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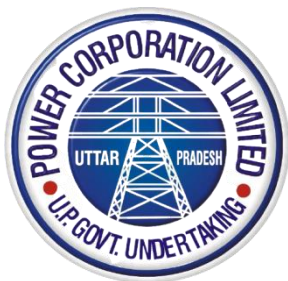
India Smart Grid Forum



**DISTRIBUTION  
UTILITY MEET  
DUM 2024**

## Session 2: STORIES FROM SOLARIZATION OF AGRICULTURAL FEEDERS AND NOTABLE EXPERIENCES FROM THE FIELD

### Presentation on KUSUM-C in UP – RFP by UPPCL & UPNEDA



***Presented By***

**Deepak Raizada,  
Chief Engineer (PPA), UPPCL**

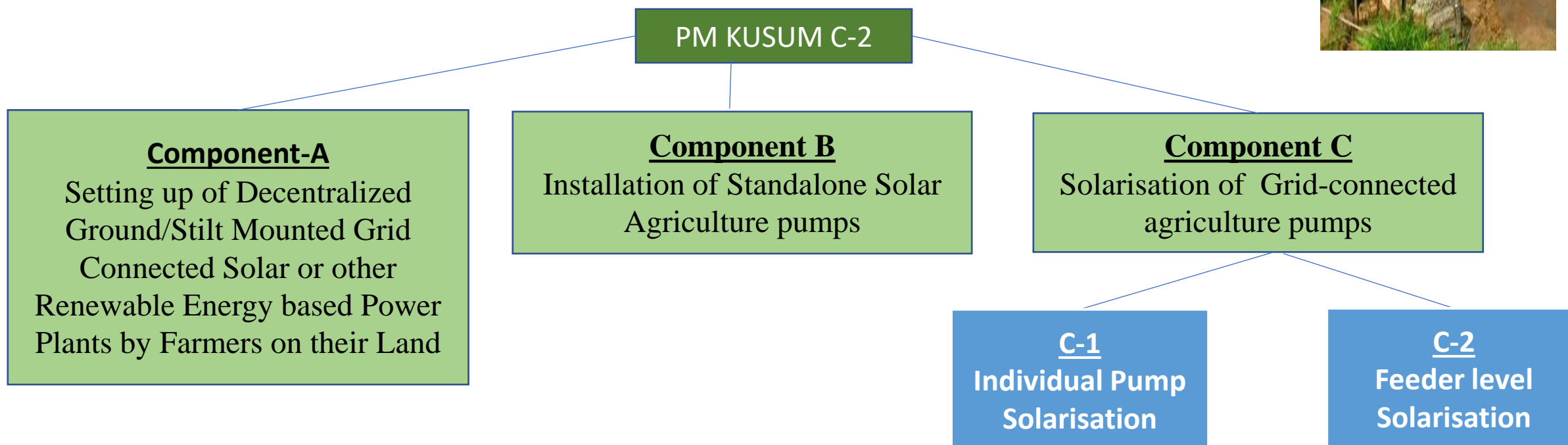


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## PM KUSUM Component C-2: Feeder Level Solarization (FLS)

- The **Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyan (PM-KUSUM) scheme** is a program that aims to increase the use of solar energy in India's agricultural sector.
- Scheme was launched in **March 2019** by the Ministry of New and Renewable Energy (MNRE).
- The scheme's **objectives** include:-
  - Providing Water and Energy Security to farmers.
  - Providing an alternative to diesel-powered irrigation i.e. de-dieselization of farm sector.
  - Increasing farmers' income by making RE/Solar technology available to farmers.



1. UPNEDA had invited a Tender for procurement of **150 MW** power for feeder-level Solarization at **49 Substations** through **RESCO Mode** for a **tenure of 25 years**.
2. **22 PPAs** for a total quantum of **34.8 MW** were signed by UPPCL with the successful bidders at a tariff of **Rs. 2.99/kWh**.

DISCOM	Count Of Projects	Solar Capacity (MW)
PUVVNL	8	11.8
PVVNL	8	12.2
DVVNL	5	8.8
MVVNL	1	2.0
<b>TOTAL</b>	<b>22</b>	<b>34.8</b>

## Salient Features of the Bidding Documents for Procurement of 3205 MW Power ....(1/3)

- RfS and Draft PPA for **3205 MW** Capacity and **942 Substations** in **36 Districts** floated in accordance with MNRE Guidelines dated 17.01.2024

DISCOM	Substation (Nos.)	Feeder (Nos.)	Solar Capacity (MW)
PUVVNL	20	39	77.9
PVVNL	555	1513	2022.7
DVVNL	314	630	875.4
MVVNL	53	118	228.9
<b>TOTAL</b>	<b>942</b>	<b>2300</b>	<b>3205.0</b>

- Website <http://www.upneda.org.in> and <https://www.bharatelectronicstender.com>
- Online bid submission last date - **26.11.2024**.
- **Financial Eligibility** : **Net worth** of the bidder / lead member of the consortium shall be positive as on 31.03.2024.
- **EMD** - INR 1 lakh per MW (EPBG form)
- **PBG** - INR 1 lakh per MW (EPBG form) for 30 Months.

Project Capacity (in MW)	Ceiling tariff
Upto 5 MW	Rs. 3.10/kWh
5 MW to 50 MW	Rs. 2.98/kWh

### Salient Features of the Bidding Documents for Procurement of 3205 MW Power ....(2/3)

- Complete capacity of plant at each substation would be allocated to lowest bidder.
- Bidder shall place only one bid for a project (sub-station).
- Bidder may quote for multiple substation with separate tariff for each substation.
- **Lottery system** in case of two or more L 1 bidders on same sub-station.
- In case **no bid** is received for any Substation **Waterfall Method** would be applied.
  - The technically qualified bidders for other substations located in the **same district** would be considered. All such bidders would be ranked in **ascending order** of their quoted tariffs in other substation in the same district. The lowest would be Rank-1, second lowest Rank-2 and so forth.
  - The substation would be offered to the bidder with the **lowest rank (L-1 rate)** and if not accepted, it would be offered to the next bidder with second lowest rank and so on at **L-1 rate**. In case two or more bidders have the same rank, the particular substation will be offered to all such bidders. If more than one accepts, then **lottery system** shall take place.

### Salient Features of the Bidding Documents for Procurement of 3205 MW Power ....(3/3)

- In event the substation is not accepted by bidders in its own district, it would be offered to bidders in the **contiguous district** at L-1 rate.
- In the event of the substation still not accepted, it would be offered to all the bidders at **Discom level** at L-1 rate.
- UPNEDA may facilitate in identifying land. **Details of identified land parcels in UP is available on UPNEDA KUSUM C-2 Land portal : <https://upnedakusumc2.in/>.**
  - Interested Farmers may register their land for leasing for the project free of cost.
  - Developers may see the details of the identified land after registration with fees of Rs. 5,900/-.



## Project Details

- PPA to be signed between Developer and UPPCL for a **tenure of 25 years** at discovered tariff.
- Plant to be setup **within 12 month. Additional 6 months** may be provided by UPNEDA from date of LOA.
- **Minimum CUF of 19%** to be maintained on annual basis during the period of PPA.
- **Repowering** is allowed.
- **Excess generation and Early Commissioning** is allowed till Grid Stability, UPPCL will purchase.

## Subsidy Details

- **Central Financial Assistance (CFA)** of 30% of Project cost subject to a maximum of **Rs. 1.05 Cr/MW**
- **Viability Gap Funding (VGF)** of **Rs. 50 lakhs/ MW** from the UP Government.
  - First release of 30% of eligible CFA and VGF on 30% of work completion.
  - Second release of 30% of eligible CFA and VGF on 75% of work completion.
  - Final release of 40% of eligible CFA and VGF on successful work completion.

## Deviation of 150 MW RfS and PPA and 3205 MW RfS and PPA

	150 MW RfS and PPA	3205 MW RfS and PPA
<b>Limited Liability Partnership (LLP)</b>	LLPs not allowed	LLPs allowed
<b>Turnover</b>	Annual average Turnover: During the last five financial years should be Rs. 2 Cr per MW.	Clause Deleted. Net worth of the bidder / lead member of the consortium shall be positive as on 31.03.2024
<b>Multiple Bids</b>	Reverse auction to be conducted for substations receiving more than one bid.	Lottery system in case more than one L1 on substation.
<b>No Bid</b>	In case of no bid on any substation rebidding to be conducted.	In case of no bid on any substation waterfall method would be applied
<b>Repowering</b>	Repowering not allowed	Repowering is allowed.
<b>Early Commissioning and Excess Generation</b>	Early commissioning and Excess generation not allowed	Excess generation and Early Commissioning is allowed till Grid Stability, UPPCL will purchase.
<b>Land Portal</b>	No Land Bank or Land Portal present	Land Portal ( <a href="https://upnedakusumc2.in/">https://upnedakusumc2.in/</a> ) with approx. 114 land parcels present



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# THANK YOU

*For discussions/suggestions/queries email: [dum@indiasmartgrid.org](mailto:dum@indiasmartgrid.org)*

*[www.dumindia.in](http://www.dumindia.in)*

*[Links/References \(If any\)](#)*

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