, Report of the Pollinator Health Task Force  
(<https://www.whitehouse.gov/sites/default/files/microsites/ostp/Pollinator%20Research%20Action%20Plan%202015.pdf>)
- The Xerces Society: Establishing Pollinator Meadows from Seed  
(<http://www.xerces.org/wp-content/uploads/2013/12/EstablishingPollinatorMeadows.pdf>)

Pollinator Habitat (Solar Farm) Recommendations

**APPENDIX A**

**Trees and Shrubs:**

Cockspur hawthorn (*Crataegus crus-galli*): early bloomer; maximum height - 35'

Eastern Redbud (*Cercis canadensis*): early bloomer; maximum height - 30'

Highbush Blueberry (*Vaccinium corymbosum*): mid-season bloomer; maximum height - 12'

New Jersey Tea (*Caenothus americanus*): mid-season bloomer; maximum height - 3'

Buttonbush (*Cephalanthus occidentalis*): mid to late season bloomer; maximum height – 12'

Passionflower (*Passiflora incarnata*): mid to late season bloomer; this is a vine suitable for a fenceline.

Pollinator Habitat (Solar Farm) Recommendations

**APPENDIX B**

The following companies can either create a mix of your choice or have pollinator mixes available for purchase:

- Roundstone Native Seed Company: Create your own mix or Southern Pollinator Conservation Seed Mix
- Ernst Conservation Seeds, Inc.: Create your own mix or Mid-Atlantic Pollinator Seed Mix
- Prairie Moon Nursery: Create your own mix or Pollinator-Palooza Seed Mix

The following local establishments can assist with creation of an appropriate native, pollinator mix:

- North Carolina Botanical Garden - Chapel Hill, NC
- Niche Gardens – Chapel Hill, NC
- Mellow Marsh Farm – Siler City, NC
- Cure Farm – Pittsboro, NC
- Big Bloomers Flower Farm – Sanford, NC
- Garrett Wildflower Seed Farm – Smithfield, NC

## APPENDIX H

### CPRE Tranche 3 Resource Solicitation Cluster

For purposes of the administering the Competitive Procurement of Renewable Energy (“CPRE”) Tranche 3 Request for Proposal (“RFP”) Step 2 evaluation process under North Carolina Utilities Commission (“NCUC”) Rule R8-71(f)(3), Duke Energy Carolinas, LLC (“DEC”) will administer a Resource Solicitation Cluster (“RSC”), as provided for in Section 4.4.2 of the North Carolina Interconnection Procedures (“NCIP”) and Section 5.3.2 of Appendix Duke CS to the South Carolina Generator Interconnection Procedures (“SC GIP”).

The RSC shall be studied separately from the 2022 Definitive Interconnection System Impact Study Cluster. The RSC shall respect Queue Position and shall be studied as its own Cluster based upon a Utility-designated Queue Number where DEC acts as authorized representative for the Interconnection Customer(s) in connection with the CPRE Tranche 3 RFP Competitive Resource Solicitation. DEC shall study the Cluster based upon the Queue Number of the RSC relative to the Queue Position of all other Interconnection Requests/Clusters. The Queue Position of the CPRE Tranche 3 RSC shall be established as of February 3, 2022. Phase 1 of the RSC study shall commence after completion of the Transitional Cluster Study (“TCS”) Phase 2 power flow restudy and before Phase 1 of the 2022 Definitive Interconnection System Impact Study (“DISIS”). Any proposal notified by the CPRE Independent Administrator (“IA”) that it is non-conforming or otherwise no longer being considered in the Tranche 3 RFP will have its associated Interconnection Request withdrawn from the RSC and shall lose the Queue Position it held as part of the CPRE Tranche 3 RSC.

#### II. New Interconnection Request during Tranche 3 Bid Window

- a. A CPRE Tranche 3 bidder must first submit an Interconnection Request (“IR”) for the RSC through Duke Energy’s Interconnection Customer Portal linked here [Duke Energy Interconnection Customer Portal](#).
- b. After submitting the Interconnection Request, the bidder will receive a Unique ID in an email that confirms the submission, and then will be issued a Queue Number. The Unique ID or Queue Number will be required information as part of the bid submission on the Independent Administrator’s (“IA”) website.
- c. Each bid proposal will require a new Interconnection Request and will be assigned a distinct Queue Number.
- d. Each Interconnection Request will require an RSC study deposit as established in NCIP 1.5.1.2 and SC GIP Appendix Duke CS 2.1.
- e. Bidders submitting more than one proposal for the same facility proffering different sizing, pricing or technology must submit a new and separate Interconnection Request for each proposal and the corresponding Queue Number for each proposal. Only one variation of the project can be selected by the IA for a Phase 1 study.

### III. Projects Not Selected for Step 2 Evaluation; Option to also Enter DISIS

- a. Projects that the IA releases after the Step 1 evaluation will not be eligible to participate in the RSC and will be withdrawn from the RSC.
- b. Tranche 3 RSC Interconnection Customers may submit a DISIS Interconnection Request (in addition to their RSC IR) at any time during the DISIS enrollment window and elect to be studied in DISIS in the event the Interconnection Customer is withdrawn from the RSC at any point in the RFP evaluation.

### IV. RSC Pre-Phase 1 Customer Engagement

- a. The RSC Customer Engagement Window will begin after the IA completes their Step 1 ranking and will be open for 30 days (approximately April 1, 2022 to April 30, 2022).
- b. Within 10 business days of the Customer Engagement Window opening, DEC will share a scoping document with Market Participants (“MPs”) invited to participate in Step 2 of the RFP with general RSC information including (per NCIP 4.4.1) a list of Interconnection Requests invited to Step 2 for that Cluster, identifying for each Interconnection Request: (i) the location by county and state; (ii) the distribution or transmission substation or transmission line or lines where the interconnection will be made; (iii) cluster being requested; and (iv) the type of Generating Facility to be constructed including fuel type.
- c. During the Customer Engagement Window, a CPRE bidder invited to be studied in the RSC or the DEC T&D Sub Team may also request a separate scoping meeting between the parties.

### V. RSC “M1” Security to enter Phase 1 Study

- a. Prior to the close of the Customer Engagement Window, each Interconnection Customer entering the RSC Phase 1 shall (i) execute a DISIS Agreement for Tranche 3 RSC pursuant to NCIP Section 4.4.5.1; (ii) provide initial security equal to one (1) times the applicable study deposit amount under NCIP Section 1.5.1.2 or SC GIP Appendix Duke CS Section 2.1 to enter the RSC; (iii) provide reasonable evidence of commercial readiness to DEC verifying that the project is offering to sell its output through the CPRE Tranche 3 RFP and has been invited to a Step 2 evaluation.
- b. At the end of the Customer Engagement Window, all RSC Interconnection Requests that meet the foregoing readiness requirements and that have an executed DISIS Agreement shall be included in that RSC Phase 1 Study. Any Interconnection Requests not deemed sufficient pursuant to NCIP Section 1.5.4 or SC GIP Appendix Duke CS Section 1.3.3 at the close of the Customer Engagement Window shall be withdrawn from the RSC.

### VI. RSC Phase 1 Study

- a. The RSC Phase 1 study consists of a power flow and voltage analysis consistent with the DISIS Phase 1 study for projects identified by the IA in Step 1 to enter the RSC that meet the foregoing readiness requirements. During the RSC, the T&D Sub Team may suspend further action on the Interconnection Requests in the Tranche 3 RFP that are not included in the selected combination.
- b. The RSC Phase 1 base case will include the projects that move into the TCS Phase 2.
- c. The RSC Phase 1 study will identify interdependencies among the RSC Phase 1 projects, and provide this information to the IA in order for the IA to rank the projects from most competitive to least competitive.

## VII. Assignment of Costs within the RSC and TCS Contingent Upgrades

- a. RSC Study Costs shall be allocated between Interconnection Customers in the RSC consistently with NCIP 4.4.3 and SC GIP Appendix Duke CS 5.3.3. As per these sections, the administering Utility shall determine each Interconnection Customer's share of the costs of completing the RSC Cluster Study (including general queue administration costs and overheads) by allocating: (1) ten percent (10%) of the applicable study costs to Interconnection Customers on a per capita basis based on the number of Interconnection Requests included in the applicable Cluster; and (2) ninety percent (90%) of the applicable study costs to Interconnection Customers on a pro-rata basis based on requested megawatts included in the applicable Cluster.
- b. If an Interconnection Customer exits the Cluster prior to the Utility commencing Phase 2 pursuant to Section 4.4.7.3 and SC GIP Appendix Duke CS 5.3.7.3 (including where the Utility determines through Phase 1 that a distribution-level System Impact Study should be completed for one or more distribution-level Interconnection Customers in lieu of being evaluated through Phase 2), then the Utility shall determine each Interconnection Customer's costs of preparing for and completing the RSC prior to commencing Phase 2 and shall then separately determine each remaining Interconnection Customer's costs for the remainder of the RSC.
- c. Allocation of Interconnection Facilities and Upgrade Costs within the RSC shall be allocated between Interconnection Customers in the RSC consistently with NCIP 4.4.4 and SC GIP Appendix Duke CS 5.3.4.
- d. Each RSC project that is contingent upon Upgrades identified and assigned to Interconnection Customers in the TCS updated Phase 2 power flow study will have the full cost of those contingent Upgrades included in their RSC Phase 1 system upgrade estimate.

## VIII. Affected System Review in RSC

- a. Any proposals that DEC identifies as needing an Affected System study in RSC Phase 1 will be notified as such and the Affected System will be notified as soon as practicable.
- b. If the Affected System responds by the end of the RSC Phase 1 study and confirms that an Affected System study is not in fact necessary, DEC T&D Sub Team will notify the IA and the proposal may continue to be evaluated. If, however, the Affected System does not respond in time or if it confirms that an Affected System study is warranted, then DEC T&D Sub Team will notify the IA and the proposal will not be eligible to proceed in the RFP and will be withdrawn from the RSC.
- c. If an RSC proposal is contingent on a TCS Affected System study that the T&D Sub Team reasonably determines will not be completed by the end of the RSC Phase 1 study, then the DEC T&D Sub Team will notify the IA and proposal will not be eligible to proceed in the RFP and will be withdrawn from the RSC.

## IX. RSC Phase 1 Report

- a. The results of the RSC Phase 1 System Upgrade cost estimates will be shared with the IA upon completion (approximately July 1, 2022) and a written report will be published on the utility's website within 90 days of the RSC Phase 1 study commencing. The report will include the 100% cost allocation estimates from TCS contingencies and will be redacted as necessary.

- b. The T&D Sub Team will include in the Phase 1 Report the System Upgrades and Interconnection Facilities for the combination of Generating Facilities identified by the IA for Study.

X. RSC Phase 2 and Facilities Study

- a. The day that the IA announces the CPRE Tranche 3 RFP bid winners, the 30-day RSC Customer Engagement Window 2 will commence prior to beginning the RSC Phase 2 study. The day the CPRE Tranche 3 RFP PPAs must be signed is the close of the RSC Customer Engagement Window 2.
- b. The RSC Phase 2 study will commence after the deadline for CPRE Tranche 3 RFP PPAs to be signed, and will continue to follow and align with DISIS timelines and procedures.
- c. RSC Phase 2 studies will no longer assume the 100% allocation of TCS System Upgrades to the remaining RSC projects and will follow the NCIP 4.4.4 and SC GIP Appendix Duke CS 5.3.4 process for allocating System Upgrades. The RSC Phase 2 report will provide the identification of System Upgrades and contingent facilities for the PPA winners.
- d. RSC Phase 2 study cost allocation will follow the NCIP Section 4.4.3 and SC GIP Appendix Duke CS Section 5.3.3 allocation process.

XI. Withdrawal Penalties for RSC Projects Entering Phase 2

- a. If an RSC project withdraws after executing a CPRE Tranche 3 PPA and entering the RSC Phase 2 Study, the applicable withdrawal penalties as set forth in NCIP Sections 6.3.4 and 6.3.5 and SC GIP Appendix Duke SC Sections 5.7.1 and 5.7.2 will apply.

XII. True Up Process for RSC Phase 1 Study Costs

- a. RSC Phase 1 study costs will be trued up 60 business days after the IA announces the bid winners.

