

**STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH**

DOCKET NO. E-2, SUB 1159
DOCKET NO. E-7, SUB 1156

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of)	COMMENTS OF THE CPRE INDEPENDENT
Joint Petition of Duke Energy)	ADMINISTRATOR (ACCION GROUP, LLC)
Carolinas, LLC, and Duke)	REGARDING REVISIONS TO COMMISSION
Energy Progress, LLC, for)	RULE R8-729(f)(3)
Approval of Competitive)	
Procurement of Renewable)	
Energy Program)	

On May 23, 2019, the North Carolina Utilities Commission ("Commission") conducted a Technical Session regarding the Competitive Procurement of Renewable Energy Program ("CPRE") Tranche 2. During the session Accion Group, LLC, the Independent Administrator of CPRE, committed to provide written responses to a number of questions. Those questions and responses are provided herein.

Question 1: Commissioner Mitchell: How many bids were Late Stage?

Answer: 3 in Duke Energy Carolinas ("DEC") and 1 in Duke Energy Progress ("DEP")

Question 2: Commissioner Clodfelter: What is the pricing after the 20-year term?

Answer: The IA understands that, pursuant to Commission Rule R8-71(l)(4)
... Any market-based rate for either utility-owned or non-utility owned facilities shall not exceed the electric public utility's avoided cost rate established pursuant to G.S. 62-156.

Accordingly, the IA made no assumptions for rates to be paid to Duke or any MP after the expiration of the 20-year period.

Question 3: Commission Staff: Did any of the storage proposals have battery discharge between 6 – 7 am in the winter?

Answer: The IA believes this information to be confidential at this time. The response is being provided to the Commission as CONFIDENTIAL ATTACHMENT 1.

Question 4: Commission Staff: What is the distribution of the \$5 million grid upgrade costs among the winners?

Answer: The following Table 1 provides the aggregated grid upgrade cost information. Table 2 provides the individual grid upgrade costs for the successful bids. Please note that the information is provided without identifying the projects or the identity of the bidders.

TABLE 1
WINNERS (13 DEC; 2 DEP)

	DEC	DEP
TOTAL	\$5,124,000	\$79,000
AVERAGE	\$427,000	\$39,500
MAX	\$832,000	\$79,000
MIN	\$192,000	\$0

Table 2
INDIVIDUAL SYSTEM IMPACT
WINNING BIDS (anonymized)

DEC	
BID	Minimum T&D Cost
DEC_00-01	\$ 450,000
DEC_01-01	\$ 725,000
DEC_02-01	\$ 450,000
DEC_03-01	\$ 832,000
DEC_04-01	\$ 225,000
DEC_05-01	\$ 225,000
DEC_06-01	\$ 450,000
DEC_07-01	\$ 450,000
DEC_08-01	\$ 450,000
DEC_09-01	\$ 192,000
DEC_010-01	\$ 450,000
DEC_011-01	\$ 225,000
DEP	
BID	Minimum T&D Cost
101-1	\$ 79,000
102-1	\$ 0

Question 5: Commission Staff: Provide data by project of the total \$230 million grid upgrade costs (if all projects were selected)?

Answer: Table 3 provides the requested information.

TABLE 3
ALL PROPOSALS (57 DEC; 19 DEP)

	DEC	DEP
TOTAL	\$235,046,394	\$253,379,000
AVERAGE	\$8,705,422	\$42,229,833
MAX	\$44,000,000	\$89,700,000
MIN	\$192,000	\$0

Question 6: Commission Staff: Provide list of storage uses.

Answer: Below is the list of Storage Products and Attributes provided by the IA during the recent Stakeholders' Meetings. The list was compiled from the IA's experience in other jurisdictions.

1. Load Following: Production Shifting

- Facility that adjusts output in coordination with demand. Produces only enough power to meet demand.

2. Distributed Storage to Avoid Transmission Investment

- Locate storage at distributed locations to meet peak needs

3. Spinning Reserve

- On-line reserve capacity synchronized to the grid that can respond within 10 minutes to compensate for shortfalls

4. Non-Spinning Reserve

- Off-line generation capacity that can be synchronized to grid within 10 minutes to compensate for shortfalls

5. Fast Start/Fast Ramping

- Facility that can stop and start on command.

6. Volt-Ampere Reactive (Var) Support

- Solar and Wind produce low to no reactive power. Hence, support is needed to produce reactive power to maintain voltage stability

7. Voltage Regulation

- Battery storage systems used to solve voltage rise during peak PV generation as well as voltage drop while meeting peak load

8. Generation Efficiency

- Use storage for short-term needs (peaking & other)
- Avoid Start Up costs of higher cost generation

9. Maximize Low Cost Units

- Avoid shut down of low-cost units by charging batteries

10. Frequency Regulation

- Energy storage to regulate AC frequency

