

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

