Clover Creek Solar Project LLC d/b/a New Frontiers Solar Park Supplemental Responses to Siting Board Staff's First Request for Information

Case No. 2024-00253

Request No. 14:

Provide a list of permits that will be required from any other local, state, or federal agencies for

the project. Include in the response the status of those permits.

Original Response to Request No. 14:

All necessary air, water, and waste permits and authorizations will be obtained before construction

and operation of the Project. The Project's final site design will determine which permits will be

required. Please see the attached list of potential permit authorizations that may be required for

Project development.

Additionally, Breckenridge County currently has an ordinance that references three types of solar

energy systems (SES) with correlating requirements for each type. However, this ordinance does

not define the types of SES or give guidance as to what constitutes an SES, and it further does not

contain any processes or procedures for preparing or filing an application for an SES. As such,

Breckenridge County does not have a local permitting process that applies to the Clover Creek

Solar Project at this time. Notably, the Project meets or exceeds the setbacks described in the

ordinance. Breckenridge County does not have a comprehensive plan or a Planning Commission.

Supplemental Response to Request No. 14:

The Kentucky Public Protection Cabinet ("Cabinet") issued Formal Interpretation #2024-1 on

February 8, 2024, interpreting Section 2703.2.3 of the Kentucky Building Code (KBC) to exclude

non-utilities from the definition of a "power company" and the related exemption from electrical

permitting requirements. In light of the Cabinet's interpretation, please find attached the Project's

revised list of potential permit authorizations to include obtaining an electrical permit from the

Cabinet.

Responding Witness: Jesse Eick

Clover Creek Solar Project Permit Matrix				
Permit	Agency	Status	Notes	
Federal			·	
Clean Water Section 401/404 Permit(s)	U.S. Army Corps of Engineers	Start: December 2024 (if applicable) End: March 2025 (target)		
Endangered Species Act (ESA) Section 7 Consultation	U.S. Fish & Wildlife Service	Start: Summer 2024 (coordination in progress) End: March 2025 (target) Start: Summer 2024 (coordination in progress)		
Migratory Bird Treaty Act (MBTA)	U.S. Fish & Wildlife Service	No permit anticipated, general USFWS coordination in progress.		
Bald and Golden Eagle Protection Act (BGEPA)	U.S. Fish & Wildlife Service	No permit anticipated, general USFWS coordination in progress.		
State				
Construction Certificate	Kentucky State Board on Electric Generation and Transmission Siting	Start: November 4th, 2024 End: May 3rd, 2025	Certificates will be for generation facility and nonregulated electric transmission line.	
KPDES KYR10 Stormwater Construction General	Kentucky Energy and Environment Cabinet, Division Not yet submitted; anticipated submittal 90 days prior to			
Permit	of Water	construction.	Includes submittal of Storm Water Pollution Prevention Plan.	
Floodplain Construction Permit	Kentucky Energy and Environment Cabinet, Division of Water	Not yet submitted.		
National Historic Preservation Act - Section 106 Consultation	Kentucky Heritage Council - State Historic Preservation Office	Not yet submitted; no permit anticipated.		
Threatened & Endangered Species Consultation	Kentucky Department of Fish and Wildlife Resources	Start: November 2024 End: January/February 2025	No permit anticipated, coordination in progress.	
Road Encroachment Permit(s)	Kentucky Transportation Cabinet	Not yet submitted.		
Utility Crossing Permit(s)	Kentucky Transportation Cabinet	Not yet submitted.		
Overweight/Over-Dimensional Permit	Kentucky Transportation Cabinet	Not yet submitted.		
Building Permit	Kentucky Dept. of Housing, Building and Construction	Not yet submitted.	For O&M building.	
Electrical Permit	Kentucky Dept. of Housing, Building and Construction	Not yet submitted.		

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Request No. 80:

Provide information on the specifications, model number, and cutsheets of the photovoltaic (PV) cell/solar panels to be used.

Original Response to Request No. 80:

Please see the attached informational sheets from Canadian Solar and QCells.

Supplemental Response to Request No. 80:

Please see the attached informational sheet for Elite Solar showing the solar panels to be used. The Project will still incorporate QCell panels, but will no longer be utilizing those from Canadian Solar.

Responding Witness: Jesse Eick



M/ET-PD-EN2024V2.1 info@elite-solar.com



PERC BIFACIAL MODULE



Increased Power Generation

Bifacial technology enables additional energy harvesting from rear side(up to 25%).



Increased Efficiency

Increased module conversion efficiency from half-cut cell structure (low resistance characteristic, decreased mismatch loss).



Severe Weather Resilience

Certified to withstand: wind load (2400 Pascal) and snow load (5400 Pascal).



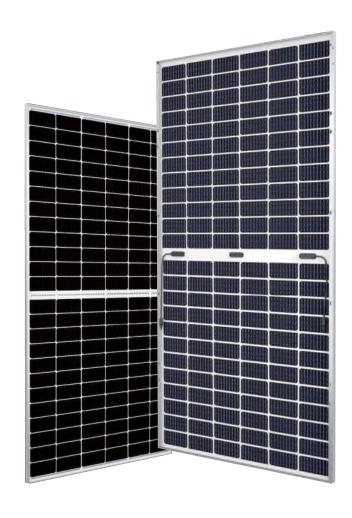
PID Resistance

Excellent Anti-PID performance guarantees limited power degradation for mass production.



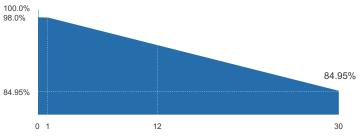
Durability Against Extreme Environmental Conditions

Exceptional durability against salt mist and ammonia exposure.



WARRANTY

EliTe Solar Mono Module Linear Performance Warranty



1st year \leq 2%, 2nd~30th years \leq 0.45% / year



Guarantee on product material and workmanship



Linear power output warranty

IEC61215 IEC61730 UL61215 UL61730





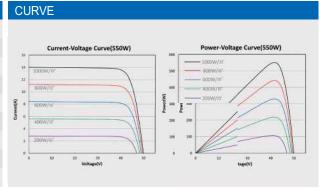




ELECTRICAL SPECIFICATIONS										
Module Type E	T-M772BH	540TW/TB	ET-M772BH	545TW/TB	ET-M772BH	1550TW/TB	ET-M772BH	555TW/TB	ET-M772BH	560TW/TB
STC/NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power -P _{mp} (W)	540	405	545	409	550	413	555	417	560	421
Open Circuit Voltage -V _{oc} (V)	49.60	46.28	49.75	46.32	49.90	46.36	50.05	46.40	50.20	46.44
Short Circuit Current -I sc (A)	13.86	11.46	13.93	11.54	14.00	11.62	14.07	11.70	14.14	11.78
Maximum Power Voltage -V mp (V) 41.64	37.30	41.80	37.36	41.96	37.42	42.11	37.48	42.27	37.54
Maximum Power Current -I mp (A)	12.97	10.86	13.04	10.94	13.11	11.03	13.18	11.12	13.25	11.21
Module Efficiency STC-η m (%)	20.	9%	21.	1%	21.3	3%	21.	.5%	21	.7%
Power Tolerance (W)					0-+3	3%				
Pmax Temperature Coefficient					-0.339	%/°C				
Voc Temperature Coefficient					-0.251	%/°C				
Isc Temperature Coefficient					+0.046	6%/°C				
Fire Performance					Class C(IEC)	/Type 1(UL)				

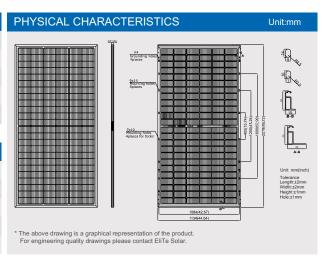
REAR SIDE POWER GAIN (ET-M772BH550TW)				
Power Gain	10%	15%	20%	25%
Maximum Power -P _{mp} (W)	605	633	660	688
Open Circuit Voltage -V∞ (V)	49.90	49.90	49.90	49.90
Short Circuit Current -Isc (A)	15.24	15.97	16.64	17.34
Maximum Power Voltage -V mp (V)	41.96	41.96	41.96	41.96
Maximum Power Current -I mp (A)	14.42	15.09	15.73	16.40

MECHANICAL SPECIFICATIONS		
External Dimension	2279 x 1134 x 33mm	
Weight	27.5kg	
Solar Cells	PERC Mono crystalline (144pcs)	
Front Glass	3.2mm AR coating tempered glass	
Frame	Anodized aluminium alloy	
Junction Box	IP68, 3 diodes	
Cable Length (Including Connector)	4.0 mm²(12AWG), Portrait:200mm(+)/400mm(-);Or customized	
Connector	MC4 Compatible	
Power Bifaciality*	70%±10%	



APPLICATION CONDITIONS	
Maximum System Voltage	1500VDC
Maximum Series Fuse Rating	30A
Operating Temperature	-40~+85 °C
Nominal Operating Cell Temperature	45±2 °C
Mechanical Load	5400Pa/2400Pa

PACKING MANNER	
Container	40'HQ
Pieces per Pallet	33
Size of packing (mm)	2300*1130*1264
Weight of packing (kg)	949.5
Pieces per Container	660



Note: The specifications are obtained under the Standard Test Conditions (STCs): 1000 W/m² solar irradiance, 1.5 Air Mass, and cell temperature of 25°C. The NOCT is obtained under the Test Conditions: 800 W/m², 20°C ambient temperature, 1m/s wind speed, AM 1.5 spectrum.

Please contact info@elite-solar.com for technical support. The actual transactions will be subject to the contracts. This parameter is for reference only and it is not a part of the contracts. The specifications are subject to change without prior notice.