DOCKET NO. SP-9590, Sub 0 DOCKET NO. E-2, Sub 1159 DOCKET NO. E-7 Sub 1156

# Exhibit B Independent Administrator's Report Conclusion of Tranche 2 Step 2 Evaluation and Selection of Proposals

Docket No. E-7, Sub 1156 Docket No. E-2, Sub 1159



# INDEPENDENT ADMINISTRATOR'S REPORT

# **DUKE ENERGY CAROLINAS (DEC)**

Competitive Procurement of Renewable Energy Program (CPRE)- Tranche 2
Request for Proposals (RFP)

# **DUKE ENERGY PROGRESS (DEP)**

Competitive Procurement of Renewable Energy Program (CPRE)- Tranche 2
Request for Proposals (RFP)

# CONCLUSION OF TRANCHE 2 STEP 2 EVALUATION AND SELECTION OF PROPOSALS

August 11, 2020

Submitted by:

ACCION GROUP, LLC 244 North Main Street Concord, New Hampshire 03301 advisors@acciongroup.com

# **CONTENTS**

l.	EXECUTIVE SUMMARY	. 1
	DISCUSSION	
	SUMMARY OF SELECTED PROJECTS	
	SUMMARY OF EVALUATION PROGRESSION	
	SUMMARY OF LOCATIONS	
	SUMMARY OF ELIMINATED PROPOSALS	
	SUMMARY OF PARTICIPATION BY DEC/DEP PROPOSAL TEAM and DER	
	SUMMARY OF PRICE SCORING PROCESS	
	CONCLUSION	

#### I. EXECUTIVE SUMMARY

On July 17, 2020, the Independent Administrator ("IA") for the Competitive Procurement of Renewable Energy Program ("CPRE") completed the evaluation of Proposals for Tranche 2 for both Duke Energy Carolinas ("DEC") and Duke Energy Progress ("DEP") (collectively "Duke"). On that date the IA delivered to the Duke Evaluation Team the best ranked Proposals. This ends the Tranche 2 RFP evaluation process. In light of the due diligence screening performed by the IA, it is expected Duke will complete the execution of a Renewable Power Purchase Agreement ("PPA") with each successful Market Participant ("MP") within the permitted 90-day period.

Summaries of the Tranche 2 process and of the final selections are provided herein. Because PPAs have not been finalized, the identity of projects and the successful MPs are not disclosed at this time. Project information and the identity of the successful MPs will be included in the final Tranche 2 report that will be presented after the contracting period is concluded. None of the Proposals selected as finalists included storage facilities.

In DEC, the average price decrement submitted by the MPs for the selected Proposals is 5.41 \$/MWh. In DEP, the winning Proposal bid a price decrement to the published avoided cost, but such price decrement (along with certain other DEP specific Proposal information) is not being disclosed herein due to the need to maintain confidentiality. The IA estimated the total nominal savings achieved through the competitive solicitation process, when compared with the estimated avoided cost over the full CPRE PPA 20-year term, of approximately \$103 million of savings for DEC and DEP customers.

### II. DISCUSSION

A total of 107 MPs registered to participate in the program for either DEP or DEC, and seventeen (17) submitted at least one Proposal. For DEC, 34 conforming Proposals were received <sup>1</sup> for a total of 1,710 MWs, and for DEP six (6) conforming Proposals were received for a total of 441 MWs. All of the submitted Proposals used solar photovoltaic (PV) technology; four (4) included battery energy storage.

MPs for four (4) of the Proposals declined to provide the required Proposal security when advanced to the Competitive Tier, thereby effectively withdrawing from the CPRE Tranche 2. At the conclusion of Step 2, the IA identified eleven (11) Proposals offered to DEC that Duke should consider for PPAs. For DEP, the 80 MW goal was satisfied with one 75 MW Proposal that had positive net benefits in the IA evaluation after including the Step 2 T&D system upgrade costs. For DEC, the 600 MW goal was satisfied with the 11 best ranked Proposals for a total of 614 MW. Nine Proposals had positive net benefits in the IA evaluation after including the Step 2 T&D system upgrade costs. Two Proposals had negative net benefits in the IA evaluation, however, each of their assigned upgrade costs were below their calculated maximum allowable T&D upgrade costs and they remained eligible for selection. The maximum allowable T&D upgrade costs are based on the Proposal's price decrement below the 20-year levelized Avoided Cost

<sup>&</sup>lt;sup>1</sup> As shown below, 37 Proposals were initially submitted, but three were determined to be non-conforming and not included in the evaluation process.



rates identified in the RFP. For further explanation, please see IA Document "20200228 CPRE IA EVAL PROCESS" in the Documents folder of the CPRE website.

The IA estimates that the capital cost of transmission system upgrades for the finalist DEC and DEP Proposals will be approximately \$18 million.

Employing knowledge from our nation-wide practice, the IA estimates the investment in solar projects, excluding land costs, to be \$1 million - \$1.5 million/MW. Therefore, the IA estimates that the successful Proposals, if they are completed, will result in capital investments of:

**Estimated Capital Investment of Selected Projects** 

Solar Investment	DEC (614 MW)	DEP (75 MW)
\$1 million/MW	\$614 million	\$75 million
\$1.5 million/MW	\$921 million	\$113 million

The IA believes the Tranche 2 solicitation was fairly conducted, with all MPs having access to the same information at the same time. Proposals for either Duke Energy Renewables, Inc. ("DER") or DEC/DEP Proposal Team were evaluated in the same manner as all other Proposals.

#### III. SUMMARY OF SELECTED PROJECTS

Eleven (11) Proposals were selected as finalists for DEC. As depicted in Figure 1, the projects ranged from 25 MW to 75 MW for a total of 614 MW. None of those selected Proposals included storage.

One 75 MW Proposal was selected as a finalist in DEP. The RFP established that up to 80 MW would be selected, with the possibility of selecting finalist Proposals up to 10% above or below that amount. The selected Proposal did not include storage.

Figure 1
Summary of Selected Proposals

(NOTE: MW sizes rounded)

Tanche 2 Finalist Proposals: Size

\*\*DEC \*\*DEP

\*\*DEC \*\*D

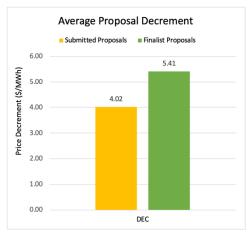


#### IV. SUMMARY OF EVALUATION PROGRESSION

The online Proposal form required MPs to present pricing in the form of a price decrement to the respective DEC or DEP levelized Avoided Cost for each of the pricing periods. The evaluation process calculated the net benefit each Proposal would provide to Duke's customers, after assessing system upgrade costs, if any, to each project. <sup>2</sup> While the MPs priced their Proposals by setting a decrement to Avoided Cost in each Proposal, the decrement was not determinative of which Proposals would provide the most value. The determination of project value included estimation of the transmission system upgrade costs, and the calculation of the net benefit of each Proposal that was included in Step 2 evaluation. The transmission system upgrade cost for each Step 2 Proposals was imputed to the Proposal.

Figure 2 presents the difference between the average decrement of all conforming submissions in DEC, and the average decrement after Proposals withdrew or were eliminated. For DEC, the average net benefit of all conforming Proposals in Step 1 (before T&D system upgrade costs) was 3.29 \$/MWh. The selected finalists for DEC have an average net benefit after Step 2 (including T&D system upgrade costs) of 3.34 \$/MWh.

Figure 2
Average Decrement Proposed - DEC



Tranche 2 included the opportunity for MPs to include storage in Proposals. Proposals with storage were required to include production profiles for the project (8760 hours/year for the 20-year term), both with and without storage. The IA used these profiles to determine whether the MP reasonably projected the use of storage. The production profiles with storage were used to calculate the net benefit for those Proposals.

#### V. SUMMARY OF LOCATIONS

The online Proposal form required MPs to identify the location of their project and the proposed Point of Interconnection. The IA confirmed project locations and corresponding Transmission Queue Applications with the Duke Transmission Team. The geographic distribution of selected Proposal sites is as follows:

<sup>&</sup>lt;sup>2</sup> MPs were required to include the cost of interconnection as part of their initial Proposals. Transmission system upgrade costs for successful Proposals are to be recovered through rates. The system upgrade costs of each Proposal, if any, were imputed to the Proposal to establish the full estimated cost of each Proposal.



Figure 3
Geographic Distribution of Finalist Projects

	North Carolina	South Carolina
DEC	9	2
DEP	1	0

### VI. SUMMARY OF ELIMINATED PROPOSALS

Figure 4 summarizes the reasons Proposals were unsuccessful in the DEC RFP.

Figure 4

DEC: Summary of Non-Finalist Proposals			
Reason for Disposition	Number of Proposals	MW AC	
Non-Conforming (Not evaluated)	3	161.5	
MP did not post Proposal Security and Withdrew Proposal	4	246.15	
T&D System Upgrade Cost more than Allowable Cost	16	748.83	
Proposals were more expensive to ratepayers than selected finalists	3	101	
Total:	26	1257.48	

Figure 5 summarizes the reasons Proposals were unsuccessful in the DEP RFP.

Figure 5

DEP: Summary of Non-Finalist Proposals			
Reason for Disposition	Number of Proposals	MW AC	
Non-Conforming (Not evaluated)	0	0	
MP did not post Proposal Security and Withdrew Proposal	0	0	
T&D System Upgrade Cost more than Allowable Cost	0	0	
Proposals were more expensive to ratepayers than selected finalist	5	365.9	
Total:	5	365.9	

# VII. SUMMARY OF PARTICIPATION BY DEC/DEP PROPOSAL TEAM and DER

None of the DEC/DEP Proposal Team or DER Proposals are included among the finalist Proposals.

## VIII. SUMMARY OF PRICE SCORING PROCESS

Each Proposal was evaluated on four measures: the MP's pricing information, the facility MW AC capability, facility storage parameters where storage was included, and the MP's load shape information, as reflected in the 8760-production profile provided by the MP. The Evaluation Model utilized the bid input parameters to calculate each Proposal's "Net Benefit" to the Duke Energy system on a twenty-year



net present value of benefit per MWh. A Proposal's net benefit can be described as the sum of facility's net energy benefit and the facility's capacity benefit, less the T&D costs borne by Duke Energy to accommodate the facility. That is:

# Net Benefit = Net Energy Benefit + Net Capacity Benefit - T&D Cost

After the Step 1 initial ranking of Proposals, the Transmission & Distribution system upgrade costs were calculated outside of the IA's Evaluation Model for each specific Proposal advanced to the Step 2 evaluation. Transmission costs were not calculated for Advanced Stage projects <sup>3</sup>. The calculated Transmission & Distribution system upgrade costs for a project were estimated to reflect the cost of adding the project to the Duke system. There were 27 DEC Proposals and 2 DEP Proposals evaluated in Step 2. The evaluation model was then re-run to produce the final ranking of Proposals at the end of the Step 2 evaluation.

The "Net Energy Benefit" was calculated as energy savings to Duke Energy resulting from the operation of the proposed facility. The energy savings for a facility can be described as the difference between the Duke Energy marginal energy cost and the proposed facility's energy cost (as established in the submitted pricing). This analysis was run on an 8760 hour per year basis for twenty years.

The facility's "Net Capacity Benefit" is the cost savings to the Duke system from Duke deferring the addition of future generating capacity, if the facility were on-line. Similar to the calculation of Net Energy Benefit, this analysis was run on an 8760 hour per year basis for twenty years. The facility's resulting capacity benefit was estimated using the Duke system (DEC or DEP) avoided capacity cost.

The Evaluation Model processed 20 years of data as submitted by the MP; each of these years was processed individually. Since the MP was required to submit pricing that conformed to the various DEC and DEP avoided cost energy and capacity pricing periods included in the RFP, the evaluation model accounted for hourly details, such as summer and winter months, weekend days, holidays, leap year impact, and Daylight Savings time shifts.

#### IX. CONCLUSION

Tranche 2 was successful in exceeding the targeted goals for DEC and DEP. The IA will provide greater detail of the Tranche 2 process and the evaluation of Proposals in the final report to be submitted after the execution of Tranche 2 PPAs.

<sup>&</sup>lt;sup>3</sup> Advanced Stage projects have executed Interconnection Agreements and any system upgrade costs are the financial responsibility of the MP and, therefore, were not calculated by the T&D Evaluation Team or included in the Step 2 system impact studies.



5