F. No. 283/41/2024-GRID SOLAR

भारत सरकार / Government of India

नवीन और नवीकरणीय ऊर्जा मंत्रालय / Ministry of New & Renewable Energy

ग्रिड सौर ऊर्जा प्रभाग / Grid Solar Power Division

Atal Akshay Urja Bhawan, Lodhi Road, New Delhi – 110003.

Dated: 30th June 2025

OFFICE MEMORANDUM

Sub: Updation of List I (Manufacturers and Models of Solar PV Modules) of ALMM Order, 2019 - Reg.

Ref:

- (i) MNRE's O.M. No. 283/54/2018-GRID SOLAR-Part(1) dated 10.03.2021
- (ii) MNRE's O.M. No. 283/22/2023-GRID SOLAR/Pt dated 10.05.2023;
- (iii) MNRE's O.M. No. 283/22/2023-GRID SOLAR/Pt dated 22.03.2024;
- (iv) MNRE's O.M. No. 32/33/2024-SPV Division dated 06.05.2025;

Reference is invited to this Ministry's O.M.s of even no. dated 10.03.2021, regarding implementation of Approved Models and Manufacturers of Solar Photovoltaic Modules (Requirement for Compulsory Registration) Order, 2019 and publishing List – I (Manufacturers and Models of Solar PV Modules) of ALMM Order, 2019.

2. This Ministry vide its O.M.s referred at (ii), (iii) & (iv) above, inter-alia, directed that only such models of Solar PV Module Manufacturers will be enlisted under ALMM, which comply with the BIS Standards and are having the following minimum module efficiency:

Category	Application/Use	Minimum Module Efficiency required to be eligible for enlistment in ALMM for solar PV modules				
		For c-Si technology based solar PV modules	For CdTe thin film technology based solar PV modules			
Category-I	Utility/Grid Scale Power Plants	20.00%	19.00%			
Category-II	Rooftop and Solar Pumping	19.50%	18.50%			
Category-III	Off-grid projects/applications like solar lamps, solar lights, solar	18.00%	18.00%			
	street lights, solar fans, etc. (other than solar powered agricultural pumps and solar PV rooftops) requiring individual capacity of each solar PV module deployed, to be of less than 200 Watt peak	(not to be included in main ALMM List-I but to be included in a separate ALMM list called ALMM List-I (DRE)				
Category-IV	Any other application	19.00%	18.00%			

- 3. Post the aforesaid O.M. dated 10.05.2023 and subsequent O.M.s dated 22.03.2024 and 06.05.2025, only such models of Solar PV Modules have been considered for enlistment under ALMM List-I, whose module efficiency is meeting the eligibility criteria as mentioned in table at para-2 above.
- 4. The List I (Manufacturers and Models of Solar PV Modules) of ALMM Order, 2019 was last updated on 05.06.2025.
- **5.** The List I (Manufacturers and Models of Solar PV Modules) of ALMM Order, 2019 is hereby further revised and the Revision-XL (*in the format of additions / modifications to Revision-XXXIX*) is enclosed at Annexure-I. The last revision no. XXXIX dated 05.06.2025 along with provisional enlistments therein (*excluding those which have been removed on account of inclusion in main ALMM List-I*) is at pages after Annexure-I.
- 6. The ALMM enlistment validity is subject to valid BIS Registration; else deemed to be delisted.
- 7. The details of Registration No. (R. No.) which has been allotted by BIS is mentioned against each manufacturer / manufacturing unit enlisted in ALMM and further details related to BIS certification like validity, models included, etc. may be checked from BIS website by using the following link: https://www.crsbis.in/BIS/Lims_registrationc.do?hmode=qetLimsData

8. This issues with the approval of competent authority.

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Encl: as above

To: All Concerned

Copy to: Director (Technical), NIC, MNRE for uploading this document on MNRE's website

A. Correction of errors in revisions of ALMM List-I

There were some typographical errors in the revisions of ALMM list-I and the same are hereby corrected as follows:

1. M/s. SASA Energy LLP - Typo error corrected in validity of Models numbers

Part B of Annexure-I to ALMM Revision dated 05.06.2025 => In SI. No. 2 => for entries corresponding to R. No. 72005681, may be read as from 27.09.2024 to 26.09.2028 (subject to valid BIS Registration; else deemed to be delisted).

2. M/s Oswal Solar Structure Pvt. Ltd. - Typo error corrected in validity of Models numbers

Part B of Annexure-I to ALMM Revision dated 21.05.2025 => In SI. No. 3 => for entries corresponding to R. No. 91013935, may be read as from 24.05.2024 to 23.05.2028 (subject to valid BIS Registration; else deemed to be delisted).

B. New additions on 30.06.2025 in the List of Manufacturers and Models of Solar PV Modules Enlisted under ALMM Order													
S. No.	Name of the	Location of	BIS Registration No.	Enlisted Capacity	S. No.	Type of Module	Applied Model	Enlisted Models		No. of Cells in Module	System Voltage		Validity
	Manufacturer	Manufacturing Facility		(MWs / Year)					(%)		(in Volt)	From	To (subject to valid BIS
													Registration; else decemd to be delisted)
1		Plot No-25, Ecotech-III,	R-93005959	1124	1124 i	Bifacial N- Type TOPCon Module (Glass to Glass)	JN-595G	JN-600G	23.25	144 (Half Cut Cells)	1500	17.08.2023	16.08.2027
	Engineers Ltd. (Model Addition &						(595 Wp)	JN-595G JN-590G	23.05 22.86				
	Capacity Change)							JN-585G	22.67				
					ii	Bifacial N- Type	JN-540G	JN-540G	22.76	132 (Half Cut Cells)	1500		
						TOPCon Module (Glass to Glass)	(540 Wp)	JN-535G	22.55				
					iii	Bifacial N- Type TOPCon Module (Glass to Glass)	JN-490G (490Wp)	JN-490G	22.62	120 (Half Cut Cells)	1500		
					iv	Bifacial N- Type TOPCon Module (Glass to Glass)	JN-440G (440 Wp)	JN-440G	22.55	108 (Half Cut Cells) 1500	1500		
2	M/s. Nithin Sai	Plot No. 75-A, 2nd e Phase, Kiadb- Industrial Area, Chintamani Taluk, Mastenahalli Industrial Area,	R-62005509	473	i	Bifacial Mono c-Si PERC Module (Glass to Transparent Backsheet)		NS-P10-144HT-550	21.29	144 (Half Cut Cells)	1500	30.06.2025	29.06.2029
								NS-P10-144HT-545	21.10				
	Limited (New							NS-P10-144HT-540	20.90				
	Addition in ALMM)							NS-P10-144HT-535	20.71				
	, ,	Chikkaballapur -						NS-P10-144HT-530	20.52	1			
		563128, Karnataka, India						NS-P10-144HT-525	20.32	1			
								NS-P10-144HT-520	20.13				
					ii	Bifacial Mono c-Si	NS-P10-132HT-490	NS-P10-132HT-500	21.05	132 (Half Cut Cells)	1500		
						PERC Module (Glass to Transparent Backsheet)	(490 Wp)	NS-P10-132HT-495	20.84	120 (Half Cut Cells)			
								NS-P10-132HT-490	20,63				
								NS-P10-132HT-485	20.41				
								NS-P10-132HT-480	20.20				
					iii	Bifacial Mono c-Si	NS-P10-120HT-440	NS-P10-120HT-450	20.72		1500		
						PERC Module (Glass to Transparent Backsheet)	(440 Wp)	NS-P10-120HT-445	20.49				
3 M/s. Orb Energy								NS-P10-120HT-440	20.26				
								NS-P10-120HT-435	20.03				
					iv	Bifacial Mono c-Si	NC D10 100HT 205	NS-P10-108HT-405	20.64	108 (Half Cut Cells)	1500		
						PERC Module (Glass to Transparent Backsheet)	NS-P10-108HT-395 (108 Wp)	NS-P10-108HT-400	20.39		1500		
								NS-P10-108HT-395	20.13				
								NS-P10-108HT-393	19.88				
	No. 95, Digital Park	R-62001708	72	i	Mono c-Si (PERC)	Orb545M144-15	Orb545M144-15	21.13	144 (Half Cut Cells)	1500	01.09.2023	31.08.2027	
3	Private Limited (Model Addition & Capacity Change)	Road, 2nd Stage, Yeshwanthapura, Bangalore - 560022,	K-02001708	72	ii	Module Mono e-Si (PERC) Module Mono e-Si (PERC) Module	(545 Wp) Orb500M132-15 (500 Wp)	Orb550M144-15	21.13	132 (Half Cut Cells)	1500	01.09.2023	31.08.2027
								Orb495M132-15	20.86				
								Orb500M132-15	21.07	132 (Hall Cut Cells)	1300		
	Karnataka, India			iii	Mono c-Si (PERC)	Orb455M120-15	Orb455M120-15	21.07	120 (Half Cut Cells)	1500			
				111	Module	Orb455M120-15 (455 Wp)	Orb453M120-15	20.78	120 (Hall Cut Cells)	1500			
				1				Orb580T144-15	20.78	144 (U-16C-+ C-11-)	1500	_	
				iv	Bifacial N-Type TOPCon Module	Orb580T144-15 (580 Wp)	Orb580T144-15 Orb575T144-15	22.48	144 (Half Cut Cells)	1500			
						(Glass to Transparent backsheet)							
								Orb570T144-15	22.09				
					v	Bifacial N-Type TOPCon Module (Glass to Transparent backsheet)	Orb530T132-15	Orb530T132-15	22.34	132 (Half Cut Cells)	1500		
							(530 Wp)	Orb525T132-15	22.13				
								Orb520T132-15	21.92				
						outlinet,		Orb500T132-15	21.07	1			
					vi	Bifacial N-Type	Orb480T120-15	Orb480T120-15	22.17	120 (Half Cut Cells)	1500	1	
						TOPCon Module	(480 Wp)	Orb475T120-15	21.94	1			
						(Glass to Transparent backsheet)		Orb470T120-15	21.71	1			
						Dacksticet)				1			