

## Appendix D-Attachment C-2 Wind MFS Bidder Questions

for

## 2021 Request for Proposals for

Renewable Resources
For Entergy Arkansas, LLC

Entergy Arkansas, LLC August 3, 2021

## **Appendix C-2: Proposed Project Information**

Bidder must fill out this table for the proposed wind project and attach equipment datasheets.

Item	Site Information /Design Conditions	Responses	Units
1	Design Lifetime of the plant		Yr
2	Site coordinates		
3	Project Size		Mwac
4	Project Land Area		ac
5	Site Description		
6	Distance to POI		miles
7	Annual Yield		GWh/yr
8	Seasonal Yield		GWh/yr
9	Project Availability		%
10	Average Elevation		FT a.s.l
11	Ambient Temperature Recorded (Minimum/Average/Maximum)		°F
12	Design Temperature for Operation (Minimum/Maximum)		°F
13	Design Relative Humidity		%
14	Design wind speed		mph
15	Rainfall (Annual Avg/Annual Max/1-day Max)		in.
16	Seismic Zone (Zone and ground acceleration values shall be confirmed by the geotechnical study).		

Item	Wind Turbine Generators (WTG)	Responses	Units
1	Attach datasheets		
2	Manufacturer		
3	Model Number		
4	Wind Turbine Classification		
5	Turbine Nameplate for MW		
6	Turbine Nameplate for Power Factor		
7	Turbine Nameplate for MVA		
8	Cut-in Wind Speed		mph
9	Rated Wind Speed		mph
10	Cut-Out Wind Speed		mph
11	Survival Wind Speed		mph

12	Standard Operating Temperature Range	
13	Cold Weather Package Temperature Range	
14	Hot Weather Package Temperature Range	
15	Hub Height	m
16	Rotor Diameter	m
17	Rotor Swept Area	m²
18	Gearbox or Direct Drive	
19	Gearbox Manufacturer	
20	Gearbox Model	
21	Generator Manufacturer	
22	Generator Model	
23	Blade Manufacturer	
24	Blade Model	
25	Plant Control Platform / System	
26	SCADA for Turbine or complete Wind Farm including MET tower	
27	WTG transformer location (up tower, down tower, pad mount)	
28	Can the Gearbox be replaced without removing the blades?	Y/N
29	Can the Generator be replaced without removing the blades?	Y/N
30	How often does the WTG require regular maintenance?	
31	Warranty for WTG Performance	
32	Warranty for Gearbox (years)	YRS
33	Warranty for Generator (years)	YRS
34	Warranty for Blades (years)	YRS
35	Warranty for Tower (years)	YRS
36	Warranty for Other Parts	YRS
37	How many of these WTG Models are operational in the USA?	
38	How many years has this WTG model been operational in the USA?	
39	Please confirm the WTGs meet each of the following conditions:	
40	Curtailment Control	Y/N
41	Voltage Control	Y/N

42	Voltage Droop Control		Y/N
43	Power Factor Controls		Y/N
44	Frequency Controls		Y/N
45	Integrated Control of Capacitor and Inductor Banks		Y/N
46	Reactive Power Production During Zero Real Power Production		Y/N
47	Mechanical Loads Analysis included in SCADA?		Y/N
48	Low/High/Zero Voltage Ride-Through		Y/N
49	Special Installation Tools Included		Y/N
50	Wind Farm Control Management System included in SCADA?		Y/N
51	Does the WTG include electrically driven service Lift?		Y/N
52	Which of the following WTG options are included in this Proposal:		
53	Weather Condition Monitoring System		Y/N
54	24/7 Offsite Monitoring (if yes, how many years)		Y/N
55	Icing Detection System		Y/N
56	Corrosion protection category for exposed sections		category C1 - C5
Item	WTG Transformer	Responses	
1	Attach datasheets		
2	Manufacturer		
3	Model Number		
4	WTG transformer location (up tower, down tower, pad mount)		
5	Rating / Cooling		kVA
6	Is the transformer Dry-type or oil insulated?		Y/N
7	If wet, what is the oil quantity?		
Item	Wind Monitoring Stations	Responses	
1	Type of System to be Used (Met Towers, LIDAR/Sodar, etc.)		
2	Attach datasheets		
	Number of towers or LIDAR/Sodar installations	1	1

10	What wind heights (i.e. 40m, 60m & 80m) or range of heights will	Y/N
9	Provide list of sensors installed and data provided to SCADA system	
8	Is remote monitoring available?	
7	Is the data integrated with the WTG OEM SCADA system?	
6	Is the tower in accordance to IEC 61400-12?	
5	Tower or LIDAR/Sodar Model	