



Jack E. Jirak
Associate General Counsel

Mailing Address:
NCRH 20 / P.O. Box 1551
Raleigh, NC 27602

o: 919.546.3257
f: 919.546.2694

jack.jirak@duke-energy.com

August 15, 2019

VIA ELECTRONIC FILING

Chief Clerk's Office
North Carolina Utilities Commission
4325 Mail Service Center
Raleigh, NC 27699-4300

**RE: CPRE Tranche 2 Stakeholder Meeting Report
Docket Nos. E-2, Sub 1159 and E-7, Sub 1156**

Dear Chief Clerk:

Pursuant to Ordering Paragraph No. 3 of the Commission's July 2, 2019 *Order Modifying and Accepting CPRE Program Plan*, please find enclosed the Report of the Independent Administrator pertaining to the CPRE Tranche 2 Stakeholder Meeting that was held August 7, 2019.

Please do not hesitate to let me know if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read 'Jack E. Jirak', written over a horizontal line.

Jack E. Jirak

Enclosure

cc: Parties of Record

OFFICIAL COPY

Aug 15 2019



**DUKE ENERGY CAROLINAS, LLC
DUKE ENERGY PROGRESS, LLC**

**REPORT OF THE INDEPENDENT ADMINISTRATOR
RE:**

TRANCHE 2 – August 7, 2019 STAKEHOLDER SESSION

DUKE ENERGY CAROLINAS (DEC)

Competitive Procurement of Renewable Energy Program (CPRE)
Request for Proposal (RFP) – 600 MW

DUKE ENERGY PROGRESS (DEP)

Competitive Procurement of Renewable Energy Program (CPRE)
Request for Proposals (RFP) – 80 MW

August 14, 2019

ACCION GROUP, LLC
244 North Main Street
Concord, New Hampshire 03301
Telephone: 603-229-1644
Fax: 603-225-4923
Email: advisors@acciongroup.com
www.acciongroup.com

**Duke Energy Carolinas, LLC (DEC), and Duke Energy Progress, LLC (DEP)
CPRE Tranche 2 Stakeholder Meeting Compliance Report**

On July 2, 2019, the North Carolina Utility Commission ("NCUC" or "Commission") issued an order Modifying and Accepting CPRE Program Plan in Docket E-2, Sub 1159. That order requires Duke Energy Carolinas, LLC (DEC), and Duke Energy Progress, LLC (DEP) (together, Duke) to meet monthly with interested stakeholders to continue discussions with the IA, the Public Staff, and the market participants with the goal of reaching consensus on the documents that will be used in the Tranche 2 CPRE RFP Solicitation and of providing a forum for market participants to gain more detailed information about the solicitation process. Further, Duke shall file reports detailing the status of these discussions on or before July 15, 2019, and every 30 days thereafter until December 15, 2019. Duke hereby submits this report with regards to the stakeholder meeting held on August 7, 2019.

I. Attendance

STAKEHOLDER SESSION PARTICIPATION AUGUST 7, 2019	
Total in Person:	21
Total on Webinar:	71
Total Identifiable Companies:	35
Total Not Identifiable by Company:	6

Attachment A is a list of the firms with representatives either in person or via the webinar.

II. Subjects Discussed

Attachment B is a copy of the presentation made by Accion Group, LLC, the Independent Administrator and Duke.

III. Areas of Agreement, Disagreement, and Open for Discussion

Attachment C is a list of all questions posed during the Stakeholder session. Written responses to each will be posted on the IA Website. The meeting was conducted as an information session with an open discussion without identified issues to be agreed to by the participants.

ATTACHMENT A

Attachment A: Firms with Participants - August 7, 019 Stakeholders Session	
Accion Group (IA)	Fox Rothschild
Adani Group	GreenGo Energy US
Avangrid	Invenergy
Birdseye Energy	Kilpatrick Townsend
Carolina Solar Energy	Navigant
Chambers for Innovation	NCUC Public Staff
Clearway Energy	Neoen
Crisp Law	NextEra Energy
Cypress Creek Renewables	Office of Regulatory Staff SC
Dave Ball Economics	Orion Renewables
Doman Engineering	Pine Gane Renewables
Duke Energy	Pure Power
EDF Renewable Energy	RAD
Energy NC	S2 Solar
Eon	Solarpack
Exoplexus	Suzlon
First Solar	VivoPower
Florida Power and Light	

ATTACHMENT B

Duke Energy – Competitive Procurement of Renewable Energy (CPRE) – Tranche 2 Stakeholders Session



August 7, 2019



Agenda

- Introduction by Independent Administrator
- Tranche 2 MW and Schedule
- Review of Tranche 1
 - IA Report
 - Results
- Interconnection Discussion
- Storage Protocols for Tranche 2
- Q&A

2



3



Independent Administrator Introduction

- IA conducting the session as required by the NCUC
 - This session is opportunity to discuss CPRE w/in NCUC Rules
 - Tranche 2 open: Until end of Step 2, Duke will not have direct exchanges with bidders re CPRE
- To ask questions, use the "Q&A" feature on the webinar control panel
 - Follow up questions encouraged during webinar
 - Use Q&A on RFP website to ask questions > webinar and < bid date
- Written responses to all questions will be posted on RFP website
 - Written responses should be used when preparing Proposals
- Webinar materials will be posted on the RFP website

3



Standards of Conduct

- Duke Evaluation Team separated from DER Proposal Team and DEC/DEP Proposal Team
 - Separate T&D Sub-Team
 - All communications between Duke teams via IA website
- Separation Training provided to all Duke personnel
- IA controls access to all Proposal data
- IA will provide Duke Evaluation Team final ranked Proposals
 - After Step 2 imputing T&D cost estimates
- Separation protocols in place throughout Tranche 2

4





CPRE Overview

- NC G.S. § 62-110.8(a): Electric public utilities shall file for Commission approval a program for the competitive procurement of renewable energy and capacity in a manner that ensures continued reliable and cost-effective electric service
- Resources up to 80 MWs in size will be selected for a 20-year term
- Renewable energy facilities eligible to participate include those facilities that use renewable energy resources identified in G. S. § 62-133.8(a)(8), the REPS statute:
 - Solar
 - Wind
 - Hydropower
 - Geothermal
 - Biomass
 - Animal waste

5



Tranche 1 MW's and Schedule

- Size of Solicitation
 - DEC ~600 MW
 - DEP ~80 MW
- Tranche 1 Schedule

Milestone	Due/End Date
Draft solicitation documents published	5/11/2018
RFP window closes – deadline for submission by all other participants	10/08/2018
Step 1 and Step 2 Evaluations completed	4/01/2019
Notify winning bidders	4/09/2019
Contracting period ended (90 days)	7/08/2019

6



Tranche 2 MW's and Schedule

- Size of Solicitation
 - DEC ~600 MW
 - DEP ~80 MW
- Tranche 2 Proposed Schedule

Milestone	Due/End Date
Draft solicitation documents published	/ / 2019
RFP window closes – deadline for submission by all other participants	12/16/2019*/
*/ NCUC Order = Sunday 12/15/2019. Submissions due next business day	
Target for Step 1 and Step 2 Evaluations completed	5/01/2020
Notify winning bidders	5/09/2020
Contracting period ended (90 days)	08/06/2020

7

Q&A



IA Tranche 1 Final Report



IA Tranche 1 Final Report

600 MW DEC Request for Proposals

- 58 proposals ranging from 7 to 80 MW-AC totaling 2,733 MW (median 50 MW)
- All proposals were solar, 3 included storage
- 1,416 MW proposed in NC, 1,317 MW in SC
- 11 projects were contracted totaling 465 MW
 - 9 in NC totaling 415 MW, 2 in SC totaling 50 MW
 - 2 projects included battery energy storage

80 MW DEP Request for Proposals

- 20 proposals ranging from 7 to 80 MW-AC totaling 1,231 MW (median 75 MW)
- All proposals were solar, 1 included storage
- 617 MW proposed in NC, 614 MW in SC
- 2 projects were contracted totaling 86 MW
 - 1 in NC totaling 79 MW; 1 in SC totaling 7 MW

10

- IA conducted all evaluations & selected winners
- Evaluation process
 1. Confirmed bids & “cure” opportunity for errors by bidders
 2. “Step 1 Evaluation”: Rank proposals based on net benefit to system
 - a. Primary Competitive Tier (most competitive projects)
 - b. Competitive Tier Reserve (less competitive projects)
 - c. Released Proposals (not competitive)

*NOTE: Bidders posted “Proposal Security” to be in Competitive Tier

Primary Competitive Tier Proposals -- CPRE Tranche 1			
	Total MWs	Average Price Decrement below Avoided Cost	Average Net Benefit
DEC	1270.22	12.36	9.94 \$/MWh
DEP	469.52	14.01	10.35 \$/MWh

3. “Step 2 Evaluation”: transmission study imputed estimated upgrade costs to each of the Primary Competitive Tier proposals

11

Interconnection Discussion



Interconnection

- Facilities must directly connect to the DEC or DEP System and in the case of PPA Proposals and Asset Acquisition Proposals:
 - Have obtained a queue number under the North Carolina Interconnection Procedures ("NCIP") or the South Carolina Generator Interconnection Procedures ("SC GIP") to interconnect to the DEC or DEP transmission/distribution system
- OR
 - Where Facility previously submitted a FERC-jurisdictional interconnection request, a Jurisdictional Interconnection Transition Request Form must be submitted
- Facilities bidding into the DEC RFP must connect to the DEC system and facilities bidding into the DEP RFP must connect to the DEP system
- PPA pricing must include all project costs to the Point of Interconnection, including the cost to directly connect to the existing DEC or DEP transmission/distribution system
- Costs of transmission/distribution grid improvements and upgrades **should not** be incorporated in the respondent's PPA price
 - These costs will be assessed by the T&D Evaluation Team in Step 2 of the evaluation process. IA will impute upgrade costs to Proposals
 - The IA will oversee this process to determine that all bidders are treated fairly & will verify all transmission/distribution cost estimates

13



Interconnection – FERC to State Queue

- Interconnection Request Transition from FERC to State Queue
 - Proposals certified as QFs contracting to sell full output to interconnected utility at POI are state-jurisdictional interconnections as matter of law
 - Asset Acquisition and PPA Proposals that previously submitted a FERC-jurisdictional interconnection request must complete the Jurisdictional Interconnection Transition Request Form by the Proposal due date
 - IA has posted this form to the RFP website
 - Projects transitioning to State queue via this process will maintain their Queue Position priority established under the OATT Procedures if unsuccessful in CPRE
 - Additional interconnection studies may be required upon transition to State queue, including opting in to System Impact Grouping Study

14



Interconnection – Tranche 1 DEC Locations

- Several MPs proposed non-late stage facilities in areas that were identified as constrained.
- Figure 33 for DEC Proposals in constrained areas.
- Figure 34 shows all winning Proposals in DEC.
- The winning Proposals were outside of the constrained areas.

Figure 33

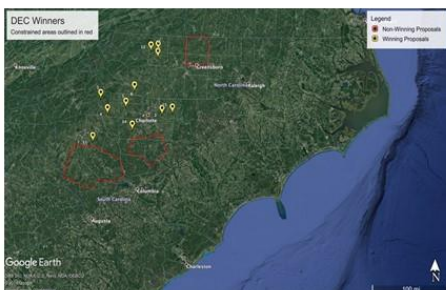
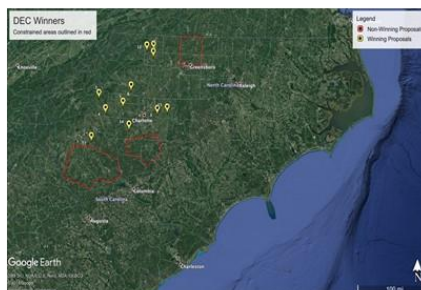


Figure 34

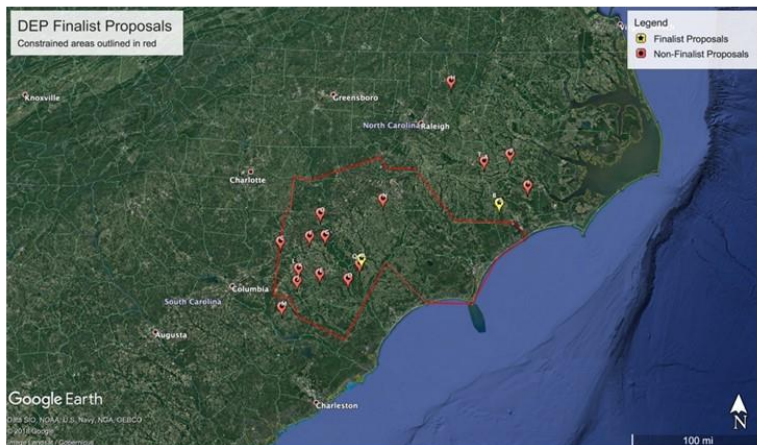


15



Interconnection – Tranche 1 DEP Locations

- Figure 35 – One successful DEP Proposal will interconnect at transmission-level service.
 - This was a late stage project.
 - Located outside of the constrained areas.

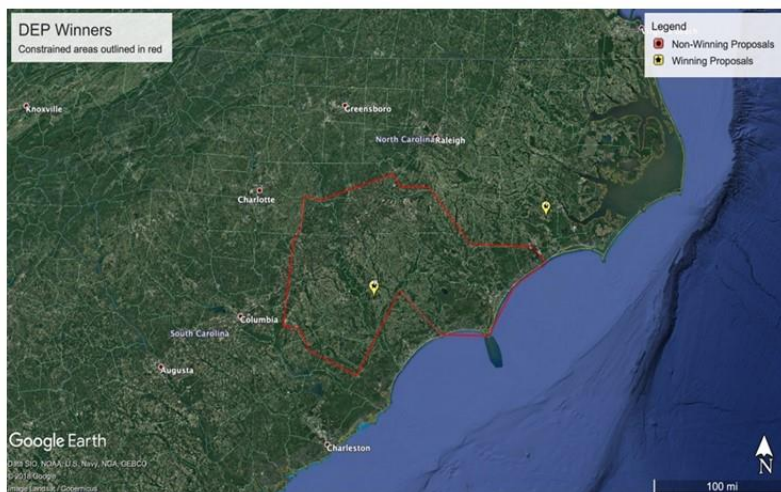


16



Interconnection – Tranche 1 DEP Locations

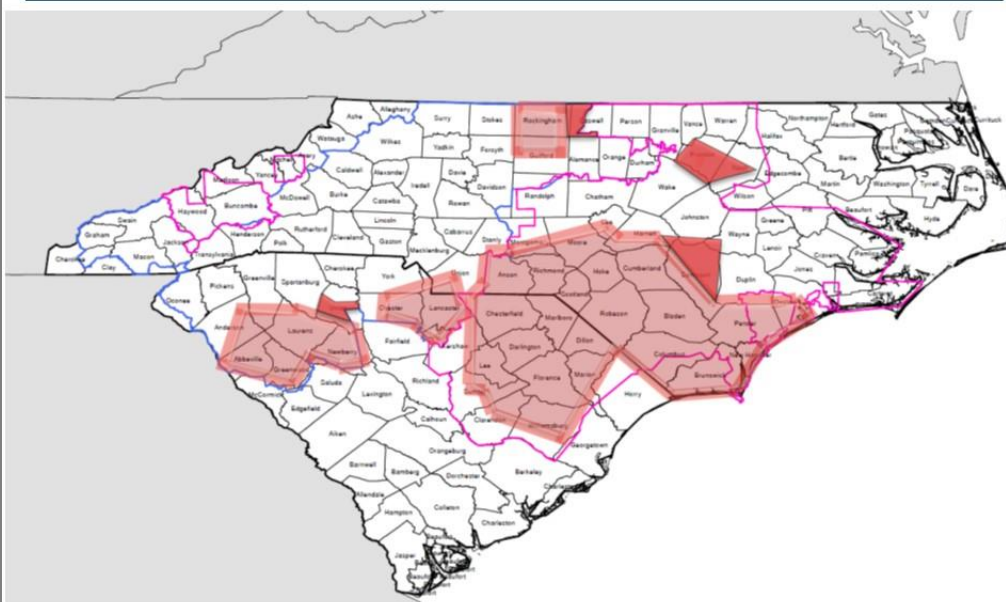
- One distribution-level project: 7.02 MW
 - In constrained area



17



Tranche 2 Grid Locational Guidance



18



Grid Locational Guidance

- Expanded locational guidance posted on IA website
 - Document page “Locational Guidance” folder
- DEP & DEC Generator Requirements and Locational Guidance
- DEP Constrained Infrastructure
- DEC Constrained Infrastructure

19

Q&A



Storage Protocols for Tranche 2



Energy Storage Key Provisions

- Proposals with storage eligible for Tranche 2
- May bid project with and without storage, as two separate Proposals
 - These proposals will require separate Interconnection Requests and separate queue numbers
- All storage Proposals must include 8760 with and without storage
- Energy storage devices must be on the DC side of the inverter and charged exclusively by the Facility
- Storage devices will not be directly controlled or dispatched by DEC or DEP
 - Subject to Duke curtailment protocols

22



Tranche 2 Storage Protocols

Steps Taken to Develop Tranche 2 Protocols

- Developed updated Tranche 2 Storage Protocols using Sub 158 Protocol as starting point
- Evaluated Updates to Tranche 1 Protocols as result of 5/23/2019 NCUC CPRE Technical Conference
- Streamlined the requirements in Tranche 1 to conform to the new rate periods
 - (Sub 158 avoided cost proposal)
- New rate periods provide proper price signal for MPs in discharging storage

23



Key Changes to Tranche 2 Storage Protocols

Ramp Rates

- Duke considered stakeholder requests to relax ramp rate limitations
- Proposed updated language eliminates storage ramping limitation when ramping is used to mitigate the Solar Integration Services Charge (SISC)
- Allowable ramp rate increased to 10% when ramping is **not** used to mitigate SISC
 - Applied on a per minute basis
- 10% ramp rate limit applies in all circumstances, except when storage used to mitigate SISC
 - Tranche 1 restrictive ramp rate (1%) eliminated
 - Sub 158 5% standard offer restrictive ramp rate eliminated

24



Q&A



Q&A

- You may continue to submit written questions through the IA Website
- Written answers to questions will be posted to the IA website
- Responses provided during this webinar are preliminary only
 - Written responses posted on the RFP website are to be used in preparing bids

28

ATTACHMENT C
AUGUST 7, 2019 STAKEHOLDER SESSION
SUBJECTS DISCUSSED

- 1) On page 26 of the report there was discussion of a capacity benefit that seemed to suggest there was some type of scoring benefit that was assigned to projects based on whether they delivered more energy on-peak rather than off-peak, and if that was the case from the published protocols I didn't understand that and can you elaborate on that?
- 2) Do those correspond to the on-peak hours in the avoided cost task or is it some different set of hours?
- 3) There was a single decrement that bidders bid against all three rate periods, is that right?
- 4) From a pure cost standpoint, regardless of which hour the energy is delivered at the savings relative to avoided cost would be the same, right?
- 5) Was there some way in which a project that delivered more hours on-peak got a scoring boost relative to one that delivered fewer hours on peak?
- 6) What is the rational for eliminating a point of interconnection that would be from a co-op that was connected to Duke's high voltage system? Is there any rational as to why those projects are eliminated from the CPRE? It looks like there is a screen that you have to be connected to Duke's system, and my question is what is the rational for doing that if someone could connect on a co-op system and basically get some degree of transmission rights to Duke's system to deliver power, that is the question what is the rational for eliminating that opportunity?
- 7) Am I right in thinking that all of the successful projects still have to get an individual system impact study and facility study before they can get an interconnection agreement? How far did the interconnection study process go for the purposes of scoring the bids as opposed to what remains to be done post-award? So, there is a lengthy interconnection study process several steps leading to an interconnection agreement, and my understanding has been that what was set up was a preliminary study to get a ballpark number for the purposes of scoring, but it didn't go as far as a system impact study for each project.
- 8) Can you clarify or confirm whether fiber communication costs were included in network upgrade impeded onto individual bids or was that treated separately?
- 9) Can you clarify what each did (DEC v. DEP)?
- 10) Where can we get the information that shows what is included and excluded for each one of the different service stations?
- 11) In particular we have seen where I believe DEC has applied a requirement to use OPGW which is the most expensive and robust fiber solution, but it is possible for a developer to negotiate a third-party solution that is much cheaper. We didn't know where in the CPRE process that opportunity is given to negotiate a less costly solution or is the most expensive solution automatically applied?

- 12) When you mention the LGIA, if the project already has that executed, I understand in CPRE 1 that was deemed a late staged proposal that warranted special treatment of that project within the evaluation. Is that expected to be repeated?
- 13) So, what would that mean for a project that already has a LGIA executed, does that mean those costs now displaced by whatever comes out of the CPRE process and the T/D analysis there?
- 14) I had not understood that when we were negotiating around late stage that it referred to pre-executed IA status, I never understood that an executed IA would be undone through this process. I agree with you no late stage and what we negotiated in tranche 1 were projects that were through system impact studies or various stages pre-IA. I could be wrong, but I had not understood that a project had an executed IA that the project would be voided.
- 15) In Tranche 2 if there is a project in the constrained area should we assume it won't prevail?
- 16) Do you have a specific definition of constrained area? Is there specifically a line loading threshold that is met to get that constrained area?
- 17) If I understand it correctly the level of loading currently is considered before the defacts is applied, so if the line is already above the threshold considered constrained you don't even do the defacts test correct?
- 18) Is there a specific line-loading that is used as a specific benchmark?
- 19) Since you bring up the base case, is there going to be an opportunity to discuss what the IA deemed to be a bloated base case in round 1 and hoping to address that for round 2?
- 20) Can you recap what happened at the technical session?
- 21) With regards to the defacts, you mentioned that anything that has a three person defacts on the constrained area is to be considered as a network upgrade. I wanted to confirm how the three person defacts is considered with respect to the percentage overloading of the line?
- 22) How do you define if the facility is constrained? Based on my understanding it does show that a network is disregarded if it loads the line over 100%, but the three person defacts should be associated with the loading of the line and how much it is increasing the loading of the line. I just wanted to understand if that was taken into consideration and if at all my understanding is different from what is considered for the CPRE evaluation?
- 23) Once you added the base case project were there any impacts on the constrained facilities that you had released previously. Did they increase the loading on the constrained facilities more once all the projects were added to create the base case?
- 24) Could you provide an estimate over how many megawatts were added in the base case?
- 25) The difference between the original guidance map and the new map what are the new projects incorporated into the new map or was there a difference in the date cut off when the analysis was done?
- 26) If I look at the report from October 2018 and center all the projects that have facilities that are either in progress or completed up to construction commercialization date declared, I can see a total 2,000 MW of projects in the queue that are all like 2 or 4 queue projects. How can we

differentiate which projects had participated into CPRE, which were left out, which participated in state projects and which did not?

- 27) Is that implied that some decision has been made that a service integration charge has been applied to tranche 2?
- 28) What are we going to do in Tranche 2 from the standpoint of allowing storage to offset the solar integration charge and have the ability to shift energy?
- 29) Is the storage ramp rate applied to the storage capacity, the facility capacity or the combined facility capacity?
- 30) What if we have solar + Storage AC coupled project with an AC recloser that restricts the battery being charged from the grid? Does this still conform with the storage requirements?
- 31) It allows for two separate requests but allows for two separate interconnection requests to go along with each bid. Will those be considered in separate scenarios if you are trying to submit both bids?
- 32) You are not required to put in both bids correct?
- 33) If you wanted to submit both requests to CPRE, it sounds like if you submit two interconnection requests you would study the first one and then the second one, but you couldn't study the second one without assuming the first one doesn't exist?
- 34) Is the pricing for solar and storage approved, and have we released it?
- 35) Has the IA thought about adding a section in information only that would make sure a follow up could be provided to the commission for future decision making as to how the pricing could work in the future? I am recognizing the fact there is no rule for the type of product that was being proposed, but one in which had a great deal of interest in debate. I think there is an opportunity for the IA to build some fact base into this process. What would be the process to get that Information only queue into the bid process?
- 36) Can the IA collect the data and, on an information, only basis not apply it in our evaluation of the tranche 2 proposals, but create a benchmark that we can provide to the commission for their edification and better understanding of this issue?
- 37) My recollection is that the commission asked Duke to provide a 20-year avoided cost rate, which would be applicable for CPRE tranche 2 based on Duke's proposed avoided cost rate. Has that been done?
- 38) Is the energy storage cannot be discharged other than during "Capacity" hours?
- 39) Given that Duke has substantial curtailment and dispatch rights on the CPRE and PPAs have you considered whether that would be sufficient to avoid the integration charge?
- 40) Is it the intention to make an integration charge applicable to tranche 2?
- 41) The 20-year estimated pricing filed by Duke in the avoided cost docket. The filing was confidential. Can it be made public or shared with potential MPs?
- 42) How has the process looking at the impact of storage impact to the transmission restraints i.e. if there is a significant amount of storage and if their generator can absorb their impact during an

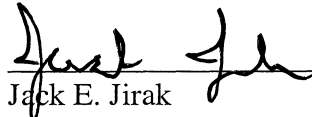
event the question would be whether or not the transmission constraint exists anymore, so how does this process look at the benefit of storage in impacting and lowering transmission constraints in particular it will have a significant benefit for those projects located in areas where there are known concerns?

- 43) I believe that leaves an open gap that we are looking at it in a binary view. That the actual transmission constraint that would be normal without storage would be the same with storage in terms of impact. I am asking you to consider whether there is any actual benefit from storage as to whether or not there is transmission constraints?
- 44) What is the concrete date we would project as to having a more complete set of storage proposals when people can start looking at and planning for their RFP's?
- 45) The commission did not explicitly rule out a ruling of a narrowing of the base case, can you clarify what is your interpretation of the NCUC direction regarding the base case?
- 46) Are you planning on performing a contingency analysis in tranche 2 and removing some projects?
- 47) In tranche 1 you just removed the large gas plants and duplicate projects so is that going to be your approach here as well?
- 48) Will Duke be opening the group study queue position when the RFP opens or upon RFP closure?
- 49) Can you share information on what generation was dispatched for the step 2 T/D analysis, was only the existing generation, that was in the model, dispatched or was the generation added to create the base case dispatched as well for the T/D evaluation? How was the generation dispatch studied or performed?
- 50) What generation was dispatched down to include the additional resources added in the model. Was there any process that was followed or any generation existing in the model close to the solar resource was dispatched down or was there a different process that was followed?
- 51) Have you made a decision as to how you are going to deal with the issue of Duke not being able to post Bid bonds in tranche 2?
- 52) What are the avoided cost prices for CPRE Tranche 2?

CERTIFICATE OF SERVICE

I certify that a copy of Duke Energy Progress, LLC's and Duke Energy Carolinas, LLC's CPRE Tranche 2 Stakeholder Meeting Report, in Docket Nos. E-2, Sub 1159 and E-7, Sub 1156, has been served by electronic mail, hand delivery or by depositing a copy in the United States mail, postage prepaid to parties of record.

This the 15th day of August, 2019.

A handwritten signature in black ink, appearing to read "Jack E. Jirak", is written over a horizontal line.

Jack E. Jirak
Associate General Counsel
Duke Energy Corporation
P.O. Box 1551/NCRH 20
Raleigh, North Carolina 27602
(919) 546-3257
Jack.jirak@duke-energy.com