Appendix 5

to

Solar BOT Scope Book

Rev. 1

June 6, 2024

REVISION RECORD			
Revision No.	Approval Date	Section / Page Revised	Reason / Description of Change
0	9/14/2023	All	Initial Issue
1	6/6/24	All	Integrated Risk appendix into design basis

APPENDIX 5: DESIGN BASIS AND OPERATIONAL DATA

The following table sets forth certain design basis and operational requirements for the overall Project. Seller shall update items in Appendix 5 as noted below. Once Seller and Buyer agree to the inputs, any Seller change in the inputs that may decrease performance must be approved by Buyer.

1	DESIGN CONDITIONS	UNITS	DATA	COMMENTS / CLARIFICATIONS
1.1	Project Location	-		City, State (County/Parish)
1.2	Main Access Road	-		
1.3	Governing Building Code	-		
1.4	Design lifetime of the plant	years		30 years specified
1.5	Average site elevation	ft a.s.l.		
1.6	Ambient Temperature Recorded (Minimum/Average/Maximum)	°F		
1.7	Design Temperature for Operation (Minimum/Maximum)	°F		
1.8	Design Humidity Ratio (Minimum/Maximum)	grams of water vapor / grams of dry air		
2.31.9	ASCE 7 Risk Category	-		Per IBC and ASCE 7
1.10	Design wind speed normal operation / storm safe position	Mph / Mph		Design per IBC and ASCE 7
1.11	Rainfall (Annual Avg/Annual Max/1-day Max/Design Basis Rainfall Event)	inch		
1.12	Maximum 500-year flood elevation	ft a.s.l.		
1.13	Designed flood elevation without equipment damage	ft a.s.l.		
1.14	Typical meteorological year (GHI)	kWh/m²		
1.15	Allowable Seismic Ground Accelerations, Ss and S1	g		Ground acceleration values shall be confirmed by the Project's geotechnical study
1.16	Available Area required (approx.)	acres		
1.17	Snow Load normal operation / storm safe position	Psf / psf		Design per IBC and ASCE 7

1	DESIGN CONDITIONS	UNITS	DATA	COMMENTS / CLARIFICATIONS
1.18	Ice thickness normal operation / storm safe position	Inch / inch		Design per IBC and ASCE 7
1.19	Design vegetation height in the array assumed for site design performance characteristics or minimizing fire heat release will adversely affect PV array.	inches		The lesser of the two values Referenced ASTM-E2908-12
1.20	Responding Fire department distance	Miles		Include address and contact number in data
1.21	Nearest water point or draft location used by fire department for this location.	Miles		Address in data
1.22	PV array fire mitigation strategy: non-combustible fire break via full perimeter roads and internal segregated by access roads.	Y/N		List deviations in data
1.23	Transformer fire mitigation: Confinement of oil and fire to transformer of origin per codes. Self-extinguishing oil impoundment.	Y/N		List deviations in data
1.24	Other physically occupiable structures, Noncombustible construction per IBC (international building code) edition adapted by state.	Y/N		List deviations in data
1.25	Adequate spatial separation to other exposures as needed to prevent secondary damage per NFPA-80a assume no fire department mitigation.	Y/N		List deviations in data

2	GENERAL PLANT DATA			
2.1	PV technology type			
2.2	Installed Capacity (total DC peak power)	MWp		
2.3	Nominal Power (AC) (total nominal inverter output)	MW		

2	GENERAL PLANT DATA			
2.4	Nominal Power at Electrical POI (AC)	MW		
2.5	DC/AC ratio			May not be modified after Agreement date without permission of both parties
2.6	Nighttime Auxiliary Power (Average/Peak)	MW		
2.7	Annual Nighttime Auxiliary Power	MWh		Year 1 (starting at the Substantial Completion Payment Date) based on TMY
2.8	Total area covered by PV arrays	acres		
2.9	Total area of Project	acres		
2.10	Row to row spacing	ft		
2.11	Ground Coverage Ratio	%		
2.12	Shading losses due to internal row spacing	%		
2.13	Total number of PV panels	Qty		
2.14	Total number of strings	Qty		
2.15	Total number of racking system tables	Qty		
2.16	Total number of combiner boxes	Qty		
2.17	Total number of inverters	Qty		
2.18	Total number of LV/MV transformers	Qty		

3	MONTHLY PERFORMANCE RATIOS	-		
3.1	January	%		
3.2	February	%		
3.3	March	%		
3.4	April	%		
3.5	May	%		
3.6	June	%		

3	MONTHLY PERFORMANCE RATIOS	-		
3.7	July	%		
3.8	August	%		
3.9	September	%		
3.10	October	%		
3.11	November	%		
3.12	December	%		
3.13	PR Base	%		

4	YEARLY PERFORMANCE RATIOS	-	
4.1	Year 1 (starting at the Substantial Completion Payment Date)	%	
4.2	Year 2	%	
4.3	Year 3	%	
4.4	Year 4	%	
4.5	Year 5	%	
4.6	Year 6	%	
4.7	Year 7	%	
4.8	Year 8	%	
4.9	Year 9	%	
4.10	Year 10	%	
4.11	Year 11	%	
4.12	Year 12	%	
4.13	Year 13	%	
4.14	Year 14	%	
4.15	Year 15	%	
4.16	Year 16	%	
4.17	Year 17	%	
4.18	Year 18	%	
4.19	Year 19	%	

4	YEARLY PERFORMANCE RATIOS	-	
4.20	Year 20	%	
4.21	Year 21	%	
4.22	Year 22	%	
4.23	Year 23	%	
4.24	Year 24	%	
4.25	Year 25	%	
4.26	Year 26	%	
4.27	Year 27	%	
4.28	Year 28	%	
4.29	Year 29	%	
4.30	Year 30	%	

5	ANNUAL DEGRADATION FACTOR	-	
5.1	Year 1 (starting at the Substantial Completion Payment Date)	%	
5.2	Year 2 (max 0.5% for years 2 -30)	%	
5.3	Year 3	%	
5.4	Year 4	%	
5.5	Year 5	%	
5.6	Year 6	%	
5.7	Year 7	%	
5.8	Year 8	%	
5.9	Year 9	%	
5.10	Year 10	%	
5.11	Year 11	%	
5.12	Year 12	%	
5.13	Year 13	%	
5.14	Year 14	%	
5.15	Year 15	%	
5.16	Year 16	%	

5	ANNUAL DEGRADATION FACTOR	-	
5.17	Year 17	%	
5.18	Year 18	%	
5.19	Year 19	%	
5.20	Year 20	%	
5.21	Year 21	%	
5.22	Year 22	%	
5.23	Year 23	%	
5.24	Year 24	%	
5.25	Year 25	%	
5.26	Year 26	%	
5.27	Year 27	%	
5.28	Year 28	%	
5.29	Year 29	%	
5.30	Year 30	%	

6	YEARLY PRODUCTION	-	
6.1	Year 1 (starting at the Substantial Completion Payment Date)	MWh/yr	
6.2	Year 2	MWh/yr	
6.3	Year 3	MWh/yr	
6.4	Year 4	MWh/yr	
6.5	Year 5	MWh/yr	
6.6	Year 6	MWh/yr	
6.7	Year 7	MWh/yr	
6.8	Year 8	MWh/yr	
6.9	Year 9	MWh/yr	
6.10	Year 10	MWh/yr	
6.11	Year 11	MWh/yr	
6.12	Year 12	MWh/yr	
6.13	Year 13	MWh/yr	

6	YEARLY PRODUCTION	-	
6.14	Year 14	MWh/yr	
6.15	Year 15	MWh/yr	
6.16	Year 16	MWh/yr	
6.17	Year 17	MWh/yr	
6.18	Year 18	MWh/yr	
6.19	Year 19	MWh/yr	
6.20	Year 20	MWh/yr	
6.21	Year 21	MWh/yr	
6.22	Year 22	MWh/yr	
6.23	Year 23	MWh/yr	
6.24	Year 24	MWh/yr	
6.25	Year 25	MWh/yr	
6.26	Year 26	MWh/yr	
6.27	Year 27	MWh/yr	
6.28	Year 28	MWh/yr	
6.29	Year 29	MWh/yr	
6.30	Year 30	MWh/yr	

***** END OF APPENDIX 5 *****