

Request of SmartFlower North America LLC. For Exclusion of Certain Specialized Solar Panels From Presidential Proclamation 9693 of January 23, 2018

SmartFlower North America LLC (SFNA), a United States company, respectfully requests that the United States Trade Representative exclude from the tariff imposed on “other CSPV” products the solar panels described below (the “Unique Panels”) because, in summary, such solar panels: (i) are of a unique design, manufacture and use that is protected by several United States patents; (ii) are manufactured only outside of the United States by an entity unrelated to SFNA; (iii) do not compete with any solar panel manufactured in the United States; (iv) are the only solar panels usable by the energy generating consumer products manufactured and sold by SFNA; and (v) are priced, because of the cost of manufacture, at more than 400% higher than the current United States average market price for solar panels.

Description of the Solar Panels

Attached as Exhibit A is a summary data sheet for the Unique Panels. The following unique features are of particular note:

- The Unique Panels are especially designed solely for use as the flower shaped solar panels for the energy generating products designed, manufactured and sold by SFNA in the United States and other countries in North America, Central America and South America. An example of the base product is attached as Exhibit B (“smartflower”).
- The Unique Panels have a distinctive shape designed to mimic one petal of a sunflower plant.
- When combined in an array of 12 panels, the Unique Panels mimic a full, open sunflower.
- Unlike standard panels, the Unique Panels have no metal frame, using instead a glass to glass laminate structure.
- Unlike standard panels, the Unique Panels employ bi-pass diodes in order to minimize the effect of shading caused by the aggregation of 12 Unique Panels.
- Unlike standard solar panels, which typically use voltage of 600 Vdc, the Unique Panels use voltage of 750 Vdc.

- The Unique Panels, unlike standard panels, use reflective thin glass to reduce weight on the elevation drive assembly.
- Each panel has a custom designed attachment point at its narrow end consisting of a specially die cast aluminum finger assembly from which special aluminum rails extend along the back of each Unique Panel, unlike any standard solar panel.

Reasons for Exclusion from the Safeguard Measure

Following the factors for exclusion identified in the Procedure To Consider Additional Requests for Exclusion of Particular Products From the Solar Products Safeguard Measure dated as of February 14, 2018:

- The special design and use of the Unique Panels are protected by U.S. Patents 8,664,511 and 9,590,558 and one pending patent application—Publ. No. US-2015-0365047-A1.
- The Unique Panels are produced by only one manufacturer located in Austria. There are no comparable panels produced in the United States or any other country.
- Prior to 2018, smartflowers were manufactured solely in Europe. Beginning some time in 2018, smartflowers shall be manufactured by SFNA in the United States.
- Smartflowers are sold to and used by residential, commercial and institutional consumers to generate solar energy and demonstrate commitment to sustainability and the environment.
- In 2017 and through the date of this Request, approximately 170 smartflowers, using the Unique Panels, have been sold in the United States. It is projected that over the balance of 2018 through 2022 an additional 7,000-10,000 smartflowers using the Unique Panels shall be sold in the United States. No smartflowers using the Unique Panels were sold in the United States prior to 2017.
- Given the unique design of the Unique Panels, which is essential to the smartflower and its functioning, there is *no* U.S.-produced substitute for the Unique Panels.
- The Unique Panels are *not* available from any U.S. producer.

- The Unique Panels are *not* “under development” by a U.S. producer.
- There is *no* current material inventory of the Unique Panels in the United States.
- Exclusion of the Unique Panels from the safeguard measure will benefit significantly the U.S solar industry because protecting the smartflower as a fully viable product in the United States will enhance the prospect for further development of the Unique Panels and other components of the smartflower by SFNA, an American company, using engineers and manufacturers in the United States.
- There is no reason to conclude that Customs and Border Protection will have any difficulty or incur material expense or effort administering the exclusion.
- Underscoring the special nature of the Unique Panels, the current price of the Unique Panels is approximately \$1.50 per watt, which is over \$1.00, or over 400%, more than the average market price of \$0.35 for a solar panel in the United States as of March 5, 2018. See Roth Capital Partners, Industry Notes; PVinsights—Relevant excerpt attached as Exhibit c.

Accordingly, SmartFlower North America respectfully submits that the factors expressly identified by the Trade Representative as material in determining the advisability of an exclusion overwhelmingly warrant the granting of an exclusion for the Unique Panels.

SmartFlower North America LLC.



Charles R. Dougherty
Chief Operating Officer

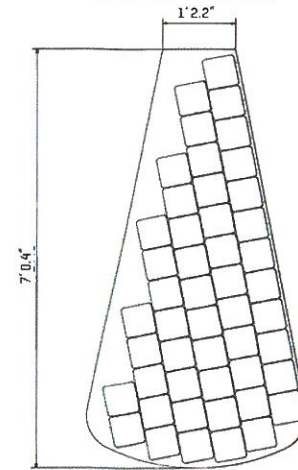
Exhibit A

PANEL 1	
Nominal power P _{mp}	225 Wp
Open circuit voltage U _{oc}	32.17 V
Nominal voltage U _{mp}	25.83 V
Nominal current I _{mp}	8.73 A
Short circuit current I _{sc}	9.12 A
Maximum power tolerance	+/-5%
Current temperature coefficient (I _{sc})	0.04 %/°C
Voltage temperature coefficient (U _{oc})	-0.32 %/°C
Power temperature coefficient (P _{mp})	-0.40%/°C
NOCT	44° C
Cells	49 monocrystalline solar cells
Cell-dimensions	6" - 6.2" x 6.2"
Bypass diodes (per module)	3
Connector type & cables	H4 connector, 1 x 4 mm ² (0.04 x 0.16 inch ²)
Ambient temperature range	-13°F - +185°F
Max. system voltage UL	750 Vdc
Serial fuse rating	10A

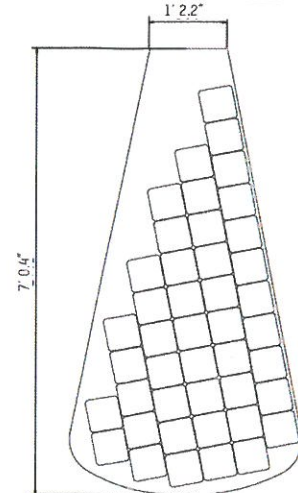
PANELS 2-11	
Nominal power P _{mp}	215 Wp
Open circuit voltage U _{oc}	28.96 V
Nominal voltage U _{mp}	23.96 V
Nominal current I _{mp}	8.94 A
Short circuit current I _{sc}	9.27 A
Maximum power tolerance	+/-5%
Current temperature coefficient (I _{sc})	0.04 %/°C
Voltage temperature coefficient (U _{oc})	-0.32 %/°C
Power temperature coefficient (P _{mp})	-0.40%/°C
NOCT	44° C
Cells	44 monocrystalline solar cells
Cell-dimensions	6" - 6.2" x 6.2"
Bypass diodes (per module)	2
Connector type & cables	H4 connector, 1 x 4 mm ² (0.04 x 0.16 inch ²)
Ambient temperature range	-13°F - +185°F
Max. system voltage UL	750 Vdc
Serial fuse rating	10A

PANEL 12	
Nominal power P _{mp}	155 Wp
Open circuit voltage U _{oc}	21.96 V
Nominal voltage U _{mp}	17.20 V
Nominal current I _{mp}	8.94 A
Short circuit current I _{sc}	9.30 A
Maximum power tolerance	+/-5%
Current temperature coefficient (I _{sc})	0.04 %/°C
Voltage temperature coefficient (U _{oc})	-0.32 %/°C
Power temperature coefficient (P _{mp})	-0.40%/°C
NOCT	44 °C
Cells	33 monocrystalline solar cells
Cell-dimensions	6" - 6.2" x 6.2"
Bypass diodes (per module)	2
Connector type & cables	H4 connector, 1 x 4 mm ² (0.04 x 0.16 inch ²)
Ambient temperature range	-13°F - +185°F
Max. system voltage UL	750 Vdc
Serial fuse rating	10A

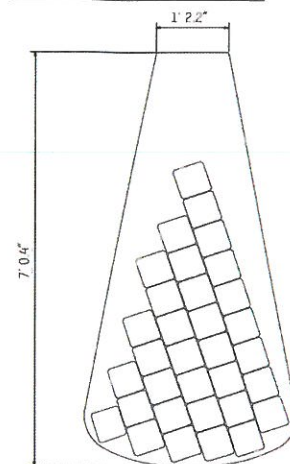
6" CELL CONFIGURATION PANEL 1



6" CELL CONFIGURATION PANEL 2-11



6" CELL CONFIGURATION PANEL 12



All values are average values, measured at STC.

All panels are assembled with standard glass backsheet technology. Front is faced with tempered glass of 2.1 mm.

Exhibit B



WEEKLY SOLAR SUPPLY CHAIN PRICING

Exhibit 1: Prices were down for poly, wafer, cell, and module WoW.

PV Insights Unit: \$/W	2/28/18	2/21/18	WoWA	YTDA	YoYA	Feb'18 Avg	Jan'18 Avg	Dec'17 Avg	Nov'17 Avg	Q1'18 Avg	Q4'17 Avg	QoQA	YoYA
PV grade poly (\$/kg)	\$16.030	\$16.210	-1.1%	-10.1%	-1.0%	\$16.288	\$17.692	\$17.325	\$16.696	\$16.990	\$16.900	0.5%	6.9%
PV grade poly (1)	\$0.079	\$0.079	-1.1%	-10.1%	-1.0%	\$0.080	\$0.087	\$0.085	\$0.082	\$0.083	\$0.083	0.5%	6.9%
2nd grade poly (\$/kg)	\$13.140	\$13.320	-1.4%	-8.8%	-2.1%	\$13.360	\$14.296	\$13.935	\$13.562	\$13.828	\$13.690	1.0%	4.4%
2nd grade poly (1)	\$0.064	\$0.065	-1.4%	-8.7%	-2.1%	\$0.065	\$0.070	\$0.068	\$0.066	\$0.068	\$0.067	1.0%	4.4%
Wafer, blended (2)	\$0.128	\$0.131	-2.3%	-11.7%	-18.0%	\$0.131	\$0.143	\$0.147	\$0.151	\$0.137	\$0.151	-9.4%	-11.9%
Wafer, mono (3)	\$0.137	\$0.142	-3.2%	-8.9%	-21.0%	\$0.141	\$0.150	\$0.153	\$0.160	\$0.145	\$0.160	-9.0%	-15.5%
Wafer, multi (3)	\$0.120	\$0.121	-1.1%	-14.7%	-14.3%	\$0.121	\$0.136	\$0.141	\$0.142	\$0.129	\$0.143	-9.9%	-7.4%
Cell, multi	\$0.181	\$0.181	0.0%	-9.0%	-13.4%	\$0.182	\$0.195	\$0.199	\$0.201	\$0.188	\$0.202	-6.7%	-9.5%
Cell, 156mm multi (3)	\$0.184	\$0.184	0.0%	-9.3%	-13.5%	\$0.185	\$0.199	\$0.203	\$0.205	\$0.192	\$0.206	-6.7%	-9.4%
Cell, 156mm mono (3)	\$0.200	\$0.201	-0.6%	-6.2%	-19.3%	\$0.202	\$0.210	\$0.216	\$0.222	\$0.206	\$0.222	-7.4%	-16.8%
Module, Si	\$0.306	\$0.308	-0.6%	-2.2%	-12.3%	\$0.308	\$0.311	\$0.313	\$0.315	\$0.310	\$0.316	-2.0%	-11.9%
Module, thin film	\$0.327	\$0.329	-0.6%	-2.1%	-9.7%	\$0.330	\$0.332	\$0.334	\$0.336	\$0.331	\$0.337	-1.7%	-9.4%

(1) Converted using 5.0g/W.

(2) ROTH calculated average of mono and multi wafer prices on a \$/W basis.

(3) Price per watt assumes 4.4W/pc for multi wafers and cells, and 4.6W/pc for mono wafers and cells.

Source: PVinsights.com (accessed 2/28/18); ROTH Capital Partners.

Exhibit 2: Energy Trend reported mostly negative price changes for poly, wafer, cell, and modules.

EnergyTrend	Unit	2/28/18	2/21/18	WoWA	YTDA	Feb'18 Avg	Jan'18 Avg	Q1'18 Avg
RoW prices in \$								
Poly	\$/kg	\$15.60	\$16.00	-2.5%	-6.0%	\$0.08	\$0.08	\$0.08
Wafer, multi super high-eff	\$/W	\$0.129	\$0.132	-2.7%	-16.9%	\$0.13	\$0.15	\$0.14
Wafer, multi diamond wire	\$/W	\$0.118	\$0.120	-1.4%	-13.4%	\$0.12	\$0.13	\$0.13
Wafer, mono	\$/W	\$0.138	\$0.147	-6.2%	-12.0%	\$0.14	\$0.15	\$0.15
Cell, multi high-eff, slurry	\$/W	\$0.189	\$0.194	-2.6%	-14.1%	\$0.19	\$0.21	\$0.20
Cell, multi high-eff, diamond wire	\$/W	\$0.183	\$0.187	-2.1%	-9.0%	\$0.19	\$0.20	\$0.19
Cell, mono PERC	\$/W	\$0.225	\$0.231	-2.6%	-7.8%	\$0.23	\$0.24	\$0.24
Cell, mono	\$/W	\$0.209	\$0.217	-3.7%	-8.7%	\$0.22	\$0.23	\$0.22
Module, multi	\$/W	\$0.347	\$0.353	-1.7%	-3.6%	\$0.35	\$0.36	\$0.36
Module, mono	\$/W	\$0.357	\$0.363	-1.7%	-3.0%	\$0.36	\$0.37	\$0.36
Domestic China prices in RMB								
Poly	¥/kg	¥127.0	¥137.0	-7.3%	-17.5%	¥0.67	¥0.75	¥0.71
Wafer, multi super high-eff	¥/W	¥0.020	¥0.020	-1.2%	-15.1%	¥0.02	¥0.02	¥0.02
Wafer, multi diamond wire	¥/W	¥0.833	¥0.839	-0.8%	-15.6%	¥0.84	¥0.94	¥0.89
Wafer, mono	¥/W	¥0.989	¥1.048	-5.6%	-13.2%	¥1.03	¥1.13	¥1.08
Cell, multi high-eff, slurry	¥/W	¥1.380	¥1.380	0.0%	-16.4%	¥1.38	¥1.57	¥1.48
Cell, multi high-eff, diamond wire	¥/W	¥1.330	¥1.330	0.0%	-7.0%	¥1.33	¥1.47	¥1.39
Cell, mono PERC	¥/W	¥1.620	¥1.640	-1.2%	-9.0%	¥1.64	¥1.76	¥1.70
Cell, mono	¥/W	¥1.500	¥1.540	-2.6%	-8.0%	¥1.53	¥1.62	¥1.57
Module, multi	¥/W	¥2.550	¥2.550	0.0%	-4.9%	¥2.55	¥2.64	¥2.60
Module, mono	¥/W	¥2.610	¥2.610	0.0%	-3.3%	¥2.61	¥2.67	¥2.64

Source: pv.energytrend.com (accessed 2/28/18); ROTH Capital Partners.