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: 21st April 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
- (iii) 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;

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. No. 283/22/2023-GRID SOLAR/Pt dated 10.05.2023 and O.M. of even no. dated 22.03.2024 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 requirement for crystalline-Silicon technology based Solar PV Modules | Minimum Module Efficiency requirement for Cadmium Telluride Thin Film technology based Solar PV Modules | | |
|--------------|-----------------------------------|---|---|--|--|
| Category I | Utility / Grid Scale Power Plants | 20.0% | 19.00% | | |
| Category II | Rooftop and Solar Pumping | 19.5% | 18.50% | | |
| Category III | Solar Lighting | 19.0% | 18.00% | | |

- 3. Post the Q.M. dated 10.05.2023 and subsequent Q.M. dated 22,03.2024, 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 27.03.2025.
- 5. The List I (Manufacturers and Models of Solar PV Modules) of ALMM Order, 2019 is hereby further revised and the Revision-XXXVII (in the format of additions / modifications to Revision-XXXVI) is enclosed at Annexure-I. The last revision no. XXXVI dated 27.03.2025 along with provisional enlistments therein 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=getLimsData

8. This issues with the approval of competent authority.

(Sanjay G. Karndhar) Scientist-E

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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 last revision of ALMM List-I dated 27.03.2025

There were some typographical errors in the last ALMM list published on 27.03.2025 and the same are hereby corrected as follows:

- M/s. Australian Premium Solar (India) Pvt. Ltd Typo Error corrected in Model numbers.
 In. Sl. No. 40=> Sl.No. 07=> Enlisted model No. 2 may be read as APSBF-550/144
 In. Sl. No. 40=> Sl.No. 14=> Enlisted model No. 1 may be read as APSAM-550/144
 - In. Sl. No. 40=> Sl.No. 14=> Enlisted model No. 2 may be read as APSAM-555/144
 - In. SI. No. 40=> SI.No. 14=> Enlisted model No. 3 may be read as APSAM-560/144
- M/s. Solex Energy Limited No. of cells updated as per the latest BIS test report
 In. Sl. No. 42=> Şl.No. 42=> No. of cells in modules may be read as 33 (Half Cut Cells)
- M/s. Mundra Solar PV Limited Typo error in Enlisted capacity corrected
 In. SI. No. 52=> Enlisted capacity may be read as 2125
- 4. M/s. H R Solar Solution Private Limited Typo Error in Type of module corrected
 In. Sl. No. 34 => Sl. No. 1 => Type of Module may be read as Mono c-Si PERC Module

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| S. No. | Name of the Manufacturer | Location of | BIS Registration No. | Enlisted | /IWs / | Type of Module | Applied Model | Enlisted Models | Module Efficiency (%) | No. of Cells in Module | System Voltage (in Volt) | Validity | |
|--------|-----------------------------|---------------------------|----------------------|--------------------------|-------------------------|-------------------------------------|-------------------------|--|--------------------------|-------------------------|--------------------------------|------------|--|
| | | Manufacturing Facility | | Capacity (MWs / Year) | | | | | | | | From | To (subject to valid BIS Registration; ele deeemd to be delisted) |
| 1 | M/s. Redren Energy | Survey No. 154/1, 154/2, | R-72001775 | 397 | 1 | Bifacial Mono c-Si PERC | RSM10MP-108HCBF400 | RSM10MP-108HCBF380 | 19.44 | 108 (Half Cut Cells) | 1500 | 05.04.2024 | 04.04.2028 |
| | Pvt. Ltd (Model | Opposite Rangpar, Bus | | | | Module | (400 Wp) | RSM10MP-108HCBF385 | 19.69 | , , | | | |
| | Addition) | Stand, National Highway | | | | (Glass to Transparent | | RSM10MP-108HCBF390 | 19.95 | | | | |
| | | No. 27, Jalida, Wankaner, | | | | Backsheet) | | RSM10MP-108HCBF395 | 20.20 | | | | |
| | | Morbi-363621, Gujarat, | | | | | | RSM10MP-108HCBF400 | 20.46 | | | | |
| | | India | | | | | | RSM10MP-108HCBF405 | 20.72 | | | | |
| | | | | | | | | RSM10MP-108HCBF410 | 20.97 | | | | |
| | | | | | | | | RSM10MP-108HCBF415 | 21.23 | | | | |
| | | | | | | 21 | BOLLLON AD ADDUCTOR ADD | RSM10MP-108HCBF420 | 21.48 | 100 (11 15 0 1 0 11) | 4500 | 05.04.0004 | |
| | | | | | 2 | | RSM10MP-120HCBF425 | RSM10MP-120HCBF415 | 19.17 | 120 (Half Cut Cells) | 1500 | 05.04.2024 | 04.04.2028 |
| | | | | | | Module | (425 Wp) | RSM10MP-120HCBF420 | 19.40 | | | | |
| | | | | | | (Glass to Transparent Backsheet) | <u> </u> | RSM10MP-120HCBF425 RSM10MP-120HCBF430 | 19.63 19.86 | | | | |
| | | | | | | Dackstieetj | <u> </u> | RSM10MP-120HCBF435 | 20.09 | | | | |
| | | | | 3 | Rifacial Mono c-Si PERC | RSM10MP-120HCBF450 | RSM10MP-120HCBF440 | 20.33 | 120 (Half Cut Cells) | 1500 | 05.04.2024 | 04.04.2028 | |
| | | | | | | Module | (450 Wp) | RSM10MP-120HCBF445 | 20.56 | 120 (rian cat cens) | 1500 | 05.0202 . | 0 110 112020 |
| | | | | | | (Glass to Transparent | (100 11) | RSM10MP-120HCBF450 | 20.79 | | | | |
| | | | | | | Backsheet) | | RSM10MP-120HCBF455 | 21.02 | | | | |
| | | | | | | , | | RSM10MP-120HCBF460 | 21.25 | | | | |
| | | | | | 4 | Bifacial Mono c-Si PERC | RSM10MP-132HCBF465 | RSM10MP-132HCBF455 | 19.16 | 132 (Half Cut Cells) | 1500 | 05.04.2024 | 04.04.2028 |
| | | | | | | Module | (465 Wp) | RSM10MP-132HCBF460 | 19.37 | 1 ` ′ | 1 | | |
| | | | | | | (Glass to Transparent | | RSM10MP-132HCBF465 | 19.58 | | | | |
| | | | | | | Backsheet) | | RSM10MP-132HCBF470 | 19.79 | | | | |
| | | | | | | | RSM10MP-132HCBF475 | 20.00 | | | | | |
| | | | | | 5 | Bifacial Mono c-Si PERC Module | RSM10MP-132HCBF495 | RSM10MP-132HCBF480 | 20.21 | 132 (Half Cut Cells) | 1500 | 05.04.2024 | 04.04.2028 |
| | | | | | | | (495 Wp) | RSM10MP-132HCBF485 | 20.42 | | 1 | | |
| | | | | | | (Glass to Transparent | | RSM10MP-132HCBF490 | 20.64 | | | | |
| | | | | | | Backsheet) | | RSM10MP-132HCBF495 | 20.85 | | | | |
| | | | | | | | | RSM10MP-132HCBF500 | 21.06 | | | | |
| | | | | | | Diferent Manager Ci DEDC | DCM440MAD 444UCDEE40 | RSM10MP-132HCBF505 | 21.27 | 4.4.4 (11-16.0-4.0-11-) | 4500 | 05.04.2024 | 04.04.2020 |
| | | | | | 6 | Bifacial Mono c-Si PERC Module | | RSM10MP-144HCBF495 | 19.16 19.36 | 144 (Half Cut Cells) | 1500 | 05.04.2024 | 04.04.2028 |
| | | | | | | (Glass to Transparent | (510 Wp) | RSM10MP-144HCBF500 RSM10MP-144HCBF505 | 19.55 | | | | |
| | | | | | | Backsheet) | | RSM10MP-144HCBF510 | 19.74 | | | | |
| | | | | | Buckstreety | | RSM10MP-144HCBF515 | 19.94 | | | | | |
| | | | | | | | | RSM10MP-144HCBF520 | 20.13 | | | | |
| | | | | | 7 | Bifacial Mono c-Si PERC | RSM10MP-144HCBF540 | RSM10MP-144HCBF525 | 20.32 | 144 (Half Cut Cells) | 1500 | 05.04.2024 | 04.04.2028 |
| | | | | | Module | (540 Wp) | RSM10MP-144HCBF530 | 20.52 | , , | | | | |
| | | | | | (Glass to Transparent | | RSM10MP-144HCBF535 | 20.71 | | | | | |
| | | | | | Backsheet) | | RSM10MP-144HCBF540 | 20.90 | | | | | |
| | | | | | | | | RSM10MP-144HCBF545 | 21.10 | | | | |
| | | | | | | | RSM10MP-144HCBF550 | 21.29 | | | | | |
| | | | | | 8 | Bifacial N-Type TOPCon | RS-M10TC-144-590 | RS-M10TC-144-610 | 23.61 | 144 (Half Cut Cells) | 1500 | 05.04.2024 | 04.04.2028 |
| | | | | | | Module | (590 Wp) | RS-M10TC-144-605 | 23.42 | | | | |
| | | | | | | (Glass to Glass) | | RS-M10TC-144-600 | 23.23 | | | | |
| | | | | | | | <u> </u> | RS-M10TC-144-595 | 23.03 | | | | |
| | | | | | | | <u> </u> | RS-M10TC-144-590 | 22.84 | | | | |
| | | | | | | | <u> </u> | RS-M10TC-144-585 | 22.65 | | | | |
| | | | | | | | | RS-M10TC-144-580 | 22.45 | | | | |
| | | | | | | | | RS-M10TC-144-575 | 22.26 | | | | |
| | | | | | 9 | Bifacial N-Type TOPCon | RS-M10TC-144-560 | RS-M10TC-144-570 RS-M10TC-144-565 | 22.07 21.87 | 144 (Half Cut Cells) | 1500 | 05.04.2024 | 04.04.2028 |
| | | | | | 3 | Module | (560 Wp) | RS-M10TC-144-560 | 21.68 | 144 (Hall Cut Cells) | 1300 | 03.04.2024 | 04.04.2028 |
| | | | | | | (Glass to Glass) | (300 MAh) | RS-M10TC-144-555 | 21.48 | | | | |
| | | | | | | (Glass to Glass) | | RS-M10TC-144-550 | 21.48 | | | | |
| | 1 | 1 | 1 | ⊢ | 10 | Bifacial N-Type TOPCon | | RS-M10TC-132-560 | 23.58 | 132 (Half Cut Cells) | 1500 | 05.04.2024 | 04.04.2028 |