Expression of Interest (EoI) for Empanelment of Agencies for Design, Supply, Installation, Testing, Commissioning and Comprehensive Maintenance for 7 years of Distributed Grid-connected Solar PV plants of Capacity above 5 kW (AC) to 100 kW (AC) for providing of Solar PV System to Agricultural Consumers on various Agriculture Feeders within the jurisdiction of UGVCL.

# **Invitation for Expression of Interest (EOI)**

for

Expression of Interest (EoI) for Empanelment of Agencies for Design, Supply, Installation, Testing, Commissioning and Comprehensive Maintenance for 7 years of Distributed Grid-connected Solar PV plants of Capacity above 5 kW (AC) to 100 kW (AC) for providing of Solar PV System to Agricultural Consumers on various Agriculture Feeders within the jurisdiction of UGVCL.

EOI No: UGVCL/SOLAR/SKY/EOI/Ag. Solarization/2022-23/01 Dated: 13/05/2022



The Chief Engineer (P&P)
Uttar Gujarat Vij Company Ltd.,
CIN: U40102GJ2003SGC042906,
Regd. & Corporate Office, Visnagar road,
MEHSANA-384001, GUJARAT-INDIA

Web: www.ugvcl.com, Email: cepp@ugvcl.com

Sign & Round Seal of the EOI applicant

Date and place (Page 1 of 125)

Expression of Interest (EoI) for Empanelment of Agencies for Design, Supply, Installation, Testing, Commissioning and Comprehensive Maintenance for 7 years of Distributed Grid-connected Solar PV plants of Capacity above 5 kW (AC) to 100 kW (AC) for providing of Solar PV System to Agricultural Consumers on various Agriculture Feeders within the jurisdiction of UGVCL.

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Sign & Round Seal of the EOI applicant	Date and place	(Page <b>2</b> of <b>125)</b>

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Sign & Round Seal of the EOI applicant	Date and place	(Page <b>3</b> of <b>125)</b>

Expression of Interest (EoI) for Empanelment of Agencies for Design, Supply, Installation, Testing, Commissioning and Comprehensive Maintenance for 7 years of Distributed Grid-connected Solar PV plants of Capacity above 5 kW (AC) to 100 kW (AC) for providing of Solar PV System to Agricultural Consumers on various Agriculture Feeders within the jurisdiction of UGVCL.

# **Notice Inviting EOI**

# EOI No: UGVCL/SOLAR/SKY/EOI/Ag. Solarization/2022-23/01DT:13/05/2022

The Chief Engineer (P&P)-UGVCL invites "On line Expression of Interest-EOI" for Empanelment of agencies for "Design, Supply, Installation, Testing, Commissioning and Comprehensive Maintenance for 7 years of Distributed Grid-connected Solar PV plants of Capacity above 5 kW (AC) to 100 kW (AC) for providing of Solar PV System to Agricultural Consumers on various Agriculture Feeders within the jurisdiction of UGVCL.

EOI documents may be down loaded from web site <a href="https://ugvcl.nprocure.com">https://ugvcl.nprocure.com</a> (For view, down load and on line submission) and UGVCL's web sites<a href="https://ugvcl.nprocure.com">www.ugvcl.com</a> for view & down load only). (To view the PDF file please use "Acrobat Reader" software which can be downloaded from "Adobe "website.)

EOI offer is required to be submitted by *online mode only in electronic form on website* <a href="https://uqvcl.nprocure.com">https://uqvcl.nprocure.com</a> (i.e. under preliminary, technical and price offer stage of online) <a href="except">except</a> documents (as mentioned in the clause no.: 3A and 3B of "PART-C- NOTE: IMPORTANT") to be submitted physically in sealed Main cover containing separate covers for "EMD &EOI Document fee Documents cover" and "Technical Offer documents cover" separately by Registered Post A.D. or Speed Post addressed to:-

The Chief Engineer(P&P),
Uttar Gujarat Vij Company Ltd., Regd. & Corporate Office,
Visnagar road,
MEHSANA-384001, (Gujarat)

# "NO COURIER SERVICE OR HAND DELIVERY" will be allowed.

Sr. no.	Description			
1	EOI No: UGVCL/SOLAR/SKY/EOI/Ag. Solarization/2022-23/01 DT: 13/05/2022			
2	Name of EOI:- Expression of Interest (EoI) for Empanelment of agencies for "Design, Supply, Installation, Testing, Commissioning and Comprehensive Maintenance for 7 years of Distributed Grid-connected Solar PV plants of Capacity above 5 kW (AC) to 100 kW (AC) for providing of Solar PV System to Agricultural Consumers on various Agriculture Feeders within the jurisdiction of UGVCL.			
3	EOI Document Fee in Rs. (non-refundable)  Rs. (non-Rs. 8850/-Rupees Eight Thousand Eight			

Sign & Round Seal of the EOI applicant	Date and place	(Page <b>4</b> of <b>125)</b>

Expression of Interest (EoI) for Empanelment of Agencies for Design, Supply, Installation, Testing, Commissioning and Comprehensive Maintenance for 7 years of Distributed Grid-connected Solar PV plants of Capacity above 5 kW (AC) to 100 kW (AC) for providing of Solar PV System to Agricultural Consumers on various Agriculture Feeders within the jurisdiction of UGVCL.

	greature recuers within the jurisdiction of ouver.			
		hundred Fifty only		
		For MSME Units in Rs. 80000		
4		(Eighty Thousand only)		
	Earnest Money Deposit amount in Rs.	For Non-MSME Units in Rs. 1.20		
		Lacs (One lakh Twenty Thousand		
		Only)		
	Last Date & Time for receipt of query /			
	clarification on the EOI Document if			
	any for pre-offer meeting. Query /	Date:20/05/2022		
5	clarification to be sent by e-mail only on	On Before 17.00 hrs.		
	following email IDs	On Before 17.00 ms.		
	cepp@ugvcl.com;			
	sesolar@ugvcl.com			
	Date, time & venue for <u>Pre EOI-</u>	Date:24/05/2022		
	OfferMeeting:	Time: 12.00 hrs Noon		
	(TheAgency who wants to attend the	Venue: UGVCL Corporate Office Conference Hall Mehsana.		
6	pre-EOI offer meeting is requested to			
	intimate us at least one day in advance	Comercine Han Wensana.		
	prior to the date of the pre-offer			
	meeting through e-mail only. )			
	On line Preliminary, technical and Price			
7	offer i.e. On line EOI Document/ offer			
	submission last date and time (This is	up to 18.00 hours		
	mandatory)			
	Last date of Physical submission of			
8	"relevant EOI Documents" (by			
	Registered post A.D. or SPEED POST	up to 17.00 hours		
	only (This is mandatory)			
	Date of opening of "EOI Document	D		
9	Fee& EMD Cover Documents" physical	Date:09/06/2022		
	as well as online opening of preliminary	up to 11.00 hours		
	offer (if possible)			
10	Date of opening of Technical offer	Date:10/06/2022		
10	document physical as well as online	up to 11.00 hours		
	Technical stage (if possible)			
11	Tentative Date of on – line opening of Priceoffer stage (Price Offer) (tentative,	Date:21/06/2022		
		up to 11.00 hours		
	if possible)			

# • UGVCL GSTIN No. is 24AAACU6551F1ZI

Sign & Round Seal of the EOI applicant	Date and place	(Page <b>5</b> of <b>125)</b>

Expression of Interest (EoI) for Empanelment of Agencies for Design, Supply, Installation, Testing, Commissioning and Comprehensive Maintenance for 7 years of Distributed Grid-connected Solar PV plants of Capacity above 5 kW (AC) to 100 kW (AC) for providing of Solar PV System to Agricultural Consumers on various Agriculture Feeders within the jurisdiction of UGVCL.

• Every Agency have to inform their GSTIN No. at the time of payment of applicable fees

AS PER THE NOTICE OF THE INVITATION OF EOI DOCUMENT (NEWS PAPER ADVERTISEMENT), THE EOI DOCUMENT IS INVITED BY *E-EOI DOCUMENTING (ON – LINE) SYSTEM*, FOR WHICH FOLLOWING CONDITIONS ARE MANDATORY.

- [A] All the relevant documents as per cl no 3A and 3B of "PART-C-(NOTE: IMPORTANT)" of EOI Document are required to be submitted physically in sealed Main cover containing separate covers for "EMD&EOI Document fee Documents cover" as per 3A and "Technical Offer documents cover" as per 3B separately (This cover shall be super scribe "EOI Document no.: UGVCL/SOLAR/SKY/EOI/Ag. Solarization/2022-23/01 DT 13/05/2022 only, on OR before due date and time. All such documents should be strictly submitted by RPAD/Speed post only, otherwise the offer will not be considered and no any further communication in the matter will be entertained.
- [B] The documents other than mentioned in Part-C and documents mentioned in *Annexure-12* of general and commercial terms and conditions of EOI Document (i.e. Part-"F") are required *to be uploaded in technical stage of online EOI Document and submitted physically in "Technical Offer documents cover".* In case of not uploading of required document in online offer or uploading of wrong document or not submitting physically in "Technical Offer documents cover",offer may not be considered for technical evaluation. However, the Agency may upload additional documents, broachers, technical / other information etc, if desires to give with the offer.

[C]Agency are requested to submit price – offer (Schedule – B) in on-line (e-EOI electronic form) only and not to submit the price offer in physical form. This is mandatory. If price offer is submitted in physical form, same will not be opened and only on-line submitted price offer will be considered for evaluation.

(D)It is mandatory for all the agencies to submit their EOI Documents by both forms viz. on - line (e - EOI Documenting) and physically in schedule time. If EOI documents submitted in only any one form, say either by on line or physically, in that case the same EOI Document will not be considered.

[E] UGVCL at its sole discretion may ask additional clarification or information or documents from the Agency who are found to be eligible in main pre-qualification criteria.

<u>Note:-</u>Agency should be in touch with websites <a href="https://ugvcl.nprocure.com">https://ugvcl.nprocure.com</a> & <a href="https://ugvcl.nprocure.com">www.ugvcl.com</a> for information regarding revision/corrigendum/Amendment in EOI Document till due date of online submission and thereafter. No separate information shall be sent in this regard and also not publish in newspaper.

Sign & Round Seal of the EOI applicant	Date and place	(Page <b>6</b> of <b>125</b> )

Expression of Interest (EoI) for Empanelment of Agencies for Design, Supply, Installation, Testing, Commissioning and Comprehensive Maintenance for 7 years of Distributed Grid-connected Solar PV plants of Capacity above 5 kW (AC) to 100 kW (AC) for providing of Solar PV System to Agricultural Consumers on various Agriculture Feeders within the jurisdiction of UGVCL.

Any technical questions, information and clarifications that may be required pertaining to this enquiry should be referred to **The Chief Engineer(P&P)**, **Uttar Gujarat Vij Company Ltd.**, **Regd. & Corporate Office**, **Visnagar road**, **MEHSANA-384001**, **GUJARAT-INDIA** 

e-Mail:- cepp@ugvcl.com

UGVCL reserves the right to reject any OR all EOI Documents/offers without assigning any reasons thereof.

For and on behalf of UGVCL

**Chief Engineer (P&P)** 

Sign & Round Seal of the EOI applicant	Date and place	(Page <b>7</b> of <b>125)</b>

Expression of Interest (EoI) for Empanelment of Agencies for Design, Supply, Installation, Testing, Commissioning and Comprehensive Maintenance for 7 years of Distributed Grid-connected Solar PV plants of Capacity above 5 kW (AC) to 100 kW (AC) for providing of Solar PV System to Agricultural Consumers on various Agriculture Feeders within the jurisdiction of UGVCL.

# Disclaimer

- A. All information contained in this, Expression of Interest (EOI) subsequently provided / clarified are in good interest and faith. This is not an agreement and is not an offer or invitation to enter into an agreement of any kind with any applicant.

  Each applicant should conduct its own investigation and analysis & should check the accuracy, reliability and completeness of the information in this Expression of Interest. Applicants should make their own independent investigation in relation to any additional information that may be required.
  - Applicant should make their own due diligence of facilities while preparing this
- B. The information contained in this EOI Documentor subsequently provided to EOI applicant(s), whether verbally or in documentary or in any other form by or on behalf of UGVCL/DISCOM or any of its employees, consultants or associates, is provided to EOI applicant(s) on the terms and conditions set out in this EOI Document/ Offer and such other terms and conditions subject to which such information is provided.
- C. This EOI Document/ Offer is not an agreement and is neither an offer nor invitation by UGVCL to the prospective Agency or any other party. The purpose of this EOI Document/ Offer is to provide interested parties with information that may be useful to them in making their Offer. This EOI Document/ Offer includes statements, which reflect various assumptions and assessments arrived at by DISCOM in relation to the Project. Such assumptions, assessments and statements do not purport to contain all the information that each EOI applicant may require. This EOI Document/ Offer may not be appropriate for all persons, and it is not possible for UGVCL to consider the technical capabilities, investment objectives, financial situation and particular needs of each party who reads or uses this EOI Document/ Offer. The assumptions, assessments, statements and information contained in this EOI Document/ Offer may not be complete, accurate, adequate or correct. Each EOI applicant should, therefore, conduct its own investigations and analysis and should check the accuracy, adequacy, correctness, reliability and completeness of the assumptions, assessments, statements and information contained in this EOI Document/ Offer and obtain independent advice from appropriate sources.
- D. Information provided in this EOI Document/ Offer to the EOI applicant(s) is on a wide range of matters, some of which depends upon interpretation of law. The information given is not an exhaustive account of statutory requirements and should not be regarded as a complete or authoritative statement of law. UGVCL accepts no responsibility for the accuracy or otherwise for any interpretation or opinion on law expressed herein.

Sign & Round Seal of the EOI applicant	Date and place	(Page <b>8</b> of <b>125)</b>

- E. UGVCL or any of its employees, consultants or associates make no representation or warranty and shall have no liability to any person including any EOI applicant under any law, statute, rules or regulations, principles of restitution or unjust enrichment or otherwise for any loss, damages, cost or expense which may arise from or be incurred or suffered on account of anything contained in this EOI Document/ Offer or otherwise including the accuracy, adequacy, correctness, completeness or reliability of the OFFER and any assessment, assumption, statement or information contained therein or deemed to form part of this EOI Document/ Offer or arising in any way in this Offer stage.
- F. UGVCL or any of its employees, consultants or associates also accept no liability of any nature whether resulting from negligence or otherwise howsoever caused arising from reliance of any EOI applicant upon the statements contained in this EOI Document/Offer.
- G. UGVCL may in its absolute discretion, but without being under any obligation to do so, update, amend or supplement the information, assessment or assumptions contained in this EOI Document/ Offer.
- H. The issue of this EOI Document/ Offer does not imply that UGVCL is bound to select an EOI applicant for the Project and UGVCL reserves the right to reject all or any of the Agency or Offers or discontinue or cancel the offering process without assigning any reason whatsoever.
- I. The EOI applicant shall bear all its costs associated with or relating to the attending pre-offer meeting, preparation and submission of its Offer including but not limited to preparation, copying, postage, delivery fees, traveling, food, lodging, expenses associated with any demonstrations or presentations which may be required by UGVCL or any other costs incurred in connection with or relating to its Offer. All such costs and expenses will remain with the EOI applicant and UGVCL shall not be liable in any manner whatsoever for the same or for any other costs or other expenses incurred by a EOI applicant in preparation or submission of the Offer, regardless of the conduct or outcome of the offering Process.

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Expression of Interest (EoI) for Empanelment of Agencies for Design, Supply, Installation, Testing, Commissioning and Comprehensive Maintenance for 7 years of Distributed Grid-connected Solar PV plants of Capacity above 5 kW (AC) to 100 kW (AC) for providing of Solar PV System to Agricultural Consumers on various Agriculture Feeders within the jurisdiction of UGVCL.

# **A- Definitions and Abbreviations**

	A- Definitions and Appreviations	#D 6: # 1 1 1 6
1.	"Beneficiary" :	"Beneficiary" shall mean the farmer who is the consumer of DISCOM for 3-ph Agriculture connection of Supply of Electricity and who have applied to participate in the project of Solarization of its existing Agriculture pump sets in his/her farm by installing grid connected SPV system
2.	"EOI applicant(s)" :	The <b>"EOI applicant (s)"</b> shall mean the EOI applicant whose offer is received by UGVCL as per eligibility criteria and shall include such EOI applicant's heirs, legal representatives, successors and assignees. Here, in this case, the EOI applicant shall not be a Joint Venture or a Consortium or an Associate.
3.	"EOI Offer" :	"EOI Offer" means this EOI Document having EOI number and name as mentioned in EOI inviting Notice including all its documents, along with all formats, annexures, corrigendum, modifications, amendments and clarifications thereto; in on-line and physical submission of offer/offer in response to this EOI Document in accordance with the terms and condition thereof.
4.	"Circle" :	"Circle" means Operation and Maintenance Circles of DISCOM.
5.	"Contract" :	The "Contract" shall mean the agreement to be entered into by the DISCOM with the Empanelled Agency/empanelled agency/supplier upon receiving the Letter of Award from DISCOM for implementation of the Project and shall include the General and commercial terms & condition, scope of work, project requirement, technical conditions, schedules, appendixes, drawings

Sign & Round Seal of the EOI applicant	Date and place	(Page <b>10</b> of <b>125)</b>

			and any other conditions specifically agreed between the parties forming a part of the contract
6.	"Empanelled Agency"/"Successful EOI applicant"/ "Supplier"/ "Contractor"	:	The "Empanelled Agency"/"Successful EOI applicant"/ "Supplier"/ " Contractor" shall mean the EOI applicant, whose EOI offer has been accepted by the DISCOM for empanelment as registered supplier /agency and shall include his authorized representatives and have signed the 'contract' agreement with DISCOM.
7.	"Company"	:	"Company" shall mean Distribution Company
8.	"Date of completion of Project"	:	"Date of completion of project" shall mean that the date of project handed over and accepted by the engineer-in-charge of DISCOM all respect provided that the CMC of 7 years, Guarantee and warrantee of 7 years shall be applicable as per the EOI Document terms and condition after the date of completion of Project.
9.	"DISCOM"	:	"DISCOM" Shall mean electricity Distribution Companies and subsidiaries of the Gujarat Urja Vikas Nigam Ltd.viz, UGVCL/PGVCL/MGVCL/DGVCL
10.	"Division"	:	<b>"Division"</b> Shall mean Operation and Maintenance Division of DISCOM.
11.	"EMD"	:	The <b>"EMD"</b> shall mean Earnest Money Deposit which is required to pay as per the EOI Document condition.
12.	"Engineer" / "Engineer-in-charge"	:	The "Engineer" / "Engineer-in-charge" shall mean the authorized officer of the <b>DISCOM</b> to act as Engineer to supervise the work for the purpose of the contract.
13.	"EPC"	:	<b>"EPC"</b> Shall mean Engineering, Procurement and commissioning of the complete project as per the terms and condition of the EOI

Sign & Round Seal of the EOI applicant	Date and place	(Page <b>11</b> of <b>125)</b>

		Document	
14. "Financial Year" or "FY"	:	"Financial Year" or "FY" shall Period starting from 1 April calendar year to 31 Marc consecutive calendar year.	of the first
5. "Guarantee Period" / "warrantee period"	:	The "Guarantee Period"/ period" shall mean the period of the Empanelled Agency shall re for replacement / repair and mai any defective parts / work perfo Empanelled Agency under the per the EOI Document condition.	emain liable intenance of rmed by the contract as
6. <b>"Guaranteed CUF"</b>	:	"Guaranteed CUF" shall be 18.39 with respect to the AC capacit plant.	
17. "Letter of Acceptance / Notice of Award of Contract / Letter of Award"	:	"Letter of Acceptance / Notice of Contract / Letter of Award" shat official notice issued by the notifying the successful EOI applies offer has been accepted empanelment with informing the EOI applicant to pay Security and execute the Agreement with per the terms and conditions.	all mean the e DISCOM, policant that ed for the successful Deposit (SD)
8. "Order" / "Acceptance of EOI Offer"	:	The "Order" /"Acceptance of shall mean the official letter is: DISCOM informing the EOI application applications and the EOI Document has been accepted.	sued by the cant that his
.9. <b>"Party" or "Parties"</b>	:	"Party" or "Parties" Shall Successful EOI applicant who ha Contract with the DISCOM to fulfilment of the Terms and Contract this EOI Document.	owards the
20. GUVNL	:	Gujarat Urja Vikas Nigam Limited	(GUVNL).
21. "Project"	:	"Project" Shall mean the project Document item for which the invited covering all aspects and	e offers are d terms and
		conditions as per the EOI	Document
		conditions as per the EOI	Document

various Agriculture Feeders within the juri	Suicti	on or odvet.	
		documents. The project cov Installation, Testing and Comm Distributed Grid connected Sola with CMC of 7years, on 11 Feeders as per the EOI Documen	nissioning of r PV system KV AGDOM
2. "Project Management Consultant" (PMC)/ "Consultant"		"Project Management Consulta "Consultant" Shall mean an age appointed by DISCOM for management.	
3. "PV System" or "SPV " or " SPV System"		"PV System" or "SPV" or "Senall mean the Grid-tie Solar Per (PV) system including the PV module inverter(s), module structure(s), cables and connection and earthing equipment, interequipment, and inverter we monitoring with other companication of Agriculture pumes shall be supplied, installed, contained by the Empanelled	hoto-Voltaic odules, grid- mounting ctors, safety erconnection ith remote conents for p sets that ommissioned
4. "Qualifying EOI applicant"		"Qualifying EOI applicant" shall EOI applicant who shall me eligibility criteria mentioned Document and selected in the endist.	eet all the in the EOI
5. <b>"Scheme"</b>		"Scheme" shall mean so solarization of Agriculture announced by Govt/GUVNL/ DIS	Consumers
6. <b>"System"</b>		"System" shall mean the grid Solar PV system as per EOI Doo shall be supplied, installed, co and maintained with all oth required by the Empanelled satisfactory operation of the Syst	cument that ommissioned er ancillary Agency for
27. "Solarization"		<b>"Solarization"</b> shall mean to of existing Agriculture pump sets of the distributed, renewable energy solar by installing Grid connect system of the required capa	of farmer to gy source of ed Solar PV
Sign & Round Seal of the EOI applicant		Date and place	(Page <b>13</b> of <b>1</b>

various Agriculture reeders within the	Januarenon or oover.
	farmer's premises (i.e.farm) as per the EOI Document terms and condition.
28. "Specification"	The "Specification" shall mean the EOI Document forming a part of the contract along with Proforma, schedules, appendixes and all annexure Part-G of EOI Document.
29. <b>"Sub-Division"</b>	"Sub-Division" Shall mean Operation and Maintenance Sub-Division of DISCOM
30. "Tripartite Agreement"	"Tripartite Agreement" means an agreement to be executed by and amongst the Empanelled supplier/agency, DISCOM& the Beneficiary in Gujarati language.
31. "week"	"Week" shall means the continuous period of seven days
32. <b>"Work"</b>	The "Work" shall mean activities to Supply, Installation, testing & commissioning of the EOI Document item for which the offers are invited.
Abbreviations	: Abbreviations are shown as under
1. AC	: Alternating Current
2. <b>ACP</b>	: Aluminium Composite Panel
3. <b>Ag.</b>	: Agriculture
4. <b>AM</b>	: Air Mass
5. <b>ASTM:</b>	: American Society for Testing and Materials
6. <b>BIS</b>	: Bureau of Indian Standards
7. <b>BoQ</b>	: Bill of Quantity
8. <b>BOS</b>	: Balance-of-System
9. <b>CEA</b>	: Central Electricity Authority
10. <b>CERC</b>	: Central Electricity Regulatory Commission

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11. <b>"CEIG"</b>	: Chief Electrical Inspector of Government
12. <b>CMC</b>	: Comprehensive maintenance Contract for 7 years
13. <b>DC</b>	: Direct Current
14. <b>DCDB</b>	: Direct Current Distribution Box
15. <b>DTR</b>	: Distribution Transformer
16. <b>DWC</b>	: Double Walled corrugated
17. <b>EPC</b>	: Engineering, Procurement and Commissioning
18. <b>EPF</b>	: Employee Provident Fund
19. <b>FF</b>	: Fill Factor
20. <b>FOR/F.O.R.</b>	: Freight on Rail/Road
21. <b>GEDA</b>	: Gujarat Energy Development Agency
22. <b>GERC</b>	: Gujarat Electricity Regulatory Commission
23. <b>GERMI</b>	: Gujarat Energy Research & Management Institute
24. <b>GI</b>	: Galvanized Iron
25. <b>GST</b>	: Goods and Services Tax
26. <b>HP</b>	: Horse Power
27. <b>HDGI</b>	: Hot Dipped Galvanized Iron
28. <b>HDPE</b>	: High Density Polyethylene
29. <b>HFL</b>	: Highest Flood-Level
30. <b>HT</b>	: High Tension (11 KV )
31. <b>IP</b>	: Internet Protocol /Ingress Protection
32. <b>IPR</b>	: Intellectual Property Right
33. <b>IEC</b>	: International Electrotechnical Commission
34. <b>IEEE</b>	: Institute of Electrical and Electronics Engineers
35. <b>IS</b>	: Indian Standard

Sign & Round Seal of the EOI applicant	Date and place	(Page <b>15</b> of <b>125)</b>

	risaic	AUDIT OF OGVEE
36. <b>Isc</b>	_:	Short Circuit Current
37. <b>IST</b>	:	Indian Standard Time
38. <b>KV</b>	:	Kilo Volt
39. <b>KW</b>	:	Kilo Watt
40. <b>KWp</b>	:	Kilo Watt peak
41. <b>LT</b>	:	Low Tension
42. <b>IoT</b>	:	Internet of Things
43. <b>MCB</b>	:	Miniature Circuit Breaker
44. <b>MDAS</b>	:	Meter Data Acquisition System
45. <b>MIS</b>	:	Management Information System
46. <b>MMS</b>	:	Module Mounting Structure
47. <b>MNRE</b>	:	Ministry of New and Renewable Energy, GOI.
48. <b>MPPT</b>	:	Maximum Power Point Tracker
49. <b>MW</b>	:	Mega Watt
50. <b>NEC</b>	:	National Electric Code
51. <b>NIT</b>	:	Notice Inviting EOI Document
52. <b>NOCT</b>	:	Normal Operating Cell Temperature
53. <b>OS</b>	:	Operating System for Computer/server
54. <b>PAN</b>	:	Permanent Account Number
55. <b>PCU</b>	:	Power Conditioning Unit
56. <b>PID</b>	:	potential-induced degradation
57. <b>POC</b>	:	Proof of Concept
58. <b>PV</b>	:	Photo Voltaic
59. <b>PVC</b>	<u>:</u>	Poly vinyl chloride
60. <b>RCCB</b>	:	Residual Current Circuit Breaker
61. <b>RFID</b>	:	Radio Frequency Identification
62. <b>RTC</b>	:	Real Time Clock
63. <b>REC</b>	:	Rural Electrification Corporation, GOI

Sign & Round Seal of the EOI applicant	Date and place	(Page <b>16</b> of <b>125)</b>

Expression of Interest (EoI) for Empanelment of Agencies for Design, Supply, Installation, Testing, Commissioning and Comprehensive Maintenance for 7 years of Distributed Grid-connected Solar PV plants of Capacity above 5 kW (AC) to 100 kW (AC) for providing of Solar PV System to Agricultural Consumers on various Agriculture Feeders within the jurisdiction of UGVCL.

64. <b>RDBMS</b>	:	Relational Data Base Management System
65. <b>SCADA</b>	:	Supervisory Control And Data Acquisition
66. <b>SMB</b>	:	Sub Miniature version B
67. <b>SPV</b>	:	Solar Photo Voltaic
68. <b>SPD</b>	:	Surge Protection Device
69. <b>STADD-Pro</b>	:	Structural Analysis And Design Computer Program
70. <b>STC</b>	:	Standard Testing Condition ("STC" shall mean Standard Testing Condition for solar cells and PV modules with air mass AM1.5, irradiance 1000W/ m2, and cell temperature of 25°C.)
71. <b>TPI</b>	:	Third Party Inspection
72. <b>THD</b>	:	Total Harmonic Distortion
73. <b>ToU</b>	:	Time of Use
74. <b>UAT</b>	:	User Acceptance Test
75. <b>UV</b>	:	Ultra Violet
76. <b>Vmp</b>	:	Voltage at Maximum Power
77. <b>Voc</b>	:	Voltage at Open Circuit
78. <b>-Ve</b>	:	Negative
79. <b>W</b>	:	Watt
80. <b>Wp</b>	:	Watt peak
81. <b>XLPE</b>	:	Cross-linked Polyethylene

# **PART-B- Important Instruction to Agency**

# 1. Earnest Money Deposit (EMD) is to be paid as under:

EOI Documenter has to pay E.M.D. as mentioned in EOI Document notice. The EMD is payable by demand draft in favour of UGVCL Drawn on any Scheduled Bank / Nationalized Bank **Mehsana**. It should be paid either, by Demand Draft or Banker's Cheque or Bank Guarantee. Otherwise it should be paid either in Cash (up to Rs. 10,000/- only) at the office address specified in the EOI Document or **by Demand Draft or Banker's Cheques only.** 

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Expression of Interest (EoI) for Empanelment of Agencies for Design, Supply, Installation, Testing, Commissioning and Comprehensive Maintenance for 7 years of Distributed Grid-connected Solar PV plants of Capacity above 5 kW (AC) to 100 kW (AC) for providing of Solar PV System to Agricultural Consumers on various Agriculture Feeders within the jurisdiction of UGVCL.

In cash of BG in favour of UGVCL from any Scheduled / Nationalized Banks in a standard format prescribed by UGVCL (Format given in this EOI Document). The validity of Bank Guarantee shall be 06 months from the schedule date of opening of EOI Document or to be extended as required by UGVCL. The BG shall be any of the banks as notified vide finance department of Govt. of Gujarat GR no.: EMD.10/2021/0729/DMO dated 28/06/2021and further amendments if any. Cheques are not acceptable. CORPORATE BANK GUARANTEES NOT ALLOWED.

The Micro and Small Scale Industrial (manufacturing) Units registered under Small Scale Industries of Gujarat State and holding subsequent registration with CSPO / NSIC / DGS&D, Registration Certificates for solar modules or solar inverters will be eligible for exemption from payment of EMD on submission of duly notarized copies of their Udyam registration certificate& CSPO/ NSIC/DGS&D Registration Certificates in EMD Cover. This benefit of exemption will not be admissible if they take part in the EOI Document indirectly either through their dealers, agents, distributors or other intermediators. Such industries shall require submitting the document of the brand name, Technical specification and its manufacturing capacity of item registered (Solar modules / solar inventor) in above certificate for verification.

EOI Documents submitted without Earnest Money Deposit by the firms, who are not eligible for any exemption, will be rejected without entering in to further correspondence in this regard and no reference will also be made.

The Udyam registration certificate NSIC/CSPO/DGS&D certificate should indicate the manufacture of Solar modules or Solarinventors. It should indicate the manufacture of related group of item. Provisional Registration Certificates are NOT allowed.

Government or Semi-Government Organizations, which are run departmentally & are not limited Companies, will be eligible for exemption from payment of E.M.D. No Interest will be allowed against payment of E.M.D.

Micro& SmallEnterprises unit of Gujarat or outside Gujarat of India should submit the Notarized copy of either certificate/acknowledgement of entrepreneur Memorandum of Udyam registration certificate/ NSIC/CSPO/DGS&D certificate indicating MICRO AND Micro & Small category of the firm, in physical form in "EMD Cover Documents" for the benefit of Payment of EMD at Lower value. Note: The offer will be rejected out rightly; if above mandatory documents are not submitted in physical form.

Note: The offer will be rejected out rightly; if above mandatory.

# 2. Instruction for Physical and On-Line Submission of EOI offer

a) All the relevant documents as per cl no 3A and 3B of "PART-C-( NOTE: IMPORTANT)" of EOI Document are required to be submitted physically in sealed

Sign & Round Seal of the EOI applicant	Date and place	(Page <b>18</b> of <b>125)</b>

Expression of Interest (EoI) for Empanelment of Agencies for Design, Supply, Installation, Testing, Commissioning and Comprehensive Maintenance for 7 years of Distributed Grid-connected Solar PV plants of Capacity above 5 kW (AC) to 100 kW (AC) for providing of Solar PV System to Agricultural Consumers on various Agriculture Feeders within the jurisdiction of UGVCL.

Main cover containing separate covers for "EMD&EOI Document fee Documents cover" as per 3A and "Technical Offer documents cover" as per 3B separately will be sent only by Registered Post A.D. or by Speed Post addressed to the CHIEF ENGINEER (P&P), UGVCL"NO COURIER SERVICE OR HAND DELIVERY" will be allowed.

- b) All the relevant documents as per cl no no 3A and 3B of "PART-C-( NOTE: IMPORTANT)" should reach to this office on or before date and time mentioned in EOI Document notice. No EOI Document shall be accepted / opened in any case received after due date and time of receipt of EOI Document of delay due to postal services or any other reasons and that UGVCL shall not assume any responsibility for late receipt of the EOI Document.
- c) Demand Draft for payment of EOI Document fee & EMD must be placed in the Cover super scribing"EMD &EOI Document fee Cover Documents" along with requisite documents as mentioned in the PART-C-Cl no-3 of this document.
- d) First the "E.M.D &EOI Document fee Cover Documents" (Physical documents) will be opened and simultaneously the preliminary stage of online mode will also be opened& if the documents towards payment of EOI Document Fee, E.M.D and E.M.D. cover documents are found OK then only Technical Offer in online as well as physical mode will be opened, which may please be noted; otherwise online offer / e-EOI Document will not be opened / say rejected out rightly and no correspondence in this regard will be entertained.
- e) Agency shall submit Price Offer'On-Line'in electronic form only and not in physical form.
- f) Technical offer and Commercial offer:

The technical offer is required to be submitted in online as well as physical mode. The technical and commercial offer shall comprise all the technical and commercial details as required to be submitted as mentioned in the EOI document. However, the required documents of technical offer which are mentioned in no 3B of "PART-C-( NOTE: IMPORTANT)" of EOI Document shall be submitted in "Technical offer Documents Cover" in physical form.

Please note that the required documents should be invariably uploaded in online / submitted in physically as mentioned in EOI Document. Any EOI Document without required documents is liable to be ignored and the EOI Document may be rejected without entering in to any further correspondence in this regard and no further reference will be made.

Sign & Round Seal of the EOI applicant	Date and place	(Page <b>19</b> of <b>125)</b>

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g) It is to clarify that in case of any discrepancy between physical annexure/ documents and on-line annexures /documents then on-line data will be considered as a final data for EOI Document evaluation and competition

# 3. Instructions for e- EOI (Online EOI) to Agency:

ı	Downloading of EOI Documents
Α	Offer document will be available on web site up to date shown in the EOI
	Document.
В	Agency willing to participate in EOI offer will have to get themselves registered
	on website <u>www.nprocure.com</u>
li	Digital Signature
Α	Agency should have valid digital certificate as per Information Technology Act
	2000 using which they can sign their electronic offers. Agency can also procure
	the same from (n) code solutions, a division of GNFC Ltd., who are licensed
	certifying authority by Govt. of India.
В	In case EOI applicant needs any clarification for e-EOI, details regarding digital
	certificate or if training required for participating in online EOI Document, they
	can contact the following office:-
	(n) Procure Cell M/s (n) Code Solution, A division of GNFC
	403, GNFC Info Tower, Bodakdev, S.G. Road, Ahmedabad 380054.(Gujarat)
	E-mail:nprocure@gnfc.netMob.: 9327084190; 9898589652
	Toll Free: 1-800-233-1010 ( Ext. 501, 512,516 , 517 , 525 )
	Phone No. 079-26857315 / 316 / 317
	Fax: 079-26857321 / 40007533
	Other Terms & Conditions as per detailed EOI Document
С	Agency who already possess valid Digital certificate need not to procure a new
	digital certificate.
iii	On line Submission of Technical and Price Offer
Α	Agency can prepare and edit their offers number of times before EOI Document
	submission date and time. After EOI Document submission date and time, EOI
	applicant cannot edit their offer submitted in any case. No written or online
_	request in this regard shall be granted.
В	EOI applicant shall submit their offer, i.e. Technical Offer as well as price offer
	in Electronic format on above mentioned website and date shown in EOI
_	Document details before digitally signing the same.
С	Offers submitted without digitally signed will not be accepted.
D	Offers only in physical form will not be open in any case.

Sign & Round Seal of the EOI applicant	Date and place	(Page <b>20</b> of <b>125)</b>

Expression of Interest (EoI) for Empanelment of Agencies for Design, Supply, Installation, Testing, Commissioning and Comprehensive Maintenance for 7 years of Distributed Grid-connected Solar PV plants of Capacity above 5 kW (AC) to 100 kW (AC) for providing of Solar PV System to Agricultural Consumers on various Agriculture Feeders within the jurisdiction of UGVCL.

### 4. General Instructions

- a) Documents towards payment of EOI Document Feebe kept along with EMD cover submission. The EOI Document fees for on line EOI Document will not be refunded under any circumstances.
- b) EOI Documenter has to pay E.M.D. as mentioned in EOI Document notice. EMD in the form as specified in EOI Document will be accepted.
- c) EOI Documents without EOI Document Fees, Earnest Money Deposit (EMD) and which do not fulfil all or any of the conditions or submitted incomplete in any respect will be rejected.
- d) Conditional EOI Document shall not be accepted.
- e) UGVCLreserves the right to reject any or all the EOI Documents or split the work between more than one EOI applicant without assigning any reasons thereof.

# PART-C: SCHEDULE- 'A'& NOTE: Important

# **SCHEDULE-- 'A':**

Inviting Expression of Interest (EOI)for Empanelment of SPV System Supplier for "Supplying, Installation, testing and Commissioning with CMC of 7 years" for Distributed Grid connected Solar PV System for Solarization of existing connections of Agriculture pump sets within the jurisdiction of UGVCL

Sr. No	Description	Total Quantity with sum of individual capacity PV Plants
1	Tentative total Capacity of Distributed grid connected SPV Plants of various individual capacities (ranging from above 5 KW to 100 KW) to come-up on various agriculture dominant feeders (MW).	Tentatively Up to 0.683 MW

Additional HT/LT overhead distribution line if required to erect, it shall be in the scope of UGVCL.

# PART-C: NOTE: IMPORTANT

1	AnEOI applicant should have required to submit the agreement/ MOU with the Solar PV module manufacture in case the EOI applicant is not a SPV module manufacturer
2	The quantity mentioned above is only indicative. The quantity or total capacity or number of components of the Solarization part may vary depending upon

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Expression of Interest (EoI) for Empanelment of Agencies for Design, Supply, Installation, Testing, Commissioning and Comprehensive Maintenance for 7 years of Distributed Grid-connected Solar PV plants of Capacity above 5 kW (AC) to 100 kW (AC) for providing of Solar PV System to Agricultural Consumers on various Agriculture Feeders within the jurisdiction of UGVCL.

actual requirement at the time of programme implementation and consumers' participation which will be based upon number of beneficiaries applied for this project.

The quantity mentioned above is tentative. No Dispute for non-allotmentor allotment of very less quantity shall be entertained and UGVCL's decision in this regards, shall be binding to the Agency. The UGVCL reserve the right to reduce/enhance the EOI Document quantity as per their requirement at the time of finalization of the EOI Document.

# 3 Physically Submission in sealed Main cover: -

The following documents' Covers as stated hereunder are required to be placed separately and submitted in physical form under sealed cover as "MAIN COVER". (This cover shall be super scribe "EOI Document No: UGVCL/SOLAR/SKY/EOI/Ag.Solarization/\_\_\_& due date of opening)

This MAIN COVERshall contain two separate covers as under.

**Sub-Cover -1**containing "EMD &EOI Document fee Documents cover" as per Documents mentioned in **Cl no 3A** 

**Sub-Cover-2**Containing "Technical Offer documents cover" as per documents mentioned in **Cl no -3B** 

# (3A) <u>'EMD COVER DOCUMENTS' SHALL CONTAINS THE FOLLOWING</u> DOCUMENTS:

The following documents as stated hereunder are required to be submitted in physical form under Seal cover of "EMD cover Documents". (This cover shall be super scribe "EOI Document No: UGVCL/EOI/Ag. Solarization/& due date of opening)

- (1)EOI Document fee amount by way of demand draft <u>or</u> photo copy of money receipt of EOI Document fee (self-certified), if EOI Document fee paid in cash at corporate office of UGVCL. **This is mandatory**
- (2) Earnest Money Deposit (E.M.D) amount by way of demand draft and /or valid Bank Guarantee in original <u>OR</u> documents like authenticated notarized certificate copies of
- (a) registration with small scale industries of <u>Govt. of Gujarat</u> (i.e. Udyam registration certificate) certificate issued by Govt. of Gujarat) and
- (**b**) registration with CSPO/NSIC/DGS&D, for availing exemption in payment of E.M.D. Please refer Part-B of EOI Document. **This is mandatory**.

Note:-Micro &Small Enterprises unit of Gujarat or outside Gujarat of India should submit the Notarized copy of either certificate/acknowledgement of entrepreneur Memorandum of Udyam registration certificate/valid NSIC/CSPO/DGS&D certificate indicating MICRO AND SMALL category of the firm, in physical form in "EMD Cover Documents" for the benefit of Payment of

**3A** 

Sign & Round Seal of the EOI applicant

Date and place

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#### EMD at Lower value.

**3B** 

Note: The offer will be rejected out rightly; if above mandatory documents are not submitted in physical form.

# (3B):-'TECHNICAL OFFER COVER ' SHALL CONTAINS THE FOLLOWING DOCUMENTS:

The following documents which are required for *Technical Evaluation* (Please refer clause no.: 61 of general and commercial terms and conditions of EOI Document for details) are required to be submitted in physical form in sealed cover of "Technical offer Cover".

- (a) <u>Certified Documents for establishing proof of fulfilling the 'Condition no- 61(B)(I)-of Minimum Eligibility Condition'as mentioned in the Techno-Commercial offer evaluation para no-61(B)(I).</u>
- (b) Certified Documents for establishing proof of fulfilling the Condition no-61(B)(II):-The details of Technical staff available with the company for execution of work are to be given in <u>Annexure – 4</u> of technical stage of online EOI Document. The copies of resumes and appropriate certificates should be submitted in Technical offer cover. The <u>Annexure -5</u> as per condition no 61(B)(III) is required to be submitted in Technical offer cover.
- (c) All Annexures duly signed and filled with documentary support
- (d) **Documents as mentioned** in **Annexure -12** are required to be submitted in physical in **Technical offer cover.**
- (e) The details of similar work done in last three years are to be given in <u>Annexure 3</u> of technical stage of online EOI Document. However, the copies of the orders and certificates from the user agencies to be to be submitted in physical in **Technical offer cover.**
- (f) List of Orders executed of last three (3) years including supplies made / status of supply of pending orders etc. to GUVNL or their subsidiary companies viz. MGVCL/DGVCL/UGVCL/UGVCL/GETCO/GSECL and other Govt. dept., other DISCOM/ SEB of India, Pvt. firms, for the EOI Documented items, duly self-attested are kept in "Technical offer Cover".
- (g) The check list **(Part-D)** shall be submitted in physical form in in "Technical offer cover."
- The successful EOI applicant/s has/have to (i) Pay the security deposit amount and (ii) Execute the agreement; within 15 days from the date of receipt of LOA indicating empanelment.
- 5 <u>PERFORMANCE GUARANTEE TOWARDS GUARANTEE PERIOD</u>:
  The successful Agency will be required to pay an amount equivalent to 5 % of

Sign & Round Seal of the EOI applicant Date and place (Page 23 of 125)

various <i>i</i>	Agriculture Feeders within the jurisdiction of UGVCL.
	order value. Please refer clause no.: 60 of General and commercial terms and
	conditions of EOI Document.
6	PERFORMANCE GUARANTEE TOWARDS SUPPLY (SECURITY DEPOSIT):
	The successful Agency will be required to pay an amount equivalent to 5% of the
	value of the order. Please refer clause no.: 48 of General and commercial terms
	and conditions of EOI Document.
7	In case UGVCL finds that there is an attempt of cartel in the prices, UGVCL
	reserves the right to consider or reject any or all the parties offer without
	assigning any reason thereof.
8	Agency are requested tosubmit details of Annexure-13 in online in Technical
	offer stage and this is mandatory.
9	The Agency are advised to submit their offers by on line through our service
	provider M/s (n) Code Solutions before one day of the due date to avoid
	complication / dispute at later stage
10	Agency are informed that their employee authorized in writing will only be
	allowed as their "Authorized Representative" for all purpose to deal with UGVCL
	in respect of this EOI Document. Non-employee cannot deal/shall not be allowed
	to deal with the Company.
11	It is proposed to have integrity pact, to have best business practices in an
	atmosphere of trust to provide goods & services for the ultimate benefit of the
	society and Nation. UGVCL management desires to have an integrity pact
	attached herewith to be confirmed by EOI applicant. However this document is
	voluntarily and does not have any legal binding.
12	Empanelment, DPR Approval and Order: -
	a) After finalization of this EOI Document and shortlisting of offers, a Letter of
	Intent for empanelment will be issued by UGVCL to execution of agreement.
	b) The letter for Award of Empanelment will be issued by UGVCL for executing
	the agreement.
	(c)The Detail order will be place after submitting the DPR proposal by the
	Empanelled agency of the feeder with a list of beneficiaries and their consent
	forms. On scrutiny of the proposal UGVCL may issue a detail order for
	execution of the feeder on the proposed feeder after receiving payment
	towards security deposit/Bank guarantee.
13	REFUND OF EMD
	a) Earnest Money Deposit (EMD) of all unsuccessful Agency shall be released
	on finalization of EOI Documents for empanelment.
	·
	b) The EMD paid by the successful bidder shall be refunded upon payment of
	the Security Deposit (SD). In case of non-submission of Security Deposit, the
	EMD will be forfeited.
14	If the physical documents of EOI Document will not reach to this office within
	mentioned date & time offer will be out rightly rejected even of successful

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Expression of Interest (EoI) for Empanelment of Agencies for Design, Supply, Installation, Testing, Commissioning and Comprehensive Maintenance for 7 years of Distributed Grid-connected Solar PV plants of Capacity above 5 kW (AC) to 100 kW (AC) for providing of Solar PV System to Agricultural Consumers on various Agriculture Feeders within the jurisdiction of UGVCL.

submission of On Line EOI Document/offer.
The offer which is not opened due to any reason/s in that case the same will not be returned to the EOI applicant in any case / Circumstances, however the same shall be at the discretion of DISCOM.

# **PART-D: CHECK LIST**

# (TO BE SUBMITTED IN PHYSICAL FORM IN SEAL COVER OF "EMD COVER DOCUMENTS" WELL AS "TECHNICAL OFFER COVER DOCUMENTS")

To ensure that your offer submitted to UGVCL is complete in all respects, please go through the following checklist & tick mark for the enclosures submitted physically in seal cover of "Technical Offer Cover" / uploaded in technical stage of online with your offer:

Sr. No.	Description (Submitted / up loaded)	(Yes/ No)
(A)	Following documents are kept in "EMD &EOI Document fee Cover Documents"	
1.	EOI Document Fee by DD / Money Receipt is kept in "EMD Cover Documents"	
2	Earnest Money Deposit by DD <u>OR</u> authenticated notary certified copy of registration with Small Scale Industries of Gujarat State (Udyam registration certificate) & CSPO / NSIC / DGS & D registration certificate are kept in "EMD &EOI Document fee Cover Documents"	
(B)	Following documents are kept in "Technical Offer CoverDocuments"	
1	Certified Documents for establishing proof of fulfilling the 'Condition of Eligibility Condition' as mentioned in the Techno - Commercial offer evaluation paraplease refer condition no 61.	
2	All Annexures duly signed and filled with documentary support - for Annexures no. 1 to15	
3	The copies of the orders and certificates of similar work done in last three years (as per Annexure-3) are kept in "Technical offer Cover" and information uploaded in technical stage of on line EOI Document	
4	The documents related to Annexure-4 are uploaded in technical stage of online EOI Document & kept in "Technical offer Cover".	
5	List of Orders executed of last three (3) years including supplies made / status of supply of pending orders etc. to GUVNL or their subsidiarycompanies	

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· a o a	agriculture recuers within the jurisdiction of odver.	
	viz.MGVCL/DGVCL/UGVCL/PGVCL/GETCO/GSECL and other Govt. dept., other DISCOM/ SEB of India, Pvt. firms, for the EOI Documented items, duly self-attested are kept in "Technical offer Cover".	
6	The copies of registration with GSTIN Number, Permanent Account Number (PAN), EPF registration no. are is kept in "Technical offer Cover".	
7	Import-Export Code Certificate (if register) is kept in "Technical offer Cover".	
8	Notarized Copy of BIS License (if applicable) is kept in "Technical offer Cover".	
8	For Turnover and Net worth of company for last three financial year, Practicing CA certificate attached & uploaded online) (Annexure-8), Audited Annual A/c of last 3 years certified by C.A.	
10	Name & address of dealers / distributors / service stations if any in Gujarat along with copy of agreements are kept in "Technical offer Cover".	
11	The required details and documents (as per Annexure-12) and other documents, broachers, technical details are kept in "Technical offer Cover".	
12	Notarized copy of power of Attorney in favour of a person authorized to sign EOI Documents.	
13	Project Plan	
14	Copy of EOI document and its amendments if any of this EOI Document with sign and official seal on every page.	
15	List of Partners/Directors	
16	List of Required machinery for manufacture EOI Documented Item	
17	List of Testing Facility	
18	Audited annual A/c of last 3 years certified by C.A.	
19	Quality Assurance Plan	
20	Yearly Production Capacity of each EOI Documented Item	
(C)	The following documents' covers as stated hereunder are placed separately and submitted in physical form under sealed cover as "MAIN COVER". (This cover is super scribed "EOI Document No: EOI Document No: & due date of opening)  This "MAIN COVER" is contained with following two separate covers as under  Cover -1 containing "EMD & EOI Document fee Documents cover" as per Documents mentioned in Cl no 3A  Cover-2 Containing "Technical Offer documents cover" as per	
	documents mentioned in Cl no -3B	

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Expression of Interest (EoI) for Empanelment of Agencies for Design, Supply, Installation, Testing, Commissioning and Comprehensive Maintenance for 7 years of Distributed Grid-connected Solar PV plants of Capacity above 5 kW (AC) to 100 kW (AC) for providing of Solar PV System to Agricultural Consumers on various Agriculture Feeders within the jurisdiction of UGVCL.

	Sealed MAIN COVER containing above two covers are sent in physical form by RPAD/ Speed post only	
(D	All online Annexures and price offer are filled up properly in e-EOI	
)	Documenting	

# **PART-E: INTEGRITY PACT OUR ENDEAVOUR**

	UGVCL's COMMITMENT		PARTY'S COMMITMENT
	To maintain the highest ethical		Not to bring pressure recommendations
•	standards in business and	•	from outside UGVCL to influence its
	professional		decision
•	Ensure maximum transparency to the satisfaction of stakeholders	•	Not to use intimidation, threat, inducement or pressure of any kind on UGVCL or any of its employees under any circumstances
•	To ensure to fulfill the terms of agreement/contract and to consider objectively the viewpoint of parties	•	To be prompt and reasonable in fulfilling the contract, agreement, legal obligations
•	To ensure regular and timely release of payment on due dates for work done	•	To provide goods and/or services timely as per agreed quality and specification at minimum cost to UGVCL
•	To ensure that no improper demand is made by employees or by anyone on our behalf	•	To abide by the general discipline to be maintained in our dealings
•	To give maximum possible assistance to all the vendors / Suppliers / Service Providers and other to enable them to complete the contract in time	•	To be true and honest in furnishing information
•	To provide all information to supplier/Empanelled Agencys relating to contract/job which facilitate him to complete the contract/job successfully in time	•	Not to divulge any information, business details available during the course of business relationship to others without written consent of UGVCL
•	To ensure minimum hurdles to vendors /suppliers / Empanelled Agencys in	•	Not to enter into carter/syndicate/understanding whether formal/non-formal so as to influence the

Sign & Round Seal of the EOI applicant	Date and place	(Page <b>27</b> of <b>125)</b>

completion	of	agreement	price
/contract/woi	rk ord	er	

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Expression of Interest (EoI) for Empanelment of Agencies for Design, Supply, Installation, Testing, Commissioning and Comprehensive Maintenance for 7 years of Distributed Grid-connected Solar PV plants of Capacity above 5 kW (AC) to 100 kW (AC) for providing of Solar PV System to Agricultural Consumers on various Agriculture Feeders within the jurisdiction of UGVCL.

# PART-F: GENERAL AND COMMERCIAL TERMS AND CONDITIONS

In the deed of agreement / Offer, unless the context otherwise requires, UGVCL shall mean the Chief Engineer (Project) or his representative of the UGVCL and shall include his successors and assignees.

The EOI applicant shall be deemed to have carefully examined all the papers, drawings, etc. attached in the EOI Document. If EOI applicant has any doubt as to the meaning of any portion of any condition / specification, etc. he shall before submitting the offer seek clarification from UGVCL so that such doubts are removed.

No deviation in specification shall be allowed and UGVCL's decision shall be final. The technical scrutiny committee of UGVCL shall evaluate the techno-commercial view of the EOI Document. UGVCL reserves the right to open or not to open the price offer of the Agency on the basis of their past performance of their supplied materials.

- 1. EOI Document should be in two offers.
  - a) Techno Commercial Offer(Online as well as Physical mode) documents as listed in Schedule-A of EOI Document, to be submitted in physical form as mentioned in cl no 3, 3A, 3B of "PART-C- the schedule-A-NOTE:IMPORTANT"

and

- b) Price Offer (Online) for EOI
- **2.** Incomplete offers and amendments and additions to offers after opening of the offers will be ignored out rightly.
- 3. The priceoffer of those Agencies who are techno-commercially qualified shall only be opened.
- 4. (A)PRICE EVALUATION and Selection of agencies for Empanelment:
- a)All EOI offers will be evaluated on price <u>Rate(Rs.)per KWp</u> basis of supply, installation, testing and commissioninggrid connected SPV System with all components, BOS,Insurance &CMC of 7 years with loading GSTseparately as per part I of schedule "B" considering weighted sum of all individual capacities of solar PV systems as mentioned in the online price bid.
- b) Price ranking will be done considering weighted sum of all quoted rates by bidder for all 06 Nos of individual Capacity and ranges of grid connected SPV systems by multiplying the quoted rates with the factor for evolution as mentioned in the on line price bid schedule B .

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# The example for calculating weighted sum of all individual capacities of solar PV system is under:

# For Bidder A

	Schedule B for Bidder A							
Sr. No.	Description (Capacity of Grid connected 3Ph SPV System)	(Rs./KW) cost including Freight & Packing, insurance and including all as per specificati on in Rs per unit (Without GST) (Rs/KW)	Appli cable perce ntage of GST (%) per unit	GST Rate Per Unit Rs.	(Rs/KW) Cost with GST (in Rs.)	Factor for Evaluat ion	Cost for evaluati	
1	2	3	4	5=(4x3)	6=(5+3)	7	8=(6x7)	
1	Above 5 KWp and up to 9 KWp	43100.00	13.8%	5947.80	49047.80	40.00%	19619.12	
2	Above 9 KWp and up to 20 KWp	40200.00	13.8%	5547.60	45747.60	16.00%	7319.62	
3	Above 20 KWp and up to 50 KWp	35068.00	13.8%	4839.38	39907.38	24.00%	9577.77	
4	Above 50 KWp and up to 100 KWp	34065.00	13.8%	4700.97	38765.97	20.00%	7753.19	
	Total			We	ighted Sum		44269.70	

# For Bidder-B

		Schedule B fo	or Bidder	·B			
Sr. No.	Description (Capacity of Grid connected 3Ph SPV System)	(Rs./KW)co st including Freight & Packing, insurance and including all as per specification in Rs per unit (Without GST) (Rs/KW)	Appli cable perce ntage of GST (%) per unit	GST Rate Per Unit Rs.	(Rs/KW) Cost with GST (in Rs.)	Factor for Evaluat ion	Cost for evaluati on
1	2	3	4	5=(4x3)	6=(5+3)	7	8=(6x7)
1	Above 5 KWp and up to 9 KWp	43200.00	13.8%	5961.60	49161.60	40.00%	19664.64
2	Above 9 KWp and up to 20 KWp	40300.00	13.8%	5561.40	45861.40	16.00%	7337.82
3	Above 20 KWp and up to 50 KWp	35000.00	13.8%	4830.00	39830.00	24.00%	9559.20
4	Above 50 KWp and up to 100 KWp	34035.00	13.8%	4696.83	38731.83	20.00%	7746.37
	Total	Weighted Sum 44308.03					44308.03

<sup>(</sup>c) In above example of Bidder A and Bidder B , Bidder-A will be considered as L1 and the Bidder B will be considered as L2 and so on for the ranking purpose.

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(d) The weighted sum of the price discovered for each of the capacity of Grid connected SPV systems and ranges shall be calculated, An example showing weighted sum of the price discovered by different bidders is shown as under:

	Schedule B						
Sr. No.	Description (Capacity of Grid connected 3Ph SPV System)	(Rs./KW)c ost including Freight & Packing, insurance and including all as per specificati on in Rs per unit (Without GST) (Rs/KW)	Applica ble percent age of GST (%) per unit	GST Rate Per Unit Rs.	(Rs/KW) Cost with GST (in Rs.)	Factor for Evaluat ion	Cost for evaluati on
1	2	3	4	5=(4x3)	6=(5+3)	7	8=(6x7)
1	Above 5 KWp and up to 9 KWp	43100.00	13.8%	5947.80	49047.80	40.00%	19619.12
2	Above 9 KWp and up to 20 KWp	40200.00	13.8%	5547.60	45747.60	16.00%	7319.62
3	Above 20 KWp and up to 50 KWp	35000.00	13.8%	4830.00	39830.00	24.00%	9559.20
4	Above 50 KWp and up to 100 KWp	34035.00	13.8%	4696.83	38731.83	20.00%	7746.37
	Total		Weighte	d Sum			44244.30

- (e) Weighted Sum of Price will be arranged in the ascending order i.e. L-1, L-2,L-3, L-4,L-5,Ln.
- (f) Lowest L1 L2 & L3 shall have to matched capacity of Grid connected SPV System L1 rates. If any of the L1 L2 & L3 bidder does not matched the lowest rate of individual capacity than next bidders i.e. L4 & L5 will be asked for price matching howeverUGVCL shall have sole
- (g)If same rate is quoted by two or more Bidders, then all the Bidders with same Rate shall be considered of equal rank/ standing in the order.
- (h) If only single bid is received and no competition is found, then decision of the Competent Authority of UGVCL for consideration of the bid will be final.
- (I) The Competent Authority of UGVCL shall have full powers to undertake negotiations in case where single bid is received. Detailed reasons and results of negotiations shall be recorded in the proceedings.
- (j) In case of non-satisfactory achievement of RATES from single bidder, the Competent Committee may choose to make a written counter offer to the single bidder and work / supply order be awarded to the bidder if he accepts the counter-offer.

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(K) Methodology of discover the price/Rate for empanelment will be at the sole discretion of the UGVCL. The decision of UGVCL for selection/ short listing of agencies for empanelment shall be final and binding on all the Agency.

# 5. Allocaton of QUANTITY:

- a) The project is required to be completed for the Solarization of existing Agriculture pump sets consumers connected on different 11 KV AGDOM Feeders of UGVCL(Banas, Sardar, Naliya, Dehgamda, Aniod, Madhav, Rajgadh & Rupnagar). The cumulative capacity of the distributed above 5 to 100 KW SPV grid connected plants,total may be up to 0.683MW. This quantity may be increased/ decrease depending up on requirement and as may be decided time to time.
- b) L1 bidder shall be allocated highest capacity of feeder and may be allocated subject to matching of price in individual Capacity of Grid connected SPV System however final decision of allocation quantity of feeder/ consumers shall be at sole discretions of UGVCL.

List of feed	der with its	Capacity	of SPV	in MW	are as under:
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Sr.	Name of Civals	Name of CVV Fooder	No. of SKY	AC capacity	DC capacity
No.	Name of Circle	Name of SKY Feeder	Consumers	in KW	in KW
1	Palanpur	BANAS	2	100	110
2	Palanpur	SARDAR	5	118	129.8
3	Palanpur	NALIYA	1	65	71.5
4	Himmatnagar	DEHGAMDA	2	24	26.4
5	Himmatnagar	ANIOD	2	12	13.2
6	Himmatnagar	MADHAV	3	24	26.4
7	Mehsana	RAJGADH	2	27	29.7
8	Mehsana	RUPNAGAR	8	313	344.3
	To	otal	25	683	751.3

# 6. Delivery Period and Project schedule: -

#### a) Commencement Period: -

Empanelled Agencies will be given a list of feeders& consumers to be undertaken in the scheme with a commencement period of 15days preparation of feeder-level DPR and technical design by empanelled installers and submission to UGVCL.

- b) The Empanelled Agencies will obtain approval/LOA and work order as per DPR within next 15 days from UGVCL.
- c) Empanelled agency is liable to get the drawings/design / Sample/test reports, project plan approved within the commencement period.

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- d) No separate commencement period will be given.
- e) All necessary formalities are to be completed within the commencement period instead of vague period.

# I. Inspection, Supply, installation, testing and commission Period: -

The total period of supply, installation, testing and commissioning including Inspection and Supply of material is as per time line mentioned here under.

Execution timeframe w.r.t. aggregate KW capacity:

Sr.	SPV System capacity to be installed	Project commissioning
No.	(aggregate –AC -KW)	schedule
		Days
Α	up to 490 KW	90 days
В	above 490 and up to 980 KW	105 days
С	above 980 and up to 1470 KW	120 days
D	above 1470 and up to 1960 KW	135 days
E	above 1460 and up to 2450 KW	150 days
F	above 2450 KW	165 days

# 7. PENALTY towards execution of order: -

"The Design, Supply, Installation, testing & commissioning of complete ordered systems at sites to be completed within above time frame.

In case of delay in any feeder, or project as a whole, penalty @ 1/2% per week or part thereof plus applicable GST and cess on the <u>total order value</u> subject to a maximum of 10% of total order value plus applicable GST and cess would be levied."

This excludes delay in the completion of the work due to unforeseen reasons beyond the control and without fault and negligence of the EOI applicant including (but not restricted to) act of God or public anomie action of Government in its sovereign capacity, floods, epidemics, strikes, lockouts, fires and accidents. In the event of any of the aforesaid contingencies UGVCL may be promptly kept informed by the EOI applicant by e-mail / followed by confirmation in writing with documentary proof within fifteen days of commencement and cessation of Force Majeure circumstances. Under such circumstances reasonable extension of time shall be granted by UGVCL. Application for such extension must be made after completion of work as per agreement. In the event of termination of the agreement, UGVCL shall be at liberty to get the remaining part of the work done through any other agency / EOI applicant at the risk and cost of successful EOI applicant and in the manner and on the terms it thinks proper. If the cost of executing the work as aforesaid shall exceed the balance due to the EOI applicant, and the EOI applicant fails to make good the deficiency, DISCOM may recover it from the EOI applicant in any lawful manner.

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- **8.** The EOI applicant shall have to comply with all rules, regulations, laws and bylaws enforced by local and State Govt. and also the organization in whose premises the work has to be done.
- **9.** The EOI applicant shall not, without consent in writing of UGVCL, transfer, assign or sublet the work under this contract or any substantial part thereof to any other party.
- 10.If the EOI applicant neglects to execute the work with due diligence and expedition or refuses or neglect to comply with any reasonable orders within two days of notice given in writing to the EOI applicant and if he fails to comply with the notice, then in such a case UGVCL shall be at liberty to get the work or any part of it, executed through any other agency / EOI applicant at the risk and cost of successful EOI applicant and in the manner and on the terms it thinks proper. If the cost of executing the work as aforesaid shall exceed the balance due to the EOI applicant, and the EOI applicant fails to make good the deficiency, UGVCL may recover it from the EOI applicant in any lawful manner.
- **11.**UGVCL shall have at all reasonable time access to the works being carried out by the EOI applicant under this contract. All the works shall be carried out by the EOI applicant to the satisfaction of UGVCL/DISCOM.

# 12.Arbitration:-

Following standard **Arbitration** Clause shall become operative post award of contract to the successful EOI applicant.

Any question, dispute or difference whatsoever arises between DISCOM and EOI applicant, in connection with this agreement except as to matters, the decision for which has been specifically provided, either party may forthwith give to the other notice in writing of existence of such questions, dispute, difference and the same shall be referred to the sole arbitration of a person nominated by **Managing Director of UGVCL**. This reference shall be governed by Indian Arbitration Act prevailing at the time of disputeand the rules made there under. The award in such arbitration shall be final and binding on all the parties. Work under the agreement shall continue during the arbitration proceedings unless the UGVCL or the Arbitrator directs otherwise.

13.UGVCL may at any time by notice in writing to the EOI applicant either stop the work altogether or reduce or cut it down. If the work is stopped altogether, the EOI applicant shall only be paid for work done and expenses legitimately incurred by him as on preparation of the execution of the work up to the date on which such notice is received by him. Such expenses shall be assessed by UGVCL whose decision shall be final and binding on the EOI applicant. If the work is cut down the EOI applicant shall not be paid for the work as so cut down, but in neither case shall be paid any

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compensation what so ever for the loss or profit which he might have made if he had been allowed to complete all the work included in the contract.

# 14.Inspection of Material:-

Prior to dispatch, the materials may be inspected and tested by UGVCL or its consultant, at the works of OEM (Original Equipment Manufacturer), where SPV (Solar Photovoltaic) panels, Grid tie Inverters, Module mounting structure, other components of the project are manufactured. Empanelled agency shall inform to UGVCL for such inspection at least 07 (Seven) days in advance before the probable date of dispatch. Materials dispatched without UGVCL's approval shall not be accepted and the UGVCL shall have right to reject it and to recover the cost so incurred, from the empanelled agency.

<u>Cost of inspection</u>:All the expenses related to inspection team like lodging, boarding, travelling, air tickets to be borne by UGVCL. The empanelled agency will provide necessary inspection & testing facility at his cost.

However, if the material is not kept ready for inspection after intimation of the offered quantity on the scheduled date for inspection then all consequences will be to suppliers account and UGVCL will recover the actual expenses of To & Fro travelling fares, if any, plus Rs.1, 000/- per day per employee.

The empanelled agency will offer Solar PV Panels, BOS and components of system for inspection at the OEM works to UGVCL and inspection can also be offered at one place in Gujarat (main distributor's place), where requisite inspection facilities are available. UGVCL reserves the right to inspect any number of SPV systems at OEM works at their discretion.

# 15. Guarantee and CMC: -

# (a) Guarantee

The Grid connected Solar Photovoltaic System for the project supplied, installed and commissioned shall be guaranteed by the empanelled agency for a minimum period of 7-**Seven** years from the date of successfully commissioning of the last system, in regard to quality of design, material, workmanship, quality of process/manufacturing, performance, efficiency, installation, etc.

In the event any defect is found or developed in the system within guarantee period, shall be rectified/replaced by the Empanelled Agency at his own expense promptly.

In case the defects are not rectified within 2 (Two) days of the receipt of the complaint by the Empanelled Agency, UGVCL shall have full liberty to rectify such

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defect or undertake such repairs as may be necessary to restore the system in working condition at the risk and cost of the Empanelled Agency.

The expenditure so incurred by UGVCL shall be deducted from EOI applicant's pending claims, security, etc. and if necessary may be recovered in other mode provided under the law. In the event of failure of the complete system, if necessary, the whole system shall be replaced by the Empanelled Agency promptly.

# (b) CMC: - Comprehensive Maintenance Contract for 7 years:-

This EOI Document cover Seven-year Comprehensive Maintenance Contract under the scope of EOI applicant.

The Seven-year comprehensive Maintenance Contract shall include comprehensive on-site guarantee and warranty for all materials and components of the system under the project asmentioned above in para no 15.(a) & (b).

During this CMC period the Empanelled Agency has to repair/replace the defective part/s or the material/s or any or all Components of the System to make it in working condition without loss of performance or degradation in efficiency and without compromising safety aspects free of cost within 48 (Forty eight)Hours of time limit as soon as the complaint is received from the UGVCL or from the beneficiary directly or receipt of notification/alert/massage from the remote metering. Also the Empanelled Agency has to undertake regular/periodical preventive maintenance of the system to avoid any future fault in the system and to improve the solar yield.

During the CMC period, the inverter monitoring, monitoring and controlling, shall be done by EOI applicant. Hence necessary reports shall be submitted by the EOI applicant in the soft/hard copies periodically to the concern authority of the UGVCL as and when asked.

# (C) Generation Guarantee:

15.(c)1-The Bidder shall provide a minimum generation guarantee corresponding to a capacity utilization factor (CUF) of 18.3% (the "Guaranteed CUF") with respect to the AC capacity of the PV system.18.3% CUF will be evaluated on 90% of feeder availability irrespective of actual availability irrespective of actual availability . If the feeder availability is less than 90 % the agency shall not be penalized due to non-availability of the feeder.

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- 15.(C) 2 This Guaranteed CUF shall be calculated on an annual basis and shall be verified by the UGVCL at the end of each year during the 7( seven) year guarantee period.
- 15.(c) 3 There shall be 1 % Degradation in Guaranteed CUF every year-on-year bases for 7 (seven) year will be considered.
- 15.(c) 4 In case of energy generation corresponding to the average of surrounding 10 such locations is less or less than the Guaranteed CUF, whichever is higher, the UGVCL shall recover an amount at the rate of Rs. 7.00 + Applicable GST plus cess per kWh from the Empanelled Agency for such shortfall at the end of the contract year to compensate the same to the Agriculture Consumer.
- 15.(C) 5 It is clarified that the penalty for loss in generation shall not be duplicated with the penalty for delay in rectification of fault beyond 48 hours of complaint.

## **Periodical maintenance:**

The record of down time and up time and periodical maintenance at least in every quarter shall have to be maintained by the Empanelled Agency in register as well as computer based software and in mobile application and shall have to be submitted to UGVCL office every week and every month.

A person of the Agency shall regularly visit the site after installation and educate the farmer to keep solar panel dust free. Cleaning of dust from SPV panel shall be in the scope of Agency and agency shall clean the panel in properly.

- **16.**Notices, Statements and other communications sent byUGVCL through registered post or e-mail or fax to the EOI applicant/ Empanelled Agencyat his specified address shall be deemed to have been delivered to the EOI applicant.
- **17.**The work shall be carried out by the Empanelled Agency with prior approval of UGVCL, Work carried out without UGVCL's approval shall not be accepted and the UGVCL shall have right to reject it. No payment will be made for it.
- **18.**All equipment / materials shall be suitably packed for transport / carriage at site and outdoor storage during transit. The EOI applicant shall be responsible for any damage to the equipment during transit and he shall replace such damaged equipment immediately to adhere to the project completion timelines.
- **19.**The cases containing easily damageable material shall be very carefully packed and marked with appropriate caution symbols i.e. 'FRAGILE, HANDLE WITH CARE' etc. The contents of each package shall bear marking that can be readily identified from the package list and packing shall provide complete protection from moisture, termites

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and mechanical shocks during shipment / transportation to site. Adequate protection must be provided for outdoor storage at site in tropical humid climate, wherever necessary proper arrangement for attaching signs for lifting shall be provided and all packages clearly marked with gross weight, signs showing 'UP' and 'DOWN' sides of boxes, contents of each package, order no. and date, name of the plant/equipment to which the material in the package forms the part of, and any handling and unpacking instructions considered necessary. The EOI applicant without any extra cost shall supply any material found short inside intact packing case. The EOI applicant shall ascertain prior to shipment, from concerned authorities, the transport limitations like weight and maximum allowable package size for transportation. All packing cases and packing material shall become the property of the purchaser.

- **20.**The Empanelled Agency shall provide one copy of the instruction manual and routine maintenance manual in English & Gujarati with each item supplied or installed to UGVCL. These manuals should contain all the relevant details and drawings required for proper maintenance of the system supplied or installed. Also, Empanelled Agency is required to give one copy of maintenance manual in Gujarati to the Beneficiary.
- **21.Photographs:** The Empanelled Agency has to submit the photograph of the beneficiary person standing at the site of the Solar PV plant installed in this project covering Solar PV Plant, sign board fixed in Gujarati, with name of the beneficiary, Consumer number, capacity of the PV plant and date of installation.

The Empanelled Agency shall not display the photograph of the work and shall not take advantage through publicity of the work without written permission of UGVCL.

- **22.**The inspection of materials and components of the project carried out by UGVCL's representative shall not relieve the Empanelled Agency from full responsibility of completing the project confirming to the requirement of the Contract.
- **23.**Conditional EOI Document shall not be accepted.
- **24.** Any other item not specifically mentioned in the specifications but which are required for Supply, Installation, Testing and Commissioning of Distributed Grid connected Solar PV plants for the project are deemed to be included in the scope of the specification as per relevant and latest IS, IEC, MNRE guidelines, standards of Rural Electrification Corporation (REC) and specified by UGVCL unless specifically excluded.

Specification of all the items covered under this EOI Document is given separately. However, if any item is left out, standard specification of relevant and latest IS, IEC, MNRE, Rural Electrification Corporation (REC) and specified by UGVCL will be applicable for the same.

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# 25. Approval from the Electrical Inspector:-

It shall be the responsibility of the Empanelled Agency to obtain the approval of all the distributed Grid connected Solar PV plants from the concerned Electrical Inspector.

## **26.** AMENDMENT OF EOI DOCUMENT

At any time prior to the deadline for submission of offers, UGVCL may, at its own discretion modify /add/delete/change the offerding documents by amendments. The amendment will be notified on Website. UGVCL will bear no responsibility or liability arising out of non compliance of the same in time or otherwise.

In order to afford prospective EOI applicant's reasonable time in which to take the amendment into account in preparing their offers, UGVCL may at its discretion, extend the deadline for the submission of offers.

Such amendments, clarification etc. shall be binding on the Agency and will be given due consideration by the Agency before they submit their offers and invariably enclose such documents as a part of the offer. All such amendments will be considered as part of EOI Document.

## **27.**REJECTION OF EOI DOCUMENT:

The EOI applicant is expected to examine all instructions, terms, conditions, schedules and other details called for in this specification and keep himself fully informed about all which may, in any way, affect the work, or cost thereof. Failure to furnish the required information or submission of EOI Document not as per the specification will be at the EOI applicant's risk and may result in rejection.

The offer may be rejected in case the offerding schedules / annexure are not filled / partially filled and if particulars are not given in format prescribed in the EOI Document documents.

Further, the offer may summarily be rejected if it contains conditions with regard to:

- a) Different rates for the same items i.e. Rates should be quoted in the single slab only.
- b) Deviation / Addition / Alternations / Omissions in offered documents.

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- c) Deviation and contradictions to the terms and conditions specified in this EOI Document.
- d) Offer with any change suggested in price pattern will be out rightly rejected.
- e) Revision of prices or any commercial terms affecting the price after opening of technical offers shall not be considered and will be ignored.

# 28.UGVCL's RIGHTS:

UGVCL reserves the right to terminate the contract or part thereof at any time giving 01 (One) months' notice of Termination or the reasons thereof. Empanelled Agency/s will not be entitled for any compensation / damages / losses, whatsoever, on account of such termination of the Contract.

UGVCL will be entitled to deduct directly, from the bills to be paid to the Empanelled Agency, any sum or sums payable by him and which sum/sums due to the Empanelled Agency or the UGVCL is required to pay as a principal employer on account of Empanelled Agency's default in respect of all liabilities referred to.

The Agency shall specifically note that any overwriting or corrections or manuscript in the offer shall be ignored and will not be considered authentic unless same are signed and EOI applicant's Stamp / Seal is affixed.

UGVCL reserves the right to split the contract into two or more Agency per feeder. In such cases, the term for completion period will be negotiated and reduced proportionate to the offered quantity / value.

In case of any doubt or interpretation of the terms and condition, the decision of the Chief Engineer (P&P), Uttar Gujarat Vij Company Ltd., Mehsana will be final and binding upon the Agency and no dispute in this regard will be entertained.

UGVCL reserves the right to accept any offer or reject any or all EOI Documents or cancel / withdraw or re invitation to offer without assigning any reason. Such decision of the UGVCL shall not be subject to question by any Agency and the UGVCL shall bear no liability whatsoever for such decision.

UGVCL has right to make minor changes / modifications in the Technical & Site condition matter. In such matter, decision of Chief Engineer of UGVCL shall be final and binding to the Empanelled Agency to carry out work accordingly.

## **29.LANGUAGE OF THE EOI DOCUMENT:**

All information in the offer shall be in English. Information in any other language shall be accompanied by its translation in English. Failure to comply with this may disqualify theoffer. In the event of any discrepancy in meaning, the English language copy of all

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documents shall govern. Notarized copy of certificate / documents provided in Hindi / Gujarati will be accepted.

## **30.**LOCAL CONDITIONS:

It will be imperative on each EOI applicant to fully acquaint himself of all local conditions and factors which may have any effect / bearing on the execution of the works covered under this EOI Document. UGVCL shall not entertain any request for clarifications from the Agency, regarding such local conditions, post award of contract.

It must be understood and agreed that such factors have properly been investigated and considered while submitting the EOI offer. No claim for financial adjustment to the contract awarded under this EOI Document will be entertained by the UGVCL/DISCOM. Neither any change in the time schedule of the contract nor any financial adjustments arising thereof shall be permitted by the UGVCL, which are based on the lack of such clear information or its effect on the cost of the works to the EOI applicant. The EOI applicant can take few visits of locations of different area to get acquainted with local conditions, if required.

## **31.PRICE BASIS CURRENCIES AND PAYMENTS:**

EOI applicant shall indicate offer prices in Indian Rupees only.

# **32. EFFECT AND VALIDITY OF EOI DOCUMENT:**

The submission of any offer connected with this EOI Document shall constitute an agreement that the EOI applicant shall have no cause of action or claim, against UGVCL for rejection of their offer. UGVCL shall always be at liberty to reject or accept any offer or offers at its sole discretion and any such action will not be called into question and the EOI applicant shall have no claim in that regard against the UGVCL.

The offer should be kept valid for a period of **120 days** from the date of opening of Technical offer/s. UGVCL may ask for extension in validity period. The EOI applicant will be at liberty to accept it or not.

# 33. SIGNING OF CONTRACT:

UGVCL will notify successful EOI agencies for empanelment. Detailed order will be placed by UGVCL as per cl. 6 of Part-F.

Within 07 (Seven) days of receipt of the detailed "Letter Of Acceptance"-LOA, the successful EOI applicant shall acknowledge with confirmation of acceptance of terms & conditions.

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The empanelled agency will prepare the contract agreement as per the Performa enclosed at **Appendix** in this EOI Document and the same will be executed within total 15 days of issue of letter of acceptance and before placement of order.

"Tripartite Agreement shall be executed amongst the empanelled agency, UGVCLand the Society/Group of farmers/beneficiary (farmer) separately for each beneficiary as per attached format at Appendix-within 15 daysfrom the date of approval of each DPR proposal or date handing over the list of beneficiaries for each feeder."

# **34.JURISDICTION OF CONTRACT:**

The laws applicable to the contract shall be the laws in force in India. The court at Mehsana (Gujarat) shall have exclusive jurisdiction in all matters arising under this contract.

# **35.COMPLETION OF CONTRACT:**

Unless otherwise terminated under the provisions of any other relevant clause, this contract shall be deemed to have been completed on the expiry of the Comprehensive Maintenance during guarantee period.

# **36.SECURITY (Responsibility of EOI applicant):**

The Empanelled Agency shall have total responsibility for all equipment and materials in his custody/stores, loose, semi-assembled and/or erected by him at site. The Empanelled Agency shall make suitable security arrangements including employment of security personnel to ensure the protection of all materials, equipmentand works from theft, fire, pilferage and any other damages and loss up to commissioning of the system.

## **37.PROTECTION OF PROPERTY AND EMPANELLED AGENCY'S LIABILITY:**

The successful EOI applicant shall be solely responsible for any damage resulting from his operations up to commissioning and handing over of the system. He shall also be responsible for protection of all persons including members of public and employees of the respective UGVCL and the employees of other Empanelled Agency and sub-Empanelled Agency and all public and private property including structures, building, other plants and equipment and utility either above or below the ground up to commissioning and handing over of the system.

The successful EOI applicant will ensure provision of necessary safety equipment such as barriers, signboards, warning lights and alarms, etc. to provide adequate

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protections to persons and property. The successful EOI applicant shall be responsible to give reasonable notice to the Engineer and the Employer of public or private property and utilities when such property and utilities are likely to get damaged or injured during the performance of his works and shall make all necessary arrangements with such employers, related to removal and / or replacement or protection of such property and utilities.

## 38. WORK & SAFETY REGULATIONS:

The Empanelled Agency shall ensure proper safety of all the workmen, materials, plants and equipments belonging to him or to the UGVCLor to others, working at the site. The Empanelled Agency shall also be responsible for provision of all safety notices and safety equipment required both by the relevant legislations and the engineer, as they may deem necessary.

All equipments used in construction and erection by Empanelled Agency shall meet Indian/International standards and where such standards do not exist, the Empanelled Agency shall ensure these to be absolutely safe. All equipments shall be strictly operated and maintained by the Empanelled Agency in accordance with manufacturer's operation manual and safety instructions and as per guidelines / rules of the UGVCL in this regard.

The successful EOI applicant shall provide suitable safety equipment of prescribed standard to all employees and workmen according to the need.

The successful EOI applicant shall not interfere or disturb electric fuses, wiring and other electrical equipment belonging to the UGVCL under any circumstances, whatsoever, unless expressly permitted in writing by the UGVCL to handle such fuses, wiring or electrical equipment.

In case any accident occurs during the construction / erection or during guarantee period of 07 years for the activities undertaken by the Empanelled Agency thereby causing any minor or major or fatal injury to his employees / labourer due to any reason, whatsoever, it shall be the responsibility of the successful EOI applicant to promptly inform the same to the Engineer in charge of concerned Sub Division of UGVCL in prescribed form and also to all the authorities envisaged under the applicable laws. For any fatal / nonfatal accident to human or animal or any mishap within area of installation due to mishandling or reason whatsoever attributable to EOI applicant at the time of commissioning of Solar photovoltaic plant system, successful EOI applicant has to pay compensation as provided under the relevant applicable Act.

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The successful EOI applicant shall follow and comply with the employer's safety rules relevant provisions of applicable laws pertaining to the safety of workmen, employees, plant and equipment as may be applicable from time to time without any demur, protest or contest or reservations. In case of any discrepancy between statutory requirement and employer's safety rules referred above, the latter shall be binding on the successful EOI applicant unless the statutory provisions are more stringent.

It will be the successful EOI applicant's sole responsibility to take the materials up to the installation site.

## 39. HANDING OVER ASSET:

After successful installation, commissioning, testing with UAT of complete system, the asset is to be handed over to the concerned engineer in-charge of the concern DISCOM. The handing over note covering the details of all the materials used and total work executed must be signed jointly by the EOI applicant of the UGVCL's Engineer in-charge. The copy of handing over note along with beneficiary's certificate (**Proforma- B ofattachedAppendix-3**) to final bill is required to be submitted by the successful EOI applicant for release of payment.

## **40.INDEMNITY:**

The EOI applicant agrees to defend, indemnify and hold harmless the UGVCL, its officers, directors, consultant, agents, employees and affiliates (and their respective officers, directors, agents and employees) from and against any and all claims, liabilities, actions, demands, judgments, losses, costs, expenses, suits, actions and damages arising by reason of bodily injury, death or damage to property sustained by third parties that are caused by an act of negligence or the willful misconduct of the EOI applicant, or by an officer, director, sub-Empanelled Agency, agent or employee of the EOI applicant.

**41.**UGVCL / beneficiaries will bear the cost of shifting of the system. In such cases, the guarantee will be continued as per EOI Document condition.

# **42.**REPEAT / ADDITIONAL ORDERS:

UGVCL's reserves the right to place repeat orders / additional orders on the successful Agency up to 50% of the original quantity of the order at the same prices, terms and conditions stipulated in the original contract during contractual period. In special circumstances UGVCL's reserves the right to place repeat order / additional order up to 100% quantity mutually agreed upon.

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# **43.**<u>TERMINATION OF CONTRACT</u>:

In case, the supplier fails to deliver the stores / materials / equipment or any consignment thereof within contractual period of delivery or in case the stores are found not in accordance with prescribed specification, UGVCL's reserves the right to terminate the contract OR UGVCL shall exercise its discretionary power either:

(a) In case material is not found as per specification, UGVCL has right to seek replacement of the same material without any incremental cost to UGVCL's.

# <u>OR</u>

(b) To purchase from elsewhere after giving due notice to the supplier on account and at the risk & cost of the supplier such stores not so delivered or other similar description without cancelling the contract in respect of the consignment not yet due for delivery

## OR

(c) to cancel the contract.

In the event of the risk purchase of stores of similar description, the opinion of UGVCL's shall be final. In the event of action taken under clause (b) or (c) above, the supplier shall liable to pay for any loss which UGVCL may sustain on that account but the supplier shall not be entitled to any saving on such purchases made against default.

The decision of UGVCL's shall be final as regards the acceptability of stores supplied by the supplier and UGVCL shall not be required to give any reason in writing or otherwise at any time for rejection of the stores.

Further, "UGVCL's reserves the right to terminate the Contract (i.e. Purchase order) at any time, without assigning any reasons, whatsoever, by giving a notice period of ONE month from the date of Notice of termination of the Contract. Suppliers will not be entitled for any compensations / damages / losses, whatsoever, on account of such termination of the Contract.

# **44.** GUIDELINES FOR AGENCY:

- It is mandatory for EOI applicant to have valid test report of SPV Modules and grid tie inverters with similar or larger capacity from MNRE approved laboratories.
- **2.** The program implementation guidelines of the GUVNL / UGVCL, as declared from time to time, for SPV program shall be applicable and followed at all times.
- **3.** The technical specification, scope of work for which EOI Document is invited are furnished in EOI Document

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- **4.** The quantity mentioned in the EOI Documentis only indicative and not final. Payment will be done only for the actual quantity executed.
- **5.** Cost of Comprehensive Maintenance during Guarantee and warrantee period and Insurance of system for 7 years is required to be included in the quoted prices.
- **6.** The Empanelled Agency shall be responsible for overall project management, system integration and testing to complete all criteria for successful functioning of the Grid connected Solar PV plant, but not limited to the functions laid down in this documents.

#### **45.SERVICE CENTRE**

- a) Empanelled Agency has to undertake to establish one no. of Service centre with necessary spare parts and technicians in thehead quarter of the Circle for which the contract has been awared.
- b) Empanelled Agency has to undertake to perform regular visit of his technician with necessary spare parts from the Service centre established at various headquarters of the division to the beneficiary sites on 11 KV AGDOM feeders selected for attending complaints and for doing regular maintenance of the system installed.
- c) The Service Centre should have adequately trained staff available for repair and maintenance of Solar PV Systems, Inverters supplied and installed.
- d) The service centre should be open for atleast 8 hours per day and 6 days a week excluding bank holidays.
- e) Empanelled Agencys need to have a dedicated mobile number which should be readily available during its office hours and an e-mail ID for correspondence.
- f) Empanelled Agency shall ensure that necessary spares are always available with the service centres to provide necessary after sales service to the beneficiary during the guarantee period.

# 46.Resolving Complaints related to defects/ non-working / poor performance of the system: -

a) For any problem/defect in system, Empanelled Agency shall have to replace/repair the defect of the system, resolve it and make the system operative as per the Technical specifications, within 48 (Fourty Eight) Hours from the receipt of the complaint or receipt of the notification/alert/massage from the remote metering system.

# b) Logging of complain:

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The concern beneficiary may also lodged theircomplain through developed mobile application for AG Solarization. The record of each and every complaint received and resolve with down time and up time shall have to be maintained by the Empanelled Agency in register as well as computer based software and in mobile application and shall have to be submitted to UGVCL office every week and every month.

- c) While doing repairing or rectification work, the Empanelled Agency's technician or any person is not authorized to work on UGVCL's electric line of 11 KV and LT having potential danger of electricity.
- d) Penalty on part of delay occurs in resolving complaint/defect/ loss of Solar generation

The successful EOI applicant shall develop a mechanism in the OS of the central server for the computation of the loss of solar generation. The computation logic shall consider the data of the average solar generation of the other PVs of around 10 nos of surrounding such system On the basis of all, it will calculate the loss of generation in terms of KWH, itself.

The penalty shall be imposed on the EOI applicant as per this loss of generation. The penalty calculation mechanism shall give alert event to the authorized person of the EOI applicant immediately, after the generation loss detected and the penalty period shall be countedimmediately after 48 Hrs of the complaint lodged by beneficiaries. The EOI applicant shall rectify the cause of loss of generation immediately, if fails penalty against loss of generation shall be recovered as under.

- Penalty against loss of generation:
  - The Empanelled Agency shall provide prompt service to the Agriculture Consumer in times of fault of breakdown of the PV system. Any complaint received from the Agriculture Consumer/ Cooperative Society/ DISCOM shall be rectified by the Empanelled Agency within 48 (forty eight) hours of such complaint. The Empanelled Agency shall be liable for loss of generation from the PV system arising from persisting fault beyond the 48-hour period and shall compensate the Agriculture Consumer at the rate of Rs. 7.00 +Applicable GST plus cess per kWh of generation loss beyond the 48-hour period. The loss in generation shall be decided on an hourly-basis based on the average generation of surrounding 10 such generating solar plants or nearby weather station.

The bidder shall be issued a notice to pay the same at UGVCL Office of respective Division/Circle within 10 days. The UGVCL shall encash the PBG immediately, if the bidder fails to pay the penalty within notice period, then.

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# 47.LOI,LOA, SD&Agreement

- a) After finalization of this EOI Document and shortlisting of offers, a Letter of Intent for empanelment will be issued by UGVCL to agency and execution of agreement.
- b) After registration of the agencies as the empanelled agencies, the LOA and Detail order will be placed by the UGVCL to in whose jurisdiction the project on 11 KV feeder to be executed and the DPR proposal is submitted by the empanelled agency to the UGVCL.
- c) The Detail order will be placed by UGVCL after submitting the DPR proposal by the Empanelled agency of the feeder with a list of beneficiaries and the consent of Co-operative Society/Consumers. On scrutiny of the proposal UGVCL may issue a detail order for execution of the feeder on the proposed feeder after receiving payment towards security deposit/Bank guarantee.
- d) Letter of acceptance (LOA) shall be issued through Fax / e-mail / post to the Empanelled agencies on approval of proposal with DPR submitted by them, indicating the quantity with capacity allocated to him and the security deposit amount to be deposited by him with UGVCL. The Empanelled agency will be required to deposit the requisite security deposit within 15 days from the date of receipt of Letter of Acceptance, failing which the Letter of Acceptance will be treated as cancelled. The detailed order will be issued to empanelled agencyby DISCOM only after receipt of requisite security deposit and signing the contract agreement.

## 48. <u>SECURITY DEPOSITAND PERFORMANCE GUARANTEE:</u>

# [Should be paid within 15 (Fifteen) days after receipt of LOA]

The successful Agency will be required to pay an amount equivalent to **5%** of the value of the order including taxes and duties as a Security Deposit for satisfactory execution of the ordered complete system. Such Security Deposit will be payable either through D.D. / Bank Guarantees. Bank Guarantees from <u>Scheduled / Nationalized Banks</u> as per Govt. GR No. EMD / 10 / 2021 / 7729 / DMO dated 28.06.2021 will be acceptable, if the amount of security deposit payable exceed Rs.10,000/-. The Security Deposit will be accepted in the form of Demand Draft issued by schedule /Nationalized Bank, ICICI Bank, IDBI Bank, HDFC Bank in favour of UGVCL as per format attached with EOI Document with validity of 180 days.

In case, if the Bank Guarantee is furnished / submitted, it should have a clear one time validity till the completion of the installation & commissioning of all the ordered system and up to the expiry of Guarantee period from the date of commissioning of the last system.

Bank Guarantee for interim period will not be allowed. If by any reasons the supply & commissioning period is extended, then supplier should undertake to renew the

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Bank Guarantee at least one month before the expiry of the validity failing which UGVCL will be at liberty to encash the same. <u>CORPORATE GUARANTEES NOT ALLOWED.</u>

No interest will be paid on the Security Deposit. Security Deposit shall be suitably extended time to time as per requirement of UGVCL.

No EOI applicant is exempted from payment of Performance Guarantee towards execution period (Security Deposit) and towards Guarantee / Guarantee period (PBG) in any case. Security Deposit should be paid within 15 (Fifteen) days of the receipt of the Letter of Acceptance.

<u>Security Deposit will be returned on successful completion of the installation and commissioning of all the ordered systems and only after the Performance Bank Guarantee 5 % of the order value is furnished.</u>

The EOI applicant will be allowed to convert the Bank Guarantee submitted towards SD (5 %) in to Performance Bank Guarantee (PBG).

If the full Security Deposit amount is not paid within 15 (Fifteen) days after the receipt of the Letter of Acceptance, then the LoA will be out rightly cancelled at the risk & cost of the EOI Documenter (at the discretion of UGVCL) and without entering into any correspondence and this will be binding on the EOI Documenter.

In the event of awarding the order of additional quantity, the EOI applicant will be required to deposit additional Security Deposit on prorate basis within two weeks of the issuance of LOA for the additional order quantity.

In the event of failure to supply no. of systems as contracted by the EOI applicant and as accepted by him while receiving the order, will lead to forfeiture of the Security Deposit and will lead to disqualification of the EOI applicant for transacting business with UGVCL & its Subsidiary Companies for at least two years or the time duration as may be decided by UGVCL.

**49.**Serial Number (identification mark) must be permanently marked on all major components of the SPV systems. Metallic number plates with serial numbers duly riveted or fixed with strong adhesive for non-metallic body, as approved by UGVCL, shall be fixed on each Inverter.

#### **50.AUDIT ISPECTION:-**

From the lots inspected by the UGVCL Inspector, the Inspector of Audit Inspection Wing, if required, may pick up samples from the lots supplied & Installed at beneficiaries' site at random for quality check only. The samples picked up will be

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tested for acceptance test as decided by UGVCL at MNRE/ Government approved laboratory in presence of representatives of supplier and UGVCL as per relevant IEC/ISS/BIS/ UGVCL specifications. The test results will be binding on the suppliers and UGVCL, in general will not allow re-sampling. If the material fails in any of the acceptance tests carried out, the full lot of materials will be considered as rejected, and if replacement is not possible due to installation of the materials then in that case for whole of the rejected lot, UGVCL will deduct maximum upto 30% (Thirty) of the End Cost Price plus GST . If the same are not utilized / consumed, then UGVCL may ask for replacement at sole discretion of UGVCL or may accept with maximum deduction upto 30% (Thirty) of the End Cost Price plus GST, and all these will be binding on the supplier. In case if the materials does not confirm to specifications or fails at Government approved laboratory or other laboratory decided by UGVCL for testing and if subsequent testing are to be carried out (which will solely at UGVCL discretion), then all Testing fees, expenses of the inspector and other expenses incurred by UGVCL will be to supplier's account. The decision in this regard for acceptance as above of UGVCL shall be final and this will be binding on the supplier.

# **51.LOCATION OF INSTALLATION:**

The Grid Connected Solar PV system is required to be installed at various location of Ag. Consumers on various AGDOM Feeders acrossthe jurisdictional area of UGVCL.

The list of consumers with contracted demandshall be issued by concern subdivision office the empanelled agency. Empanelled agency shall approach each consumer to form a co-operative society. The agency shall submit detail of agreed consumers with consent of society/consumer along with detail drawing and design of each system and will submit a DPR in a prescribed form to UGVCL.

UGVCL, in consultation with the Government department, will assist and the facilitate the empanelled agency to from a group/society of the consumers for energy account propose. A common agreement shall be signed by all members of the group/society on a non judicial stamp paper of Rs. 300/- . A common draft of agreement shall be provided by UGVCL.

#### 52.PRICES:-

Prices quoted should be 'FIRM' and F.O.R. basis exclusive of Taxes and levies as per price offer schedule showing GST. For supply with work portion, EOI applicant has to mention Unit End Cost with price break up of GST, Freight, Packing, Insurance charges, installation charge in price schedule. Component of taxes should be shown separately.

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<u>Comprehensive Maintenance during guarantee period of the complete system for 7 years is in the scope of EOI applicant.</u>

# **53.**VALIDITY OF THE OFFERS:

The offers will have to be kept valid for a period of 120 days from the date of opening of technical offers. In case finalization of the EOI Document is likely to be delayed, the Agency will be asked to extend the same without change in the prices or any terms and conditions of the offer. If any change is made, original or during the extended validity period, the offers will be liable for outright rejection without entering into further correspondence in this regard and no reference will also be made.

# **54.PACKING AND FORWARDING CHARGES:**

The prices shall be inclusive of packing & forwarding charges. The stores should be strongly and adequately packed to ensure safe arrival at destination. The materials dispatched from overseas by Air / Shipping should be packed in such a way that it can withstand rough handling and possible corrosion due to exposure to salt laden atmosphere, salt spray or open storage. All packing must be clearly marked with order Number and consignee's name and address.

# **55.INSURANCE**

## (A)Transit Insurance:

All the materials under the Solarization part will be required to be supplied up to farmer's site and shall have transit insurance against all transit risks, such as damage, loss, theft, fire, etc. The transit insurance period shall cover 60 days after the date of receipt of materials at destination to enable DISCOM to check the stores fully. The cost of damaged, defective stores materials will however be deducted from the bills of the suppliers and will be refunded only after replacement thereof. It will be the responsibility of the supplier to lodge claim against the insurance on receiving necessary advice from the consignee. Transit Insurance of the material shall remain the responsibility of the EOI applicant till the time of Commissioning.

## (B) Insurance for Seven Years:

The empanelled Agency has to take insurance for freight, transits, storage, accident, theft, damage etc. up to commissioning of whole system. The insurance of the system after its commissioning shall be taken by GoG/ UGVCL. However, the empanelled agency shall be responsible for immediate replacement/rectification in case of theft/damage/fire and damage or loss due to

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the natural calamities for seven years from the date of commissioning of the last system of the project within time frame to maintain the guaranteed generation. In such case the payments towards replacement/rectification as covered above shall be paid to the empanelled agency after receiving amount of the claim from the insurance company.

#### **56.ACCEPTANCE OF STORES:**

All or any stores and materials to be supplied at F.O.R. Destination (Farmer's site), against this contract will be subject to their acceptance by the consignee or any other Officer deputed by UGVCL for this purpose. UGVCL will be at liberty to reject whole lot without assigning any reasons and the decision of the Officer concerned will be considered as final.

## **57.TAXATION:-**

#### (A) Goods and Service Tax (GST) :

The F.O.R. Destination prices are excluding GST and Cess as applicable which will be paid extra on a given taxable goods and/or services. The amount and % of GST and Cess as applicable should clearly be indicated separately. (GST/Cess means all applicable Tax/Cess under GST Laws. GST Laws means IGST Act, GST(Compensation to the State for Loss of Revenue) Act, CGST Act, UTGST Act and SGSCT Act, 2017 and all related ancillary legislations).

You shall have to submit a C.A Certificate & duly authorized Signatory of successful EOI applicant, certifying that you have not claimed Refund of any applicable GST and Cess, charged to COMPANY or shall not claim any such Refund, on a future date, from the concerned Authorities and if, any Refund, in respect of such GST and Cess, is claimed by you, it will be immediately passed on to the COMPANY, without COMPANY making any specific Claim, for the same, either from the Department or from you.

The offers having price INCLUSIVE OF GST and Cess is likely to be rejected if the rate of GST and Cess is not mentioned clearly unless the EOI applicant has opted for Composition Scheme under GST Act, which should be clearly indicated in the price offer. COMPANY may at its discretion consider such offer with presumption of highest applicable rate of GST/Cess prevailing when the price quoted is inclusive of GST and Cess.

If the Supplier/Empanelled Agency has opted for the Composition scheme of GST, the same must be clearly specified with valid Declaration & Certificate from Department. In the event of withdrawal/cessation of the Supplier from

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Expression of Interest (EoI) for Empanelment of Agencies for Design, Supply, Installation, Testing, Commissioning and Comprehensive Maintenance for 7 years of Distributed Grid-connected Solar PV plants of Capacity above 5 kW (AC) to 100 kW (AC) for providing of Solar PV System to Agricultural Consumers on various Agriculture Feeders within the jurisdiction of UGVCL.

Composition scheme during the tenure of the contract, the rate mentioned in the price offer shall be final and any additional GST will have to be borne by the EOI Documenter. In no case additional amount towards tax or otherwise will be paid / reimbursed to supplier/Empanelled Agency. Further Statutory Variation clause will not be applicable in case of Supplier / Empanelled Agency has opted for Composition Scheme under GST.

Supplier/Empanelled Agency should charge GST in Invoice at the rate as agreed to / mentioned in acceptance of EOI Document only and any deviation in the same shall not be accepted. Further, any additional liability of GST (later on due to wrong mentioning of GST rate, mis-interpretation of HSN/SAC Code, etc.) over and above as charged in the invoice shall be borne by the Supplier/Empanelled Agency. However, any refund received by the supplier / Empanelled Agency on account of GST charged from the company; such refund shall have to be passed on to the company, along with interest if any. Such refund along with interest needs to be passed on suo-moto by the supplier / Empanelled Agency.

Further, the Company has a right to recover the amount of GST along with penal interest at the rate of applicable rate per annum if GST charged is not paid / short paid to the government or fail to upload the details or uploads inaccurate particulars on GSTIN portal by the Supplier / Empanelled Agency within the stipulated time limit.

In case, Govt. revises the rate of GST rate / Code during the tenure of the contract, the provision of GUVNL's statutory variation clause shall apply.

#### (B)INPUT TAX CREDIT BENEFIT

In the event of any statutory increase in the rate of Input Tax Credit and / or due to inclusion of any other additional item of their inputs / input services under the ambit of the Input Tax Credit provisions under the GST Act , subsequent to the date of submission of the offer, the same should be passed on to COMPANY and you should inform such changes to COMPANY from time to time.

## (C) STATUTORY DEDUCTION:-

statutory deduction will be made as per applicable rules & rates for TDS, Worker welfare cess, or any other taxes applicable time to time etc. All other statutory liabilities towards this contract will be on the part of Empanelled Agency.

## **58.UNLOADING:**

Unloading of the materials at farmer's site shall be arranged by the Empanelled Agency.

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## **59.STATUTORY VARIATION:**

Any statutory increase or decrease in the taxes and duties including GST and Cess as applicable or in the event of introduction of new tax/cess or cessation of existing tax/cess subsequent to suppliers offer if it takes place within the original contractual delivery date will be to COMPANY's account subject to the claim being supported by documentary evidence. However, if any decrease takes place after the contractual delivery date, the advantage will have to be passed on to COMPANY.

Statutory Variation clause will not be applicable in case of Supplier / Empanelled Agency has opted for Composition Scheme under GST.

## **60.PAYMENT TERMS:**

- a) 60% of the order value of delivered quantity of Solar PV system at farmer's (Beneficiary's) site on submission of necessary documents in triplicateat concerned Division Office of DISCOM& after on-site verification, inspection, by Deputy Engineer of concerned Sub-division of UGVCL and / or its authorized inspection agencies as per norms of UGVCL, for which the claim is received.
  - Empanelled Agency should provide the bill of material for each system along with the delivery of system to the concerned Executive Engineer division. Payment will be made by UGVCLafter submission of challan, invoice in duplicate & Advance receipt to the concerned Executive Engineer Division Office of DISCOM
- b) **30% of the order value** against successful Commissioning of each Solar PV system. Installation certificate duly signed by the Deputy Engineer of the concerned Sub division / Executive Engineer Division Office UGVCLshowing its installation date and performance to be submitted along with invoice.
  - Empanelled Agency has to submit the Project Completion Report in the format (Proforma-A, Proforma-B, Proforma-C) (Copy Enclosed-Appendix-3) along with photograph of the front view of the proposed site and after system installed & commissioned by Empanelled Agency in same view while claiming payment as per (B) mentioned above.
- c) Balance payment of 10% of the order value and security deposit shall be made after taking in to account the payment made under clause (a) & (b) above and against submission of 5% of order value against Performance Bank Guarantee. (drawn on Nationalized Bank, ICICI Bank, IDBI Bank and HDFC Bank as per the prescribed format attached with EOI Documents, for submission of Bank guarantee, Banks to be allowed as per the latest GR of Govt.) which should be valid

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for a period of 7 years from the date of completion of total order & should be submitted to Corporate Office, UGVCL.

- d) Security Deposit shall be released against submission of Performance Bank Guarantee. Performance Bank Guarantee shall be submitted after completion of ordered quantity.
- e) The supplier / Empanelled Agency / successful EOI applicant has to give Performance Bank Guarantee with validity period of additional 01 (one) month i.e. more than actual Guarantee period of 84 months (depending upon product) to safeguard Company's interest in case of any eventuality happening on the last day of the Guarantee period after office hours of the Bank or Bank holidays.
- f) Supplier has to submit Project Completion Report in the proforma (in <u>Proforma</u> -A, <u>Proforma-B</u>, and <u>Proforma-C</u> of <u>Appendix-3</u>) along with photograph before and after the system installed & commissioned by them while claiming payment as per (b) mentioned above.
- g) Supplier has to submit copy of Insurance policy while claiming payment as per clause (c) mentioned above.
- h) Payment will be made by the Circle Office /Corporate Office UGVCL.
- i) In case of any type of misappropriations, cheating or intention of cheating, frauds, irregularities, malpractice, etc., UGVCL reserves the right to cancel the order without giving reasons thereof and forfeit the security deposit and / or performance bank guarantee/s and purchase the system under risk & cost of the supplier.
- j) During site inspection by UGVCL's staff / authorized representative, if the systems are found to be not installed and false report of installation & commissioning is submitted to UGVCL for claiming payment, UGVCL is empowered to take action(s) as deemed fit and or forfeit Security Deposit and / or performance bank guarantee/s up to 100%.
- k) Agency are also required to quote rates inclusive of Comprehensive Maintenance during guarantee period of seven years for the systems. The rates quoted should be inclusive of charges for providing routine maintenance services at the beneficiary's end to ensure smooth and satisfactory performance of the system. Replacement of any components of the system is included in the scope of work of maintenance at free of cost. As per the **Appendix-2** format quarterly report should be prepared and submitted to UGVCL after providing necessary services.

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- Third Party Inspection may be carried out by the agency authorized by DISCOM (i.e. GERMI) if required.
- m) The EOI applicant should provide the bill of material for each system along with the delivery of system.

## **61.EOI DOCUMENTELIGIBILITY CONDITIONS&EVALUATION CRITERIA:**

## **61.(A) PRELIMINARY OFFER:**

Documents towards payment of the EOI Document Fee and Earnest Money Deposit or notarized copy of Udyam registration certificate of Gujarat State and registration certification with CSPO/NSIC/DGS &D the prescribe form are required to be submitted with EOI Document. (Please refer Part –B and Part-C - Schedule-A and Note important of EOI Document).

All the documents as required to be submitted in the "E.M.D &EOI Document fee Cover" must be placed there in as mentioned in the Part –B and Part-C-Note important of EOI Document.

Technical Offers of only those Agency who are found qualified, based on considerations specified in the preliminary offer will be opened.

# **61.(B) TECHNO-COMMERCIAL OFFER:**

The offers of only those Agencywho fulfil the Minimum eligibility conditions and other eligibility conditionsmentioned under and who have submitted the following required documents in physical form under sealed cover of "Technical Offer cover" and submitted required details / documents in on-line in respective Annexures will be considered for technical evaluation.

# **61.(B).(I) - MINIMUM ELIGIBILITY CONDITIONS:**

i. The EOI applicant should be:

ARegisteredCompany withmanufacturingfacility inIndiafor:

SPVModules ORSolarPump Controllers OR Grid tie Inverter(Test Certificate for any one of the above components from a MNREaccreditedTestlabismandatory)

#### OR

A PV System Integrator with three years track record in OFF - GRID/ GRID Connected PV Systems.

**ii.** EOI applicantshouldnotbe stopped deal or blacklistedby any Govt. Agency.

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Agencywhoarestopped-deal or black-listedinanystatewouldnotbeeligibletooffertilltheyremove thecauseof theirbeingblacklisted.

- **iii.** Interested agency to have installed and commissioned at list aggregated 1MW of PV systems under SKY scheme/ Ground Mounted/ Grid connected Solar System before the EOI submission date.
- iv. Average turnover of the interested agency during last 3 financial years to be Rs. 84.13Lakh/ year. The Bidder should have positive net worth for each of the last three Financial year. (FY18-19 to FY20-21).

**Parent company**: Eligibility criteria of parent company of the bidder shall also be consider for bidders eligibility criteria if the parent company is holding minimum 26% share in the bidding company. Documentary evidence shall be submitted along with the bid.

[Certifiedcopies of the annual returns submitted to the 'Registrar of Companies' (R.O.C.) should be enclosed. For the preceding year, a summarized sheet of turnover certified by registered CA should be enclosed.

- Forproprietary/partnershipcompanies,copiesofIncome
  Taxreturnswith full details
  ofturnovershouldbeenclosed.Asummarizedsheetofturnovercertified by
  registeredCA shouldalso beenclosed.]
- **v.** The empanelled agency shall have to submitcertified copy of valid test certificate of solar photovoltaic module confirming technical requirement as per the part-G, along with DPR submission.
- **vi.** The EOI applicant should have valid GSTIN registration certificate in the state. Acopy of which should be enclosed.
- **vii.** The EOI Applicant shall have to submit the Agreement /MOU with the solar PV manufacture in case of EOI applicant is not a SPV module manufacture.
- viii. Conflict of Interest among Bidders/ Agents:-

A bidder shall not have conflict of interest with other bidders for particular quoted item. Such conflict of interest can lead to anti-competitive practices to the detriment of Procuring Entity's interests. The bidder found to have a conflict of interest shall be disqualified. A bidder may be considered to have a conflict of interest with one or more parties in this bidding process for particular quoted item, if:

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- a) they have proprietor/ partner(s)/ Director(s) in common; or
- b) they receive or have received any direct or indirect subsidy/ financial stake from any of them; or
- c) they have the same legal representative/ agent for purposes of this bid; or
- d) they have relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or influence on the bid of another bidder; or
- e) bidder participates in more than one bid in this bidding process. Participation by a bidder in more than one Bid will result in the disqualification of all bids in which the parties are involved. However, this does not limit the inclusion of the components/ sub-assembly/ assemblies from one bidding manufacturer in more than one bid.
- f) in cases of agents quoting in offshore procurements, on behalf of their principal manufacturers, one agent cannot represent two manufacturers or quote on their behalf in a particular tender enquiry. One manufacturer can also authorise only one agent/ dealer. There can be only one bid from the following:
- 1. The principal manufacturer directly or through one Indian agent on his behalf; and
- 2. Indian/ foreign agent on behalf of only one principal.
- g) A Bidder or any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the contract that is the subject of the Bid;
- h) in case of a holding company having more than one independently manufacturing units, or more than one unit having common business ownership/ management, only one unit should quote. Similar restrictions would apply to closely related sister companies. Bidders must proactively declare such sister/ common business/ management units in same/ similar line of business.
- i) Bidder shall not act in contravention/ violation to the provisions of competition act, as amended from time to time.

Every bidder should, at the time of submission of bid, give a declaration, that bidder shall not have conflict of interest with other bidders for particular quoted item, as above.

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# 61.(B).(II) **GENERAL**:

- a. The EOI applicant should have an Engineer (B.E./B.Tech Electrical) and at least **5 Nos.** of technically qualified and well-experienced manpower having minimum level of 2<sup>nd</sup> class wireman pass certificate or batter technical qualification for Installation and after sales service of the systems. Brief biodata of the key personnel is to be given in **Annexure 4** of technical stage of online EOI Document.
- b. The EOI applicant should have declared, if any relative is working with or employee of GUVNL /UGVCL /DISCOM in **Annexure-5**

The "Price offers" of only those Agency shall be opened, who qualify in techno-Commercial offer evaluation with fulfilling the criteria mentioned as above.

## Offers not satisfying any of the above-mentioned criteria will be liable for rejection.

UGVCL reserves the right to accept or reject any or all the EOI Documents. Decision taken by UGVCL shall be final and binding on all.

# 62.Duration of Empanelment: -

The selected empanelled agency will be empanelled initially for **one year**. After completion of this period, the validity of empanelment rates may further be extended on the basis of performance of the agency and mutual consent between UGVCL and interested empanelled firms.

However, in this case the empanelment may be issued subject to revision of rates at the sole discretion of the UGVCL/GUVNL, if required.

- **63.** GST at applicable rate will be applied on all the kind of penalty recover under this contract.
- **64**. In commercial terms and conditions whenever plus GST mentioned it is to be replaced with plus GST and cess as applicable.

**UGVCL** Bank detail:

Account name: UTTAR GUJARAT VIJ COMPANY LIMITED

Name of Bank: BANK OF BARODA, Bank Account No: 01520500013524

IFSC Code:- BARBOMEHSAN MICR code: 384012001

Expression of Interest (EoI) for Empanelment of Agencies for Design, Supply, Installation, Testing, Commissioning and Comprehensive Maintenance for 7 years of Distributed Grid-connected Solar PV plants of Capacity above 5 kW (AC) to 100 kW (AC) for providing of Solar PV System to Agricultural Consumers on various Agriculture Feeders within the jurisdiction of UGVCL.

# Annexure -1 EOlwith Undertaking

(To be submitted in online and physical mode on the letter head of the EOI Applicant)

From:- (Full name of EOI Applicant) address of the Organisation	
Email ID:	
PHONE /MOBILE NO.:	
То:	
The Chief Engineer(P&P)	
Uttar Gujarat Vij Company Ltd.,	
Regd. & Corporate Office, Visnagar road	i,
MEHSANA-384001, GUJARAT-INDIA	

**Sub:** Expression of Interest (EoI) for Empanelment of Agencies for Design, Supply, Installation, Testing, Commissioning and Comprehensive Maintenance for 7 years of Distributed Grid-connected Solar PV plants of Capacity above 5 kW (AC) to 100 kW (AC) for providing of Solar PV System to Agricultural Consumers on various Agriculture Feeders within the jurisdiction of UGVCL.

Ref: UGVCL/SOLAR/SKY/EOI/Ag. Solarization /2022-23/01 Dt: 13/05/2022.

## Dear Sir,

In connection with the above subject, I / We confirm the following:

- **2.** I/We have paid the requisite amount of EMD. I/we understand that without payment of the EMD by us, our offer shall outrightly be rejected.
- **3.** If, I/we are selected and shortlisted for the empanelment,I/we are agree to execute agreement.

Sign & Round Seal of the EOI applicant Da	Date and place	(Page <b>60</b> of <b>125)</b>
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- **4.** I/We agree to treat the bid document and other records connected with the Works as secret and confidential documents and shall not communicate information described therein to any person other than the person authorized by you or use the information in any manner prejudicial to the safety of the Works.
- **5.** I/We understand that you are not bound to accept the lowest or any proposal you may receive.
- 6. I/ We are participating, as Bidders, in note more than one Bid in this Bidding process
- 7. I / We declare that our offer is strictly in line with EOI Document Specification and there is no deviation. Further, I/We also agree that additional conditions / deviations, if any, found in our offer, the offer shall be out rightly rejected without assigning any reason thereof. We shall ensure that we execute such EoI Documents as per the provisions of the EOI and provisions of such EOI Documents shall be binding on us. I/We confirm that we have not taken any deviation so as to be deemed non-responsive.
- **8.** I/We hereby unconditionally and irrevocably agree and accept that the decision made by UGVCL and GUVNL in respect of any matter regarding or arising out of the EoI shall be binding on us. We hereby expressly waive any and all claims in respect of Bid process.
- **9.** I/ We confirm that there are no litigations or disputes against us, which materially affect our ability to fulfil our obligations with regard to execution of projects.
- **10.** I/ We hereby submit our offer and undertake to keep our offer valid for a period of 120 days from the date of opening of technical offer. I / We hereby further undertake that during the said period, I / We shall not vary/alter or revoke my/ our offer.
- **11.** I/We also agree to abide by and fulfill all the terms, conditions and provisions of the above mentioned offer documents.

(Signature of Applicant)
With Seal

Sign & Round Seal of the EOI applicant	Date and place	(Page <b>61</b> of <b>125)</b>
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## **ANNEXURE-2**

# (To be submitted in online and physical mode)

# Manufacturing /production Capacity of EOI applicant/Agency supplier's

Sr. No	Details of the Items	Name of Manufacturer with whom EOI applicant has made MOU to supply material under this project	Firm's Per Annum Production Capacity for the items.
1	SPV Modules		
2	Grid tie Inverters		
3	Module mounting Structure		
	rk execution Capacity per m	• • • •	testing and commissioning
Sr.	Plant capacity	Complete system per mo	nth
1	Above 5 KWp and up to 9 KWp		
2	Above 9 KWp and up to 20 KWp		
3	Above 20 KWp and up to 50 KWp		
4	Above 50 KWp and up to 100 KWp		

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## ANNEXURE – 3(A)

# Format of the Details for the Technical Experience as per Eligibility Criteria (To be submitted in Online and Physical mode)

#### **INSTRUCTIONS:**

- A. The EOI applicant shall indicate EPC experience of Grid-Connected Solar/Off Grid Photovoltaic projects herein.
- B. The EOI applicant shall duly attach the Letter of Award (LOA)/Work order and the Commissioning Certificate of each EPC Work from the Client/PSU/DISCOM/Nodal agency/any Gov department.
- C. Projects without sufficient documentary evidence for installed & commissioned the Quantity of SPV plant as mentioned in the Eligibility Criteria shall not be considered towards technical evaluation of the EOI applicant.
- D. The EOI applicant shall indicate the technical experience for the projects to meet eligibility condition.

Sr.	Name of Client	Name of Contact person with Phone No	SPV Project Capacity (in MW)	Date of Commissioning (DD/MM/YY)	Page No of Commissioning certificate attached
1.					
2.					
3.					
4.					
5.					
6.					
7.					
	Total				

Note: EOI applicant can add supplementary rows in the table.

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Sign & Round Seal of the EOI applicant	Date and place	(Page <b>63</b> of <b>125)</b>

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# ANNEXURE – 3(B)

#### CertificateofBidder'sFinancialQualification

(On Letterhead of CA for the bidder (Bidder/ Lead Member/ Other Member) for which thebelow details are provided. In Case of JV the following format is to be provided by EachMemberoftheJointVentureseparately)

	(To be submitted in 'on-line' and physical mode by both)						
<u>FinancialQ</u>	ualificationCertificate for A	annual Turnover and Positive N	<u>letworth</u>				
In Respon	In Response to EOI No: UGVCL/SOLAR/SKY/EOI/Ag. Solarization /2022-23/01 Dt: 13/05/2022						
	TO WHOMSOEVER IT N	MAY CONCERN					
We M/s	We have verified the books of accounts and related record of M/s situated at <u>Address of the factory/firm&gt;</u> and on verification of the records, we						
	by certify that average Turn ast three financial years which	over and net worth of this mented are as under:	tioned entity/firm during				
Sr.No.	Financial Year	Total Turnover	Net worth				
		Rupees in LAKHS	(Positive/Negative)				
1	2018-19						
2	2019-20						
3	2020-21						
	Total						
Average A	nnual Turn Over of last						
ABOVE FIG	URE OF TURN OVER IS MEN	TIONED IN RUPEES IN LAKH.					
(Signature&SealofPracticingCharteredAccount) Certifying Chartered Accountant:NameofFirm: UDIN No: Date:							

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Place:

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## ANNEXURE – 4

# Details of Technical staff available with the company for execution of work

(To be submitted in online as well as in Physical mode of 'Technical offer cover')

(To be completely filled by the EOI applicant)

No.	Name	Qualification	Additional Certification, if any	Total Experience, no. of years	Remarks

## Note:

The copies of resumes and appropriate certificates should be submitted in "Technical offer cover"

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## **ANNEXURE – 5**

# <u>DECLARATION</u> (To be submitted in online and physical mode)

110 00000000000000000000000000000000000	, commission projection means	
(Strike off whichever is not applicable)		
This is to declare that Mr. / Ms GUVNL / UGVCL/PGVCL/MGVCL/DGVC to our name).		
Note: Agency has to reproduce above of all blanks.	declaration in the text box area	a with filling
OR		
This is to declare that none of the Propried employed or working with GUVNL / UGV its parent Department i.e. Energy & Petro	/CL/PGVCL/MGVCL/DGVCL at a	any of its offices or

Date and place

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Sign & Round Seal of the EOI applicant

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# **ANNEXURE** - 6

# <u>DEVIATION SHEET</u> (To be submitted in online and physical mode)

Any deviations offered from the terms and conditions of the offer should be clearly specified below in this sheet. If there are no deviations offered, it should be clearly mentioned on this page.

Deviation offered to Chapter No./ Clause No. of the EOI Document	Deviation offered	
We,applicant's name), confirm our acceptate Document, and all subsequent clarificate		
us, if any.	· •	,
		I
Sign & Round Seal of the EOI applicant	Date and place	(Page <b>67</b> of <b>125)</b>

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## **ANNEXURE - 7**

# (To be submitted in online and physical mode)

# **List of Plant and Machinery**

(To be completely filled by the EOI applicant)

	anufacturing of		PV panels: OI applicant's Suppli 	er of SPV Mod	ules:-	
Sr. No.	Name equipment	of	Date of purchase	Date calibration	of	Ut

No.	equipment	Date of purchase	calibration	Utility

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# <u>ANNEXURE – 8</u> (To be submitted in online and physical mode)

# Detailsof Grid connected Solar PV plant configuration of respective capacity

General Arrangement Agriculture pump sets.		Grid	connected	SPV	Plant	for	solarization	of
Brief description of cor	nfiguration							

Date and place

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Sign & Round Seal of the EOI applicant

Expression of Interest (EoI) for Empanelment of Agencies for Design, Supply, Installation, Testing, Commissioning and Comprehensive Maintenance for 7 years of Distributed Grid-connected Solar PV plants of Capacity above 5 kW (AC) to 100 kW (AC) for providing of Solar PV System to Agricultural Consumers on various Agriculture Feeders within the jurisdiction of UGVCL.

## **ANNEXURE – 9**

# (To be submitted in online and physical mode)

# (UNDERTAKING IN REGARD TO STOP DEAL / BLACK LIST THEREOF)

(On Non-Judicial Stamp Paper of Rs. 300/- attested by Notary Public/ First Class Magistrate)

Sub: Undertaking in regard to Stop Deal / Black List thereof.

Ref: EOI No. UGVCL/SOLAR/SKY/EOI/Ag. Solarization/2022-23/01

Sign & Round Seal of the EOI applicant

I / We, an authorized signatory of our company (EOI applicant) here by certify that our company (EOI applicant) is not stopped deal/blacklisted by GUVNL and or their any subsidiary company viz. GSCEL / GETCO / DGVCL / UGVCL / PGVCL / MGVCL or MNRE or state Renewable development agencies across the country or by any other Govt. PSU / Govt. Company / Govt. Department in India.
Authorized Signature
Company's seal
Date
Place

Date and place

(Page 70 of 125)

Expression of Interest (EoI) for Empanelment of Agencies for Design, Supply, Installation, Testing, Commissioning and Comprehensive Maintenance for 7 years of Distributed Grid-connected Solar PV plants of Capacity above 5 kW (AC) to 100 kW (AC) for providing of Solar PV System to Agricultural Consumers on various Agriculture Feeders within the jurisdiction of UGVCL.

## **ANNEXURE-10**

# (To be submitted in online and physical mode)

<u>Details of the Agreement/ MOU between EOI applicant and the SPV Module</u>

<u>Manufacturer in case of EOI applicant is not manufacturer of SPV module.</u>

If the EOI applicant is a manufacturer of the SPV module, the name & address of their works/factory where the SPV modules are manufactured is required to be mentioned in this annexure.

	·
EOI applicant Name	
EOI applicant's address	
Manufacturers' Name where SPV modules are manufactured	
Manufacturing Works/factory address of SPV module manufacturer.	
SPV module Manufacturing works/factory is Within Gujarat / Outside Gujarat	
Date of Agreement /MOU executed expiry date of the agreement/ MOU	

<u>Note:-</u> Notarized copy of agreement / MOU between manufacturer of SPV Module and the EOI applicant (in case of EOI applicant is not manufacturer of SPV module) is/are required to be submitted in the "Technical offer cover."

Sign & Round Seal of the EOI applicant	Date and place	(Page <b>71</b> of <b>125)</b>

Expression of Interest (EoI) for Empanelment of Agencies for Design, Supply, Installation, Testing, Commissioning and Comprehensive Maintenance for 7 years of Distributed Grid-connected Solar PV plants of Capacity above 5 kW (AC) to 100 kW (AC) for providing of Solar PV System to Agricultural Consumers on various Agriculture Feeders within the jurisdiction of UGVCL.

# **ANNEXURE – 11**

# (To be submitted in online and physical mode) Acceptance of Terms and conditions

Name of EOI Applicant:-....

SR No	Terms and conditions	Accepted / Not accepted
1	Scope of work, technical specification and General & Commercial Terms and condition of EOI Document.	
2	PENALTY TERMS OF EOI DOCUMENT AGREED:	
3	Penalty due to loss of generation for non attendingfault/defect/complaint agreed	
4	Penalty for not maintaining annual CUF 18.3% agreed.	
5	PERFORMANCE GUARANTEE TO COVER EXECUTION PERIOD (SECURITY) TERMS OF EOI DOCUMENT AGREED:	
6	PERFORMANCE GAURANTEE TOCOVER GAURANTEE PERIOD (INCLUDING MAINTENANCE DURING GUARENTEE PERIOD) TERMS OF EOI DOCUMENT AGREED: (Wherever applicable):	
7	VALIDITY OF THE OFFER OF EOI DOCUMENTAGREED	
8	PAYMENT TERMS OF EOI DOCUMENT AGREED:	

Sign & Round Seal of the EOI applicant	Date and place	(Page <b>72</b> of <b>125)</b>

Expression of Interest (EoI) for Empanelment of Agencies for Design, Supply, Installation, Testing, Commissioning and Comprehensive Maintenance for 7 years of Distributed Grid-connected Solar PV plants of Capacity above 5 kW (AC) to 100 kW (AC) for providing of Solar PV System to Agricultural Consumers on various Agriculture Feeders within the jurisdiction of UGVCL.

## **ANNEXURE – 12**

Agency are required to submit the below details /documents in "technical offer cover" in physical mode submission.

Agency are required to upload the below details /documents in technical stage of online offer. The documents are required for technical offer evaluation.

- (1) List of testing equipments (must have been calibrated up dated) at the works of manufacturer for EOI Document items/s.
- (2) List of machinery installed for manufacturing EOI Document item/s at the works of manufacturer
- (3) Annual production capacity (with shift in operation) of each item manufactured
- (4) GSTIN Registration no. and date and issuing authority
- (5) Valid factory license (for manufacturer)
- (6) EPF Registration No. and date of issue in the name of EOI applicant.
- (7) The copy of Income tax PAN No. in the name of EOI applicant
- (8) Audited Accounts, financial turnover and Net worth certificate as per the eligibility conditions of the firm / EOI applicant
- (9) Performance reports, if any
- (10) Consent letter from their principals to manufacture such items whenever applicable
- (11) Copy of partnership deed / Memorandum of Pvt. or Public limited company's issued by RoC in respect of EOI applicant
- (12) The list of order/s and the copy of order/s of EOI Document item/s of UGVCL of GUVNL and other UGVCL / SEB of the country, which is / are executed in last three years (to be submitted in physical form in "EMD Cover Document" also)
- (13) The list of order/s and the copy of order/s of EOI Document item/s of other UGVCL / SEB of the country, which is / are under execution.
- (14) The documents / copies related to Annexure-3
- (15) The documents / copies related to Annexure-4
- (16) All required documents satisfying the eligibility criteria as mentioned in the Techno-Commercial offer

Sign & Round Seal of the EOI applicant	Date and place	(Page <b>73</b> of <b>125)</b>

Expression of Interest (EoI) for Empanelment of Agencies for Design, Supply, Installation, Testing, Commissioning and Comprehensive Maintenance for 7 years of Distributed Grid-connected Solar PV plants of Capacity above 5 kW (AC) to 100 kW (AC) for providing of Solar PV System to Agricultural Consumers on various Agriculture Feeders within the jurisdiction of UGVCL.

### ANNEXURE - 13

(To be submitted in online mode)
(UNDERTAKING IN REGARD TO QUOTED PRICE)

(All bidders will have to furnish the following undertaking duly filled in, for all the quoted item/s of the tender along with online Technical)

We accept and undertake that UGVCL is authorized to place LOA/Purchase Order at lower 'unit ex- works price with GST on ex-works price' than the 'unit ex-works price with GST on ex-works price' quoted/offered by us in the present tender of UGVCL for tendered item/(s) with similar specifications as per the above tender of UGVCL, which is quoted/offered to other subsidiary company of GUVNL, during the period of past 30 days from last date of submission of this tender to next 30 days after the last date of submission of bid of this tender by UGVCL.

We also understand that LOA /Purchase Order placed by one Subsidiaries of GUVNL on the basis of above undertaking shall not be considered as 'offered' price for the tender items in subsequent tender by other Subsidiaries of GUVNL, If it is not within period mentioned above.

✓	I/We accepts above undertaking.

Check box: To be confirmed by the bidder in ONLINE mode. If not checked, the supplier will not able to submit his bid online mode. The system shall give pop up message to supplier that in the event of non-checking of above box, he will not able to submit his bid.

NOTE:

BIDDERS MUST MENTIONED / PROVIDE TEXT / WORDS OF "CONFIRMED / NOT CONFIRMED" IN BOX OF PART [A] and "ACCEPTED / NOT ACCEPTED" IN BOX OF PART [C] OF ABOVE ANNEXURE -13 IN ONLINE MODE. THE WORDS OTHER THAN ABOVE SHOULD NOT BE ALLOWED / CONSIDERED OTHERWISE THE BID MAY BE REJECTED WITHOUT GOING IN TO FURTHER CORRESPONDANCE WITH BIDDER.

Sign & Round Seal of the EOI applicant	Date and place	(Page <b>74</b> of <b>125)</b>

Expression of Interest (EoI) for Empanelment of Agencies for Design, Supply, Installation, Testing, Commissioning and Comprehensive Maintenance for 7 years of Distributed Grid-connected Solar PV plants of Capacity above 5 kW (AC) to 100 kW (AC) for providing of Solar PV System to Agricultural Consumers on various Agriculture Feeders within the jurisdiction of UGVCL.

## **ANNEXURE-14**

# DETAILS OF THE FIRM (TO BE SUBMITTED / FILLED IN ONLINE / e-EOI DOCUMENT FORMAT ONLY)

## **GENERAL INFORMATION ABOUT THE EOI APPLICANT& their OEMs**

Supplier / EOI applicant Category	Manufacturer/Authorized dealer/distributor/Trader/Agent
EOI applicant / Supplier Name	
Manufacturers' Name	
Manufacturing Works/factory at	
Works Within Gujarat / Outside Gujarat	
Pvt. Firm / Public Ltd. / State Govt. Under	
taking / Central Govt. undertaking	
GST Registration number and Date of EOI applicant	
PAN no	
PF NO	
Excise Licence No. and issue date and	
valid up to (in case of mfg.)	
Udyam Registration No. and Date	
(in case of mfg.)	
NSIC/DGS&D/CSPO Certificate No.	
(Should be revalidated since last 3 yrs.)	
NSIC/ DGS&D/CSPO Certificate Date.	
Whether under NSIC/ DGS&D/CSPO scheme. If Yes then Monetary limit.	Rs.
ISO Certification Details	
Name of ISO Certification Agency	
Validity Period of ISO Certification	From Date to Date
Manufacturing facilities	
(a list of machinery be attached	
Name and address of the	
Indian/Foreign collaborator(s) if any.	
Details of Technical Staff available.	
(Please furnish information as per	
Enclosed Annexure 4)	

Sign & Round Seal of the EOI applicant	Date and place	(Page <b>75</b> of <b>125)</b>

	kmen on muster roll illed / unskilled (attach			
copy of muster ro				
last 3 years and p (With Annual Acc	etworthof company for profit for each year. counts). tified by C.A. firm.	YearRs YearRs Year Rs		
Has any Govt. De				
Address of	Registered Office of EOI applicant	Factory / Works of mfg.	Authorized Signatory	Representative/
Contact person				
name				
Designation				
Address				
City & Pin code				
State				
Country				
Phone				
Nos.(Office)				
Phone				
Nos.(Residence)				
Fax Nos.				
STD Code.				
Mobile No.				
Web site				
address				
Email-id				
Specimen signature				

Sign & Round Seal of the EOI applicant	Date and place	(Page <b>76</b> of <b>125)</b>

Commissioning and Comprehensive Maintenance for 7 years of Distributed Grid-connected Solar PV plants of Capacity above 5 kW (AC) to 100 kW (AC) for providing of Solar PV System to Agricultural Consumers on various Agriculture Feeders within the jurisdiction of UGVCL.

Expression of Interest (EoI) for Empanelment of Agencies for Design, Supply, Installation, Testing,

DETA	DETAILS OF PARTNERS / DIRECTORS OF FIRM / COMPANY			
Sr. No.:	Name of Partners / Directors DIN no. as applicable	e- mail ID	Address of Office & Contact Phone / Fax No. / Mobile No.	Address of Residence & Contact Phone / Fax No./ Mobile No.
1				
2				
3				
4				
5				
6				

Sign & Round Seal of the EOI applicant	Date and place	(Page <b>77</b> of <b>125)</b>

Expression of Interest (EoI) for Empanelment of Agencies for Design, Supply, Installation, Testing, Commissioning and Comprehensive Maintenance for 7 years of Distributed Grid-connected Solar PV plants of Capacity above 5 kW (AC) to 100 kW (AC) for providing of Solar PV System to Agricultural Consumers on various Agriculture Feeders within the jurisdiction of UGVCL.

#### **ANNEXURE-15**

## **Declaration for Compliance with the Code of integrity and No Conflict of interest**

(OnLetterheadofBiddergivingsaiddeclaration)

To

The Chief Engineer(P&P),
Uttar Gujarat Vij Company Ltd.,
Regd. & Corporate Office,
Regd. & Corporate Office, Visnagar road,
MEHSANA-384001, GUJARAT-INDIA

Sub: Bid for Empanelment of Agencies for Design, Supply, Installation, Testing, Commissioning and Comprehensive Maintenance for 7 years of Distributed Grid-connected Solar PV plants of Capacity above 5 kW (AC) to 100 kW (AC) for providing of Solar PV System to Agricultural Consumers on various Agriculture Feeders within the jurisdiction of UGVCL

#### **Ref:EOINO:**

We hereby declare that, we are in complete compliance of clause of Conflict of interest as per EOI Document.

(Signature & Seal of Authorized Signatory for which POA attached)NameofAuthorizedSignatory:

Sign & Round Seal of the EOI applicant	Date and place	(Page <b>78</b> of <b>125)</b>

Expression of Interest (EoI) for Empanelment of Agencies for Design, Supply, Installation, Testing, Commissioning and Comprehensive Maintenance for 7 years of Distributed Grid-connected Solar PV plants of Capacity above 5 kW (AC) to 100 kW (AC) for providing of Solar PV System to Agricultural Consumers on various Agriculture Feeders within the jurisdiction of UGVCL.

## **APPENDIX-1** (Format for Guarantee Card)

## FORMAT FOR GUARANTEE CARD TO BE SUPPLIED WITH EACH GRID CONNECTED SOLAR PV SYSTEM

- 1. Name & Address of the supplier of the System:
- 2. Name & Address of Purchasing Agency:
- 3. Date of supply of the system:
- 4. Details of PV Module (s) supplied in the System Make (Name of the EOI applicant):

Model Serial No(s)

Wattage of the PV Module (s) under STC Guarantee valid up to

5. Details of Electronics & other BOS items:

System Make (Name of the EOI applicant) Model Serial No(s) Guarantee valid up to

7. Designation & Address of the person to be Contacted for claiming Guarantee obligations

(Signature)
Name & Designation
Name & Address of the Agency
(SEAL)

Place & Date:

(During the guarantee period **UGVCL** reserves the right to cross check the performance of the systems with the minimum performance levels specified in the EOI Document specifications).

Sign & Round Seal of the EOI applicant	Date and place	(Page <b>79</b> of <b>125)</b>

Expression of Interest (EoI) for Empanelment of Agencies for Design, Supply, Installation, Testing, Commissioning and Comprehensive Maintenance for 7 years of Distributed Grid-connected Solar PV plants of Capacity above 5 kW (AC) to 100 kW (AC) for providing of Solar PV System to Agricultural Consumers on various Agriculture Feeders within the jurisdiction of UGVCL.

## **APPENDIX-2**

## **QUARTERLY MAINTENANCE & SERVICING REPORT**

- 1. DETAILS OF SOLAR PHOTOVOLTAIC SYSTEM INSTALLED
  - Supplied by :
     Date of installation :
  - 3. Servicing period : From to
- 2. USER PROFILE
  - 1. Name and address of User:
- 3. TECHNICAL DETAILS
  - 1. Module Capacity, make and serial numbers:
  - 2. Inverter Cpacity, make and serial no.
- 4. CHECK OF THE PRODUCT
  - 1. Correct inclination and orientation of SPV panel
  - 2. Cleaning of dust from SPV panel :
  - 3. Interconnection of modules, charge controller etc.:
  - 4. Fuse of charge controller:
  - 5. Working of inverter
- 5. DIFFICULTIES IN OPERATION/ PROBLEM FACED BY USER:
- 6. DIAGNOSIS DETAILS/ REPAIR ACTION:
- 7. DATE ON WHICH SYSTEM WAS LAST ATTENDED:
- 8. IT IS MANDATORY TO SUBMIT INSTALLATION WISE QUARTERLY ENERGY GENERATION DATA TO RESPECTIVE UGVCL OFFICE.
- 9. REMARKS:

User Name & Signature Technician's Name & Signature Date: (with rubber stamp)

Sign & Round Seal of the EOI applicant	Date and place	(Page <b>80</b> of <b>125)</b>

Expression of Interest (EoI) for Empanelment of Agencies for Design, Supply, Installation, Testing, Commissioning and Comprehensive Maintenance for 7 years of Distributed Grid-connected Solar PV plants of Capacity above 5 kW (AC) to 100 kW (AC) for providing of Solar PV System to Agricultural Consumers on various Agriculture Feeders within the jurisdiction of UGVCL.

## **APPENDIX-3**

Projectcompletion Reportfor individual Grid connected Solar PV plant

## **Proforma-A(bytheinstaller)**

Sr. No.	Component	Observation
1	Sanction No & Date	
2	Category: Nodal Agency / Channel partner NameandCompleteAddress:	
2.1	IncaseofNodal Agency, NameandCompleteAddressofinstaller:	
3	Site /Location Longitude/Latitude Type (Bore well/ openwelletc.)	
4	Solar PVArray Capacity:	
4.1	MakeofModules Whether importedor indigenous?	
4.2	IEC certificate: Agency Dateofissue Validity (Enclose acopyofIECcertificate)	
4.3	Whether RFID tagis pastedor not? If so, tagisinsideoroutside. If not, the reason? TypeofRFID	
	Support Structures/	
5.1	Indigenous or imported	
5.2	Tracking System/ Fix (No tracking) Manual	
5.3	SeasonalTiltAngle adjustment provided or not?	

Sign & Round Seal of the EOI applicant	Date and place	(Page <b>81</b> of <b>125)</b>

Expression of Interest (EoI) for Empanelment of Agencies for Design, Supply, Installation, Testing, Commissioning and Comprehensive Maintenance for 7 years of Distributed Grid-connected Solar PV plants of Capacity above 5 kW (AC) to 100 kW (AC) for providing of Solar PV System to Agricultural Consumers on various Agriculture Feeders within the jurisdiction of UGVCL.

6	Grid-Tie inverter details	
6.1	Motor PumpsetCapacity (h. p.) (Beneficiary's)	
7	Electronics /controls	
7.1	MPPT provided or not? Ifyes, provide details	
7.2	Details ofInverter	
8	Monitoring Mechanism for the installed System	
8.1	Technical Person Trained to maintain the system Name oftheperson withMobileno.	
9	Dateof Commissioning (EnclosetestcertificateofSystem as per MNRErequirement)	
10	Copy of invoice and details of loan if taken from anybank	

## **Declaration**

It istocertifythatallthe components / sub systems and materials including junction boxes, cables, distribution boards, switches, circuit breakers used in the system areas per MNRE requirement.

(ChannelPartner /	SNA)Withseal
-------------------	--------------

Date: Place:

Sign & Round Seal of the EOI applicant	Date and place	(Page <b>82</b> of <b>125)</b>

Expression of Interest (EoI) for Empanelment of Agencies for Design, Supply, Installation, Testing, Commissioning and Comprehensive Maintenance for 7 years of Distributed Grid-connected Solar PV plants of Capacity above 5 kW (AC) to 100 kW (AC) for providing of Solar PV System to Agricultural Consumers on various Agriculture Feeders within the jurisdiction of UGVCL.

## Proforma -B (Bythe customer)

Sr.No.	Component	Observation
1	Name ofthecustomerwith photograph (enclose USER ID proof- Pan card / Aadhaarcard / Voter ID)	PHOTOGRAPH
	Location with GPS Lat&Long	
2	Capacity(kWp&HP)	
	Location	
3	Whether trainingwasprovided by installerfor operation and maintenance	
	Whether thefollowingdocuments were provided or not	
4	I-Vcurves ofallmodules	
	Inverter manual	
	Guaranteecardfor system	
5	Dateofhandingover ofthe system	
6	Cost breakup	Total projectcost: User Share: MNRE Share: Loan:

Itis tocertifythatallinformationgiven aboveis trueandcorrectto bestof myknowledge

(User signature andstamp)

D	ate:	
Р	ace:	

Sign & Round Seal of the EOI applicant	Date and place	(Page <b>83</b> of <b>125)</b>

Expression of Interest (EoI) for Empanelment of Agencies for Design, Supply, Installation, Testing, Commissioning and Comprehensive Maintenance for 7 years of Distributed Grid-connected Solar PV plants of Capacity above 5 kW (AC) to 100 kW (AC) for providing of Solar PV System to Agricultural Consumers on various Agriculture Feeders within the jurisdiction of UGVCL.

## <u>Proforma -C Inspection report(byinspecting approval)</u>

Sr.No.	Component	Observation
1	Site /LocationwithComplete Address	
2	Capacityofsystem Installed (kWp)	
	Whether thesystemwas installedinshadowfree areaor not? If notmention thedetails	
	Anyinter moduleshadingexistsor not	
3	Whether the modulescontains	
	informationaboutcompany name,serial	
	noandyear manufacturinginside	
	RIFD pasted inside oroutside	
	Electronics /controls	
4	Whether theinformationgivenin	
	part Ais same orfound any deviation	
6	Structures:- tracking / fix	
7	CablesMakeand size	
8	User FeedBack	
9	Any Specific problem	

- 1. Signature of Userwith Stampanddate
- 2. Channel partner signature withstampanddate
- 3. Signature of inspecting Officer and date

## **List ofenclosures:**

- 1. Copyof invoicebilled to user
- 2. List ofserialno. of modules installed in the system
- 3. Test certificates of the components

Sign & Round Seal of the EOI applicant	Date and place	(Page <b>84</b> of <b>125)</b>

Expression of Interest (EoI) for Empanelment of Agencies for Design, Supply, Installation, Testing, Commissioning and Comprehensive Maintenance for 7 years of Distributed Grid-connected Solar PV plants of Capacity above 5 kW (AC) to 100 kW (AC) for providing of Solar PV System to Agricultural Consumers on various Agriculture Feeders within the jurisdiction of UGVCL.

- 4. Statement of expenditure
- 5. OriginalColorphotographs

Signature of the EOI applicant

Seal of the Firm

Sign & Round Seal of the EOI applicant	Date and place	(Page <b>85</b> of <b>125)</b>

Expression of Interest (EoI) for Empanelment of Agencies for Design, Supply, Installation, Testing, Commissioning and Comprehensive Maintenance for 7 years of Distributed Grid-connected Solar PV plants of Capacity above 5 kW (AC) to 100 kW (AC) for providing of Solar PV System to Agricultural Consumers on various Agriculture Feeders within the jurisdiction of UGVCL.

## **APPENDIX-4**

## (On Non-judicial stamp paper of Rs.300/- duly notarized)

AGREEMENT		
THIS AGREEMENT made on this	lay of Two thousand	
BETWEEN		
	esented byed Officer (herein after called requires or admits shall inclu	d "The Supplier", de his legal heir,
(Name or and representatives) of the OTHER PART.	esented byd Officer (here in after called where the context so require	"The Purchaser / es or admits shall
WHEREAS, the Supplier willingly so No	r company for supply of **Ipplied by the Supplier** as spectance of EOI Documentdtdby the Purchase	cified and as per (AT) / Letter of er company at the
AND WHEREAS THE PURCHASER Comp Supplier for the supply for the only) * subject to the conditions herein mentions	ne total sum of Rs including / excluding taxes upo	(Rupees
Sign & Round Seal of the EOI applicant	Date and place	(Page <b>86</b> of <b>125)</b>

Expression of Interest (EoI) for Empanelment of Agencies for Design, Supply, Installation, Testing, Commissioning and Comprehensive Maintenance for 7 years of Distributed Grid-connected Solar PV plants of Capacity above 5 kW (AC) to 100 kW (AC) for providing of Solar PV System to Agricultural Consumers on various Agriculture Feeders within the jurisdiction of UGVCL.

**AND WHEREAS**, a list is made out in the "**SCHEDULE**" hereunder written and all of which said documents of the Schedule are deemed to form part of this agreement and included in the expression "the **Supply**" wherever herein used, upon the terms and subject to the conditions hereinafter mentioned.

## NOW THIS AGREEMENT WITNESSES AS UNDER AND IT IS HEREBY AGREED AND DECLARED THAT:-

(1)	The Supplier h	nas accepted the	Terms and	Conditions	set out in	n the E	OI
Docume	nt Notice No.	dtd	as we	ell as in the	form of A	cceptan	ce
of EOI D	Document (AT)	/ Letter of Acce	ptance (LOA	) No		dt	d.
	which will ho	ld good & valid d	uring the pe	riod of this A	greement		

- (2) The supplier shall do and perform for all supplies and things mentioned and described in this agreement or which are implied therein or therefrom respectively or are reasonably necessary for the in-time and in manner supplies as mentioned and subject to the general / commercial terms & conditions and stipulations contained in this agreement.
- (3) In consideration of the due provision, executions, completion of the Supply, as agreed to by the Supplier as aforesaid, the Purchaser company hereby agrees to pay all the sums of money as and when they become due and payable to the supplier under the provisions of the agreement and such payment to be made at such times and in such manner as provided in the agreement.
- (5) Upon breach by the Supplier of any of the conditions of this Agreement, the Purchaser Company may give a notice in writing to rescind, determine and put to an end to the A/T without prejudice to the right of the Purchaser company to claim damages for antecedent breaches thereof on the part of the Supplier and also to claim reasonable compensation / risk & cost purchase for the loss occasioned by the Purchaser Company due to failure of the Supplier to fulfill the Order as certified in writing by the Purchaser for which Certificate shall be conclusive evidence of the amount of such compensation payable by the Supplier to the Purchaser.

Sign & Round Seal of the EOI applicant	Date and place	(Page <b>87</b> of <b>125)</b>

Expression of Interest (EoI) for Empanelment of Agencies for Design, Supply, Installation, Testing, Commissioning and Comprehensive Maintenance for 7 years of Distributed Grid-connected Solar PV plants of Capacity above 5 kW (AC) to 100 kW (AC) for providing of Solar PV System to Agricultural Consumers on various Agriculture Feeders within the jurisdiction of UGVCL.

- (6) The Purchaser Company shall not be bound to take the whole or any part of the ordered quantity herein or therein mentioned in the LOA / AT and may cancel the contract at any time after giving **ONE MONTH'S NOTICE IN WRITING** without compensating the Supplier.
- (7) This Agreement shall remain in force till the expiry of satisfactory performance of the Supply during Guarantee period including for the quantity mentioned in the repeat order, if any as per the terms & conditions of the LOA / AT.
- (8) Any Notice in connection with the Supply including the Notice for termination may be given by the Purchaser or any Authorized Officer for the said purpose as per the Commercial Terms & Conditions of the LOA / AT.
- (9) If subject to the circumstances beyond control i.e. Force Majeure conditions, the Supplier fails to deliver the materials, the same shall be governed as per the EOI Documents.
- (10) The agreed value, extent of supply, delivery dates, specifications, and other relevant matters may be altered by mutual agreement as per the policy of the purchaser Company and if so altered shall not be deemed or construed to mean or apply to affect or alter other general / commercial terms & conditions of the agreement and the agreement so altered or revised shall be and shall always be deemed to have been adhered subject to and without prejudice to said stipulation.
- (11) The following is the Schedule forming part of this agreement as provided herein above:

Herein above.		
<b>SCHEDULE</b>		
List of documents:		
1.		

\_ .

2.

3.

4.

5.

In witness whereof the parties hereto have set their hands and seals this day, month and year first above written.

Place:

Date:

Sign & Round Seal of the EOI applicant	Date and place	(Page <b>88</b> of <b>125</b> )

	1.	Signed, Sealed and	delivered by :	
(Sign	nature <u>'</u>	with Name, Designati	on & official seal / stamp)	
(Comple	ete Nai		(Supplier) uthorized person of the Su of company)	upplier with Authority
n the p	resence	e of Name, full Addres	s & Signatures:	
	i)			
	ii)			
	2.	Signed, Sealed and	Delivered by :	
(Sign	nature	with Name, Designati	on & official seal / Stamp)	
oi aiiu	on ben	iait of	(Purchaser),	
Comple OOP of	ete Nar the Pui	nalf of me, Designation & Lo rchaser Company) e of Name, Full Addres	cation / Address of the au	thorized officer as per
Comple DOP of a	ete Nar the Pui	me, Designation & Lo rchaser Company)	cation / Address of the autorists & Signature:	thorized officer as per
Comple DOP of in the printing	ete Nar the Pui	me, Designation & Lorchaser Company) e of Name, Full Addres	cation / Address of the autorists & Signature:	thorized officer as per
Comple DOP of in the printing	ete Nar the Pui	me, Designation & Lorchaser Company) e of Name, Full Addres	cation / Address of the autorists & Signature:	thorized officer as per
Comple DOP of in the printing	ete Nar the Pui	me, Designation & Lorchaser Company) e of Name, Full Addres	cation / Address of the autorists & Signature:	thorized officer as per
Comple DOP of in the printing	ete Nar the Pui	me, Designation & Lorchaser Company) e of Name, Full Addres	cation / Address of the autorists & Signature:	thorized officer as per
Comple DOP of in the printing	ete Nar the Pui	me, Designation & Lorchaser Company) e of Name, Full Addres	cation / Address of the autorists & Signature:	thorized officer as per

Expression of Interest (EoI) for Empanelment of Agencies for Design, Supply, Installation, Testing, Commissioning and Comprehensive Maintenance for 7 years of Distributed Grid-connected Solar PV plants of Capacity above 5 kW (AC) to 100 kW (AC) for providing of Solar PV System to Agricultural Consumers on various Agriculture Feeders within the jurisdiction of UGVCL.

## **APPENDIX-5**

F.	Μ.	D.	BANK	GUAR	ANTFF	<b>FORMAT</b>
		<b>D</b> .		JUAIN	~!	

<b>FOR</b>	ΕΟΙ Γ	OCUMENT	NO · HGVCI	/SOLAR/SKV/FO	N/Ag Solarization	/2022-23/01 Dt
FUN	LUIL	JOCUIVILINI	INO UGVCL	/ 30 LAN/ 3N I / L	JI/ Mg. Julalizatiuli	/ ZUZZ-Z3/UI Dl

## (BANK GUARANTEE ON NON-JUDICIAL STAMP PAPER OF Rs. 300/-)

	,					
WHEREAS M/s	(name & ad	dress of the Firm)				
having their registered office at		(address of				
the firms Registered Office) (hereinafter called the 'EOI Documenter') wish to participa						
in the EOI Document No.						
for	of (Supply / Erect	tion / Supply &				
Erection Work) (Name of the	material / equipment ijarat Vij Company Ltd and V	/ Work) for				
Guarantee for (hereinafter called the "Be	eneficiary") Rs	(amount of EMD)				
valid till (mention here date						
months from the schedule date of openi	-					
submitted by the EOI Documente	er along with the EOI	Document. We,				
(name	e of the Bank and address of t	the Branch giving				
the Bank Guarantee) hav	ing our Registered	Office at				
	(address of Bank's Register	ed Office) hereby				
give this Bank Guarantee No						
unequivocally and unconditionally to pa						
Uttar Gujarat Vij Company Ltd or any O	fficer authorized by it in this bo	ehalf any amount				
not exceeding Rs (amo	ount of E.M.D.), (Rupees					
(in words) to the sa	id Uttar Gujarat Vij Company Lt	d on behalf of the				
EOI Documenter. We	(name of the	Bank) also agree				
that withdrawal of the EOI Document of	r part thereof by the EOI Docu	menter within its				
validity or Non-submission of Security De	eposit by the EOI Documenter v	within one month				
from the date EOI Document or a part th	ereof has been accepted by the	e Uttar Gujarat Vij				
Company Ltd would constitute a default	•					
Bank Guarantee is liable to be invoked as	nd encashed within its validity b	by the Beneficiary				
in case of any occurrence of a default of	n the part of the EOI Docume	nter and that the				
encashed amount is liable to be forfeited	by the Beneficiary. This agreen	nent shall be valid				
and binding on this Bank up to and incl	usive of	(mention here				
the date of validity of Guarantee) and shall not be terminable by notice or by Guarantor						
change in the constitution of the Bank of	or the firm of EOI Documenter	Or by any reason				
whatsoever and our liability hereunder shall not be impaired or discharged by any						
extension of time or variations or alterna	tions made, given, conceded w	ith or without our				
Sign & Round Seal of the EOI applicant	Date and place	(Page <b>90</b> of <b>125)</b>				

Consumers on various Agriculture Feeders within the jurisdiction of UGVCL.
knowledge or consent by or between the EOI Documenter and the UGVCL. "Notwithstanding anything contrary contained in any law for the time being in force or banking practice, this Guarantee shall not be assignable, transferable by the beneficiary (i.e. UGVCL). Notice or invocation by any person such as assignee, transferee or agent of beneficiary shall not be entertained by the Bank. Any invocation of the Guarantee can be made only by the beneficiary directly." NOTWITHSTANDING anything contained hereinbefore, our liability under this guarantee is restricted to Rs (Amt. of E.M.D.) (Rupees ) (in words). Our Guarantee shall remain in force till (Date of validity of the Guarantee). Unless demands or claims under this Bank Guarantee are made to us in writing on or before (Date of validity of the Guarantee) and the contraction of the Guarantee shall be forfeited and we shall be released and discharged from all liabilities there under:
Place: Date:
Please mention here Complete Postal Signature of the Bank's Address of the Bank with Branch Code, Telephone and Fax No.
SIGNATURE OF THE BANK'S AUTHORISED SIGNATORY WITH OFFICIAL ROUND SEAL.
Note: The Banks shall be from the nationalized Banks or any other banks, as notified by the Finance Department, Government of Gujarat (GoG) from time to time.

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Expression of Interest (EoI) for Empanelment of Agencies for Design, Supply, Installation, Testing, Commissioning and Comprehensive Maintenance for 7 years of Distributed Grid-connected Solar PV plants of Capacity above 5 kW (AC) to 100 kW (AC) for providing of Solar PV System to Agricultural Consumers on various Agriculture Feeders within the jurisdiction of UGVCL.

## **APPENDIX-6**

## ON STAMP PAPER OF RS. 300/- FORM OF BANKER'S UNDERTAKING

[For Performance Guarantee (SD) for seconditions of EOI Document]	supply period as per Commo	ercial Terms and
We, Bank ofunconditionally to pay immediately on Company Ltd /NAME OF UGVCL or any C	demand in writing from the Officer authorized by it in this boy Rs (in	<b>Uttar Gujarat Vij</b> ehalf any amount words) Rupees
<b>UGVCL</b> on behalf of M/s		
have entered into a contract for the supp	ly/works specified below:	
L.O.A. No	_dated	
and shall not be terming of the Bank or the firm of Empanelled whatsoever and our liability hereunder extension of time or variations or alterawithout our knowledge or consent, by contract.  "Notwithstanding anything contrary con	r shall not be impaired or di itions made, given conceded o or between parties to the sa	ny other reasons scharged by any r agreed, with or id within written
banking practice, this Guarantee shall no (i.e. GUVNL or Subsidiaries). Notice of transferee or agent of beneficiary shall no the Guarantee can be made only by the b	r invocation by any person sot be entertained by the Bank.	uch as assignee,
only). Our	ned herein before, our liab (Rupees _ guarantee shall remain y of the Guarantee). Unless de	in force until
under this Bank Guarantee are made to validity of the Guarantee), all rights of forfeited and we shall be released and dis	ous in writing on or before Beneficiary under this Bank G	<i>(Date of</i> uarantee shall be
Place:		
Sign & Round Seal of the EOI applicant	Date and place	(Page <b>92</b> of <b>125)</b>

Expression of Interest (EoI) for Empanelment of Agencies for Design, Supply, Installation, Testing, Commissioning and Comprehensive Maintenance for 7 years of Distributed Grid-connected Solar PV plants of Capacity above 5 kW (AC) to 100 kW (AC) for providing of Solar PV System to Agricultural Consumers on various Agriculture Feeders within the jurisdiction of UGVCL.

### Date:

Please Mention here Complete Postal	Signature of the
Address of the Bank with Branch Code,	Bank's Authorised Signatory
Telephone and Fax Nos.	with Official Round Seal.

Note: The Banks shall be from the nationalized Banks or any other banks, as notified by the Finance Department, Government of Gujarat (GoG) from time to time.

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Expression of Interest (EoI) for Empanelment of Agencies for Design, Supply, Installation, Testing, Commissioning and Comprehensive Maintenance for 7 years of Distributed Grid-connected Solar PV plants of Capacity above 5 kW (AC) to 100 kW (AC) for providing of Solar PV System to Agricultural Consumers on various Agriculture Feeders within the jurisdiction of UGVCL.

## **APPENDIX-7**

Tripartiate Agreement
in Gujarati Language
on Non-judicial Stamp paper of Rs.300/श्रिपक्षियक्षरार.
300-नानोन्ळयुडिस्यवस्टेभ्पपेपर

(This is the tripartite agreement by and amongst DISCOM, Empanelled agency and the each beneficiary separately, covering various terms and conditions drafted in Gujarati language.

(To be handover to the Empanelled agency with order of empanelment) (The cost of the stamp paper is to be borne by the empanelled agency)

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Expression of Interest (EoI) for Empanelment of Agencies for Design, Supply, Installation, Testing, Commissioning and Comprehensive Maintenance for 7 years of Distributed Grid-connected Solar PV plants of Capacity above 5 kW (AC) to 100 kW (AC) for providing of Solar PV System to Agricultural Consumers on various Agriculture Feeders within the jurisdiction of UGVCL.

## Scope of Work and Technical Specifications

#### 1. DEFINITIONS

- 1.1. "AC" shall mean alternating current;
- 1.2. "Bid" shall mean the application submitted by the Interested Agency in response to this "Expression of Interest (EoI) for Empanelment of Agencies for Design, Supply, Installation, Testing, Commissioning and Comprehensive Maintenance for 7 years of Distributed Grid-connected Solar PV Plants of Capacity above 5 kW (AC) to 100 kW (AC) for Solarization of existing 25 Nos. of Agriculture Feeders" with EoI No:UGVCL/SOLAR/SKY/EOI/Ag. Solarization /2022-23/01 Dt: 13/05/2022
- 1.3. "CEIG" shall mean Chief Electrical Inspector of Government.
- 1.4. "Contract" or "Contract Agreement" shall mean the contract signed between the DisComand the Empanelled Agency to execute the entire Scope of Work as given in this EoI;
- 1.5. "DC" shall mean direct current;
- 1.6. "DisCom" shall mean the relevant Distribution Company;
- 1.7. **"Empanelled Agency"** shall mean the company or individual whose Bid to perform the Contract as per this EoI has been accepted by the DisCom and is named as such the Contract Agreement, and includes the legal successors or permitted assigns of the Empanelled Agency;
- 1.8. "Expression of Interest" or "EoI" shall mean this "Expression of Interest (EoI) for Empanelment of Agencies for Design, Supply, Installation, Testing, Commissioning and Comprehensive Maintenance for 7 years of Distributed Grid-connected Solar PV Plants of Capacity above 5 kW (AC) to 100 kW (AC) for providing of solar PV system to Agricultural consumers on Agriculture Feeders" with EoI No. UGVCL/SOLAR/SKY/EOI/Ag. Solarization /2022-23/01 Dt: 13/05/2022.
- 1.9. "GEDA" shall mean Gujarat Energy Development Agency;
- 1.10. "GERC" shall mean Gujarat Electricity Regulatory Commission;
- 1.11. "GERMI" shall mean Gujarat Energy Research & Management Institute;
- 1.12. "Guaranteed CUF" shall be 18.6% calculated with respect to the AC capacity of the PV plant.
- 1.13. "GUVNL" shall mean Gujarat UrjaVikas Nigam Limited;

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Expression of Interest (EoI) for Empanelment of Agencies for Design, Supply, Installation, Testing, Commissioning and Comprehensive Maintenance for 7 years of Distributed Grid-connected Solar PV plants of Capacity above 5 kW (AC) to 100 kW (AC) for providing of Solar PV System to Agricultural Consumers on various Agriculture Feeders within the jurisdiction of UGVCL.

- 1.14. "HFL" shall mean high flood level;
- 1.15. "Interested Agency" or "Bidder" shall mean a Company or an Individual submitting the Bid. Any reference to the Interested Agency includes a Company or an Individual including its successors, executors and permitted assigns severally, as the context may require;
- 1.16. "IS" shall mean Indian standard;
- 1.17. "kW" shall mean kilowatts;
- 1.18. "MMS" shall mean module mounting structure;
- 1.19. "MNRE" shall mean Ministry of New & Renewable Energy, Government of India;
- 1.20. "MPPT" shall mean maximum power point tacking;
- 1.21. "MW" shall mean megawatts;
- 1.22. "PID" shall mean potential-induced degradation;
- 1.23. "PV" shall mean "photovoltaic";
- 1.24. "Scheme" shall mean scheme for solarization of Agriculture Consumers;
- 1.25. "STC" shall mean Standard Testing Condition for solar cells and PV modules with air mass AM1.5, irradiance 1000W/ m², and cell temperature of 25°C;
- 1.26. "THD" shall mean total harmonic distortion;
- 1.27. "TPI" shall mean third-party inspection;
- 1.28. "TPI Agency" shall mean the Third-Party Inspection Agency'
- 1.29. "W" shall mean Watts.

#### 2. SCOPE OF WORK

#### 2.1. Overall Scope

2.1.1. Bids are invited for turnkey design, supply, installation, testing, commissioning and comprehensive maintenance for 7 (seven) years of distributed grid-connected solar PV plants on the ground under the Scheme of providing of Solar PV System to Agriculture Consumers (the "Scheme").

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- 2.1.2. The Bidder shall be responsible for acquainting oneself with all terms and conditions of this EoI, site location(s) and conditions prior to quoting. In case of any safety or compliance issues foreseen the by Bidder, the same shall be immediately reported by the Bidder to the relevant DisCom.
- 2.1.3. The solar PV plants shall consist of PV modules, grid-tie inverters, module mounting structures (MMS), AC and DC junction boxes, cables, earthing, lightning protection, associated civil works, and accessories as described in this section.
- 2.1.4. The capacities of the solar PV plants shall range from above 5 kW (AC) to 100 kW (AC). The capacity of the PV plant shall be based on the existing contract load of the Agriculture Consumer as described in this section.
- 2.1.5. All components and works shall adhere to relevant Indian Standards, State and Central policies and regulations, and all statutory provisions under the Indian law.
- 2.1.6. The Empanelled Agency shall adhere to all Boundary Conditions described in this section including but not limited to outreach and handholding of Agriculture Consumers on the given feeder; integrating the Empanelled Agency's own Scope of Work with the supplier of the metering and communicating equipment; obtaining insurance on the PV system including metering set supplied and installed by third party; and so on.
- 2.1.7. The Empanelled Agency shall be entirely responsible for the execution of the Scope of Work in accordance to this Eolincluding but not limited to its specification, schedules, and annexure. The Empanelled Agency shall further provide guarantee and be responsible for the quality and workmanship of all materials and completed works, correct designs and drawings, correct delivery of material, erection, testing, commissioning and comprehensive maintenance
- 2.1.8. The Empanelled Agency shall be responsible for undertaking all applications and obtaining all approvals, permissions, etc. in order to successfully complete the Scope of Work. In cases where DisCom's certifications are required, the Empanelled Agency shall inform the relevant DisCom and provide the requisite formats for such certificates well in advance.
- 2.1.9. The Empanelled Agency shall provide a generation guarantee and maintain an active local office to rectify faults within the stipulated timeframe described in this section.
- 2.1.10. The Empanelled Agency shall adhere to best practices in terms of safety, quality and performance while undertaking the Scope of Work, and the same shall be included within the Empanelled Agency's contract price.

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Expression of Interest (EoI) for Empanelment of Agencies for Design, Supply, Installation, Testing, Commissioning and Comprehensive Maintenance for 7 years of Distributed Grid-connected Solar PV plants of Capacity above 5 kW (AC) to 100 kW (AC) for providing of Solar PV System to Agricultural Consumers on various Agriculture Feeders within the jurisdiction of UGVCL.

- 2.1.11. The Empanelled Agency shall repair at its own cost any damage caused to the DisCom's premises due to implementation of the Scope of Work.
- 2.1.12. Submission of brochures, technical specifications, designs, data sheets, etc. at the time of Bidding do not imply approval of the same. All such approvals shall be taken up separately at the time of project execution by the Empanelled Agency.
- 2.1.13. All final specifications, designs, drawings bill of material, quality assurance plan, etc. shall be inspected, vetted and approved by the Third Party Inspection Agency appointed by the DisComs.

### 2.2. Obligation towards Agriculture Consumers

- 2.2.1. It shall be the prime responsibility of the Empanelled Agency to manage all Agriculture Consumers connected to the Agriculture Feeder assigned to the Empanelled Agency.
- 2.2.2. The Empanelled Agency shall directly deal with the Agriculture Consumers on a regular basis to:
  - (a) Educate, create awareness and market the Scheme to the Agriculture Consumers,
  - (b) Facilitate the Agriculture Consumers in formation of a Cooperative Society as per the provision of the Scheme as well as other statutory provisions,
  - (c) Obtain all necessary approvals, permissions, etc. towards installation and commissioning of the PV system on behalf of the Agriculture Consumer,
  - (d) Obtain the necessary insurance on the PV system on behalf of the Agriculture Consumer to comply with loan guidelines,
  - (e) Coordinate successful operation and maintenance of the PV system.
- 2.2.3. The Empanelled Agency shall identify a suitable location for the installation of the PV system within the premises of the Agriculture Consumer. This location shall be identified in close coordination and agreement of the Agriculture Consumer in writing. The cable routing of the PV system shall also be mutually agreed upon by the Empanelled Agency and the Agriculture Consumer in writing. The Scope of Work includes AC cabling for a distance between the inverter and interconnection point of up to 30 meters.
- 2.2.4. In case the Agriculture Consumer demands or the Empanelled Agency offers any features or facilities in addition to this Scope of Work, the Empanelled Agency may undertake the same at a cost mutually agreed upon between the Empanelled Agency and the Agriculture Consumer. Such extra cost may or may not be eligible for any incentives under the Scheme, and the same shall be clarified prior to such agreement and its execution with the relevant DisCom in order to obtain such benefits under the Scheme.
- 2.2.5. The Empanelled Agency shall establish one functional local office per circle where they have installed the PV systems.

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Expression of Interest (EoI) for Empanelment of Agencies for Design, Supply, Installation, Testing, Commissioning and Comprehensive Maintenance for 7 years of Distributed Grid-connected Solar PV plants of Capacity above 5 kW (AC) to 100 kW (AC) for providing of Solar PV System to Agricultural Consumers on various Agriculture Feeders within the jurisdiction of UGVCL.

2.2.6. The Empanelled Agency shall provide prompt service to the Agriculture Consumer in times of fault of breakdown of the PV system. Any complaint received from the Agriculture Consumer/ Cooperative Society/ DisCom shall be rectified by the Empanelled Agency within 48 (forty eight) hours of such complaint. The Empanelled Agency shall be liable for loss of generation from the PV system arising from persisting fault beyond the 48-hour period and shall compensate the Agriculture Consumer at the rate of Rs. 7.00 +Applicable GSTper kWh of generation loss beyond the 48-hour period. The loss in generation shall be decided on an hourly-basis based on the performance of nearby generating solar plants or nearby weather station.

#### 2.3. Interfacing with Metering and Communication Solution Provider

- 2.3.1. The Empanelled Agency shall work in close coordination with the Metering and Communication Solution Provider assigned by the DisCom.
- 2.3.2. The Empanelled Agency shall install the hardware including but not limited to energy meters and communication gateway (data logger, modem and antenna) provided in an enclosure by the Metering and Communication Solution Provider.
- 2.3.3. The Empanelled Agency shall mount this hardware as per DisCom's standards, make appropriate connections to this hardware with respect to power cables and communication cables.
- 2.3.4. The Empanelled Agency shall connect all its inverters to the appropriate interconnection point within the hardware provided by the Metering and Communication Solution Provider via a shielded RS-485 communication cable. The Empanelled Agency shall ensure appropriate cable laying standards for both power cable(s) and RS-485 cable(s). The Empanelled Agency shall ensure avoidance of signal attenuation within the RS-485 cable and install repeaters if required.
- 2.3.5. The Empanelled Agency shall only utilize grid-tie inverters with Modbus communication capability via RS-485 serial port, and share the details of the protocol with the Metering and Communication Solution Provider. Further, the Empanelled Agency shall assist the Metering and Communication Solution Provider to ensure successful communication of the inverter data to the designated server by the DisCom.
- 2.3.6. The Empanelled Agency shall assist the Metering and Communication Solution Provider in case any hardware adjustments are required by the Metering and Communication Solution Provider or if any support is required during configuration of the inverter communication or commissioning of the metering and communication hardware.

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Expression of Interest (EoI) for Empanelment of Agencies for Design, Supply, Installation, Testing, Commissioning and Comprehensive Maintenance for 7 years of Distributed Grid-connected Solar PV plants of Capacity above 5 kW (AC) to 100 kW (AC) for providing of Solar PV System to Agricultural Consumers on various Agriculture Feeders within the jurisdiction of UGVCL.

#### 2.4. Insurance during Construction of PV system

- 2.4.1. During the construction period, i.e. before the commissioning of the PV system, all insurance-related expenses shall be borne by the Empanelled Agency. The goods supplied by the Empanelled Agency shall be fully insured against the loss or damage incidental to manufacture or acquisition, transportation, storage, delivery, theft, natural or other disaster, etc.
- 2.4.2. In case of any loss or damage or pilferage or theft or fire accident or combination of the said incidents under the coverage of insurance, the Empanelled Agency shall lodge the claim as per rules of insurance. Any FIR required to be lodged at the local Police Station shall be the responsibility of the Empanelled Agency.
- 2.4.3. The Empanelled Agency shall arrange to supply/ rectify/ recover the materials even if the claim is unsettled for timely completion of the Project. The final financial settlement with the insurance company shall be rested upon the Empanelled Agency.

#### 2.5. Insurance during Operation of PV system

- 2.5.1. Aftercommissioning of the PV system insurance on the PV system against theft and vandalism for a minimum period of 7 (seven) years shall be taken by GoG/UGVCL however, the empanelled agency shall be responsible for immediate replacement /rectification in case of theft, damage, fire and damage or loss due to natural calamities for seven year form the date of commissioning.
- 2.5.2. The insurance shall comply with terms and conditions of the loan obtained from the financial institution.
- 2.5.3. The metering and communication hardware supplied by the Metering and Communication Solution Provider shall also be covered under the insurance by the Empanelled Agency at the Empanelled Agency's cost.
- 2.5.4. The Empanelled Agency shall assist the Agriculture Consumer for insurance claims during the 7 (seven)-year comprehensive maintenance period.
- 2.5.5. At the end of the term of insurance undertaken byGoG/UGVCL, the Empanelled Agency shall provide all the necessary documents to the satisfaction of the Agriculture Consumer in order to enable the Agriculture Consumer to take up the insurance of the PV system.

#### 3. TECHNICAL SPECIFICATIONS

#### 3.1. PV System Capacity

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- 3.1.1. The AC and DC Capacity of the grid-connected PV system shall be based on the contract load of the Agriculture Consumer's pump connection. In case the Agriculture Consumer is applying addition/ alteration in contracted load prior to installation of the PV system, then the Empanelled Agency shall size the PV system based on the revised capacity of the connection as confirmed by the DisCom.
- 3.1.2. The AC and DC Capacity of the PV system shall be based on the pump connection capacity as follows:

Sr.	Conti	ract	Load	Minimum AC	Minimum DC
No.		/ la .a \		(Inverter) Capacity	
1		(hp)		(kW)	(kW @ STC)
1.	2.4	≤	3	5	5.5
2.	3.1	-	5	6	6.6
3.	5.1	-	7.5	9	9.9
4.	7.6	-	10	12	13.2
5.	10.1	-	12.5	15	16.5
6.	12.6	-	15	18	19.8
7.	15.1	-	16	18	19.8
8.	16.1	-	17.5	20	22
9.	17.6	-	20	25	27.5
10.	20.1	-	22.5	25	27.5
11.	22.6	-	25	30	33
12.	25.1	-	27.5	35	38.5
13.	27.6	-	30	35	38.5
14.	30.1	-	35	40	44
15.	35.1	-	40	50	55
16.	40.1	-	45	55	60.5
17.	45.1	-	50	60	66
18.	50.1	-	55	65	71.5
19.	55.1	-	60	70	77
20.	60.1	-	63	75	82.5
21.	63.1	-	65	75	82.5
22.	65.1	-	70	85	93.5
23.	70.1	-	75	90	99
24.	75.1	-	80	100	110
25.	80.1	-	85	100	110
26.	85.1	-	90	110	121
27.	90.1	-	95	110	121
28.	95.1	-	100	120	132
29.	100.1	-	100.1	120	132

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Expression of Interest (EoI) for Empanelment of Agencies for Design, Supply, Installation, Testing, Commissioning and Comprehensive Maintenance for 7 years of Distributed Grid-connected Solar PV plants of Capacity above 5 kW (AC) to 100 kW (AC) for providing of Solar PV System to Agricultural Consumers on various Agriculture Feeders within the jurisdiction of UGVCL.

30.	100.2	-	105	130	143
31.	105.1	-	110	130	143
32.	110.1	-	115	140	154
33.	115.1	-	120	140	154
34.	120.1	-	125	150	165

- 3.1.3. In case the Agriculture Consumer demands or the Empanelled Agency offers additional capacity of the PV system compared to the capacity defined above, the Empanelled Agency may undertake the same provided:
  - (a) The cost of such scope shall additional and mutually agreed upon between the Empanelled Agency and the Agriculture Consumer. Such extra cost may or may not be eligible for any incentives under the Scheme, and the same shall be clarified prior to such agreement and its execution with the relevant DisCom in order to obtain such benefits under the Scheme.
  - (b) Any cost involved in augmentation of the existing distribution transformer or any component of the DisCom's distribution network shall be borne by the Empanelled Agency and/ or the Agriculture Consumer, and the DisCom shall not be liable to bear any such cost.
  - (c) Any such augmentation of the capacity of the PV system shall be upon the prior written approval of the DisCom.

#### 3.2. Applicable Standards

Sr. No.	Applicable Standard	Description
1.	Solar PV Modules	
(a)	IEC 61215/IS 14286	Design qualification and type of approval
		for crystalline silicon Terrestrials
		photovoltaic Modules
(b)	IEC 61853-1/ IS 16170-1	Photovoltaic (PV) module performance
		testing and energy rating-Irradiance and
		temperature performance measurements
		and power rating
(c)	IEC 61730-1,2	Photovoltaic (PV) Module safety
		Qualifications
(d)	IEC 62759-1	Photovoltaic (PV) modules -
		Transportation testing
(e)	IEC 61701	Salt Mist Corrosion Testing of
		Photovoltaic (PV) Modules

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Solar PV Grid-tie Inverters			
IEC 62109-1,2	Safety of power converters for use in photovoltaic power systems		
BS EN 50530:2010+A1:2013 /IEC	Overall efficiency of grid connected		
62891	photovoltaic inverters		
IEC 61683	Photovoltaic Systems – Power		
	conditioners: Procedure for Measuring		
	Efficiency (10%, 25%, 50%, 75% & 90-100%		
	Loading Conditions)		
IEC 62116/UL 1741/IEEE 1547	Utility-interconnected photovoltaic		
	inverters - Test procedure of islanding		
	prevention measures		
VDE V 0126-1-1	Automatic disconnection device between		
	a generator and the public low-voltage		
	grid		
IEC 60255-27:2013	Measuring relays and protection		
	equipment - Part 27: Product safety		
	requirements		
IEC 60068-2(1,2,14,27,30,64)	Environmental testing of PV system –		
	Power Conditioners and inverters		
IEC 62093	Balance-of-system components for		
	photovoltaic systems - Design qualification		
	photovoltaic systems - Design qualification natural environments		
Fuses and switches			
Fuses and switches IS/IEC 60947(1,2,3),EN 50521			
	natural environments		
	General Requirements for connectors, switches, circuit breakers(AC/DC) Supplementary requirements for fuse-links		
IS/IEC 60947(1,2,3),EN 50521	General Requirements for connectors, switches, circuit breakers(AC/DC)		
IS/IEC 60947(1,2,3),EN 50521 IEC 60269-6	General Requirements for connectors, switches, circuit breakers(AC/DC) Supplementary requirements for fuse-links		
IS/IEC 60947(1,2,3),EN 50521 IEC 60269-6 Cables	General Requirements for connectors, switches, circuit breakers(AC/DC) Supplementary requirements for fuse-links for the protection of solar photovoltaic energy systems		
IS/IEC 60947(1,2,3),EN 50521  IEC 60269-6  Cables  IEC 60227/IS694, IEC 60502/IS	General Requirements for connectors, switches, circuit breakers(AC/DC) Supplementary requirements for fuse-links for the protection of solar photovoltaic energy systems  General Test and measuring method for		
IS/IEC 60947(1,2,3),EN 50521  IEC 60269-6  Cables  IEC 60227/IS694, IEC 60502/IS 1554 (1,2)	General Requirements for connectors, switches, circuit breakers(AC/DC) Supplementary requirements for fuse-links for the protection of solar photovoltaic energy systems  General Test and measuring method for PVC insulated cables		
IS/IEC 60947(1,2,3),EN 50521  IEC 60269-6  Cables  IEC 60227/IS694, IEC 60502/IS	General Requirements for connectors, switches, circuit breakers(AC/DC) Supplementary requirements for fuse-links for the protection of solar photovoltaic energy systems  General Test and measuring method for PVC insulated cables Cross linked polyethylene insulated PVC		
IS/IEC 60947(1,2,3),EN 50521  IEC 60269-6  Cables  IEC 60227/IS694, IEC 60502/IS 1554 (1,2) IS 7098-1	General Requirements for connectors, switches, circuit breakers(AC/DC) Supplementary requirements for fuse-links for the protection of solar photovoltaic energy systems  General Test and measuring method for PVC insulated cables Cross linked polyethylene insulated PVC sheathed cables up to 1000 V		
IS/IEC 60947(1,2,3),EN 50521  IEC 60269-6  Cables  IEC 60227/IS694, IEC 60502/IS 1554 (1,2)	General Requirements for connectors, switches, circuit breakers(AC/DC) Supplementary requirements for fuse-links for the protection of solar photovoltaic energy systems  General Test and measuring method for PVC insulated cables Cross linked polyethylene insulated PVC sheathed cables up to 1000 V  Electric cables for photovoltaic systems,		
IS/IEC 60947(1,2,3),EN 50521  IEC 60269-6  Cables  IEC 60227/IS694, IEC 60502/IS 1554 (1,2) IS 7098-1  BS EN 50618	General Requirements for connectors, switches, circuit breakers(AC/DC) Supplementary requirements for fuse-links for the protection of solar photovoltaic energy systems  General Test and measuring method for PVC insulated cables Cross linked polyethylene insulated PVC sheathed cables up to 1000 V		
IS/IEC 60947(1,2,3),EN 50521  IEC 60269-6  Cables  IEC 60227/IS694, IEC 60502/IS 1554 (1,2) IS 7098-1  BS EN 50618  Surge Arrestors	General Requirements for connectors, switches, circuit breakers(AC/DC) Supplementary requirements for fuse-links for the protection of solar photovoltaic energy systems  General Test and measuring method for PVC insulated cables Cross linked polyethylene insulated PVC sheathed cables up to 1000 V  Electric cables for photovoltaic systems, mainly for DC cables		
IS/IEC 60947(1,2,3),EN 50521  IEC 60269-6  Cables  IEC 60227/IS694, IEC 60502/IS 1554 (1,2) IS 7098-1  BS EN 50618	General Requirements for connectors, switches, circuit breakers(AC/DC) Supplementary requirements for fuse-links for the protection of solar photovoltaic energy systems  General Test and measuring method for PVC insulated cables Cross linked polyethylene insulated PVC sheathed cables up to 1000 V  Electric cables for photovoltaic systems, mainly for DC cables  Low voltage surge protection devices-		
IS/IEC 60947(1,2,3),EN 50521  IEC 60269-6  Cables  IEC 60227/IS694, IEC 60502/IS 1554 (1,2) IS 7098-1  BS EN 50618  Surge Arrestors IEC 61643-11/IS 15086-5	General Requirements for connectors, switches, circuit breakers(AC/DC) Supplementary requirements for fuse-links for the protection of solar photovoltaic energy systems  General Test and measuring method for PVC insulated cables Cross linked polyethylene insulated PVC sheathed cables up to 1000 V  Electric cables for photovoltaic systems, mainly for DC cables		
IS/IEC 60947(1,2,3),EN 50521  IEC 60269-6  Cables  IEC 60227/IS694, IEC 60502/IS 1554 (1,2) IS 7098-1  BS EN 50618  Surge Arrestors IEC 61643-11/IS 15086-5  Earthing/ Lightning	General Requirements for connectors, switches, circuit breakers(AC/DC) Supplementary requirements for fuse-links for the protection of solar photovoltaic energy systems  General Test and measuring method for PVC insulated cables Cross linked polyethylene insulated PVC sheathed cables up to 1000 V  Electric cables for photovoltaic systems, mainly for DC cables  Low voltage surge protection devices-requirements and test methods		
IS/IEC 60947(1,2,3),EN 50521  IEC 60269-6  Cables  IEC 60227/IS694, IEC 60502/IS 1554 (1,2) IS 7098-1  BS EN 50618  Surge Arrestors IEC 61643-11/IS 15086-5	General Requirements for connectors, switches, circuit breakers(AC/DC) Supplementary requirements for fuse-links for the protection of solar photovoltaic energy systems  General Test and measuring method for PVC insulated cables Cross linked polyethylene insulated PVC sheathed cables up to 1000 V  Electric cables for photovoltaic systems, mainly for DC cables  Low voltage surge protection devices-		
	62891 IEC 61683  IEC 62116/UL 1741/IEEE 1547  VDE V 0126-1-1  IEC 60255-27:2013  IEC 60068-2(1,2,14,27,30,64)		

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		Structures Against Lightning		
7.	Junction Boxes			
(a)	IEC 60529	Degrees of protection provided by enclosures		

- 3.2.1. Equipment meeting with the requirements of any other authorities standards, which ensures equal or better quality than the standard mentioned above as well as latest standard shall also be acceptable.
- 3.2.2. If the equipment offered by the Empanelled Agency conform to other standards, salient points of difference between the standards adopted and the specific standards shall be clearly brought out in relevant schedule. In case of any difference between provisions of these standards and provisions of this specification, the provisions contained in this specification shall prevail. One hard copy of such standards with authentic English Translations shall be furnished for consideration of such approvals.

#### 3.3. PV Modules

- 3.3.1. The Bidder shall employ solar PV module of mono/ poly-crystalline silicon solar technology only. The Bidder shall provide detail Technical Data Sheets, Certifications of Standard Testing Conditions (STC: defined as Standard Testing Condition with air mass AM1.5, irradiance 1000 W/ m², and cell temperature 25°C) as per the latest edition of IEC 61215 and IS 14286 and IEC 61730 and as tested by MNRE/ IEC-recognized test laboratory.
- 3.3.2. The PV modules to be employed shall be indigenously manufactured and shall fulfil MNRE's criteria of domestic content requirement to avail its capital subsidy. The manufacturer of the PV module shall have supplied net PV modules of a capacity more than 1 MW in other projects.
- 3.3.3. All components used for installation of solar plants shall conformtoapplicableBIS/MNRE specificationsandfollowqualitycontrolguidelinesissued byMNRE and ALMM order with its amendments issued by MNRE time to time.
- 3.3.4. PV modules shall consist of 72 numbers of solar cells, each with a dimension of 156 mm x 156 mm. PV modules with 72 cell configuration shall have a minimum capacity of 300 W at STC.

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- 3.3.5. The rated power of solar PV module shall have maximum tolerance up to +3%. No negative tolerance in the rated capacity of solar PV module is allowed.
- 3.3.6. All PV modules shall be certified IEC 61215 2nd Ed. (Design qualification and type approval for Crystalline Si modules), IEC 61730 (PV module safety qualification testing @ 1000 V DC or higher).
- 3.3.7. Minimum certified PV module efficiency shall be 15% for crystalline. The temperature coefficient power of the PV module shall not be less than -0.50% / °C.
- 3.3.8. All PV modules should carry a performance warranty of >90% during the first 10 years, and >80% during the next 15 years. Further, module shall have performance warranty of >97% during the first year of installation. Degradation of module should not be more than 0.7% per annum.
- 3.3.9. All PV modules shall be PID-free, and documents for the same shall be submitted with conditions of the PID test for a humidity of 85 % and a cell temperature of 850 C at 1000VDC.
- 3.3.10. The warranty on the workmanship of the PV modules including its electrical connections and mechanical construction shall be at least for 7 (seven) years.
- 3.3.11. The mismatch losses for PV modules connected to an inverter shall be less than 1%.
- 3.3.12. PV module shall have module safety class-II and should be highly reliable, light weight and must have a service life of more than 25 years.
- 3.3.13. The PV modules shall be equipped with IP67 or higher protection level junction box with a minimum of 3 (three) numbers of bypass diodes of appropriate rating and appropriately sized output power cable of symmetric length with MC4 or equivalent solar connectors.
- 3.3.14. The SPV module shall be made up of high transmissivity glass and front surface shall give high encapsulation gain and the module shall consists of impact resistance, low iron and high transmission toughened glass. The module frame shall be made of corrosion resistant anodised aluminium, which shall be electrically compatible with the structural material used for mounting the modules.
- 3.3.15. The PV modules shall have suitable encapsulation and sealing arrangements to protect the silicon cells from environment. The encapsulation arrangement shall ensure complete moisture proofing for the entire life of PV modules.

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- 3.3.16. The PV module frame shall be made of aluminium or corrosion resistant material, which shall be electrolytically compatible with the structural material used for mounting the PV modules.
- 3.3.17. All materials used for manufacturing solar PV module shall have a proven history of reliability and stable operation in external applications. It shall perform satisfactorily in temperature between -40°C to +85°C and shall withstand adverse climatic conditions, such as high speed wind, blow with dust, sand particles, saline climatic/ soil conditions.
- 3.3.18. Modules only with the same rating and manufacturer shall be connected to any single inverter.
- 3.3.19. The Bidder shall provide in the Bid power performance test data sheets of all modules.

  The exact power of the module shall be indicated if the data sheet consists of a range of modules with varying output power.
- 3.3.20. DisCom/ GUVNL or the TPI Agency reserves the right to inspect the PV modules at the manufacturer's site prior to dispatch.
- 3.3.21. The Bidder would be required to maintain accessibility to the list of module IDs/ serial numbers along with the parametric data for each module.
- 3.3.22. RF Identification tag for each solar module shall be provided inside the module and must be able to withstand environmental conditions and last the lifetime of the solar module.

#### 3.4. Grid-tie Inverter

- 3.4.1. Make of only those Grid-tie Inverters which are commissioned for more than 1 MW capacity in other solar PV projects in India and operational for more than 1 (year) shall be considered.
- 3.4.2. The Bidder shall provide sufficient information for the satisfaction of DisCom/ GUVNL prior placing the order for the inverters.
- 3.4.3. All inverters shall consist of associated control, protection and data logging devices and remote monitoring hardware, software for string level monitoring.
- 3.4.4. Capacity of single unit of inverter shall be at least 5 kW.
- 3.4.5. Inverter shall conform to the following details:

**Particulars** 

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**Details** 

PCU Mounting	As per the manufacturer's guidelines		
Nominal AC Output Voltage	415 VAC <u>+</u> 15%, 3 phase, 50 Hz		
Type of solar charge controller	MPPT-based Solar Charge Controller		
Switching Devices	MOSFET/ IGBT-based		
Maximum Input Voltage	Not more than 1000 VDC		
Output Waveform	Pure Sine wave		
DC voltage range, MPPT	As per design		
Peak Efficiency	At least 97%, measure as per IEC 61683		
Euro Efficiency	At least 96%, measure as per IEC 61683		
Output frequency	50 Hz +3% to - 5% Hz		
Power Factor	0.8 lag- 0.8 lead		
Maximum THD at rated power	<u>≤</u> 3 %		
Ambient dry bulb temperature range	0 to 50° deg C		
Humidity	15% to 95 % non- condensing		
Enclosure	At least IP21 for indoor installation,		
	At least IP65 for outdoor installation,		
	as per IEC-60068-2 (environmental)		
Protection rating	Classification of chemically active		
(as per IEC-60721-3-3)	substances: 3C2		
	Classification of chemically active		
	substances: 3S2		
Grid Specifications IEC 61727, VDE 0126			
Nominal Voltage & Frequency	415 Volts, 3-phase& 50 Hz		
Grid Voltage Tolerance	<u>+</u> 15% and -10%		
Communication protocol and	Modbus protocol over RS-485 interface		
interface			

- 3.4.6. The inverters shall comply with applicable IEC/ equivalent BIS standard for environmental tests as per standard codes IEC 60068- 2 (1,2,14,30)/ Equivalent BIS Standard.
- 3.4.7. All inverters shall be IEC 61000 compliant for electromagnetic compatibility, harmonics, etc.
- 3.4.8. All inverters shall be safety rated as per IEC 62109 (1 &2), EN 50178 or equivalent DIN or UL standard.
- 3.4.9. All inverters shall be compliant with IEEE standard 929-200 or equivalent. The Bidder shall select the inverter as per its own system design so as to optimize the power output.

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- 3.4.10. Display: The inverter shall have local LCD (Liquid crystal display) and keypad for monitoring instantaneous parameters, event logs and data logs. Display should be simple and self-explanatory, and should indicate:
  - (a) Instantaneous DC power input
  - (b) DC input voltage
  - (c) DC Current
  - (d) Instantaneous active AC power output
  - (e) Instantaneous reactive AC power output
  - (f) AC voltage (all the 3 phases and line)
  - (g) AC current (all the 3 phases and line)
  - (h) kWh Produced during entire day
  - (i) Total kWh produced during its life time
  - (j) PCU must be provided with display
- 3.4.11. DC input terminals must be in enough numbers so as each terminal is connected to dedicated single input from the PV string. Two DC inputs cannot be connected to a single input DC terminal of the inverter. If adequate number of inputs are not available in the selected inverter by the Bidder then a DC junction box should be incorporated into the design.
- 3.4.12. The inverter shall be tropicalized and design shall be compatible with conditions prevailing at site. Provision of exhaust fan with proper ducting for cooling of inverter's internal circuitry shall be incorporated in the inverter, keeping in mind the extreme climatic condition of the site.
- 3.4.13. The Empanelled Agency shall completely adhere to the installation guidelines of the inverter manufacturer including but not limited to protection from exposure to sun, rain and other weather condition.
- 3.4.14. Nuts and bolts and the PCU enclosure shall have to be adequately protected taking into consideration the atmosphere and weather prevailing in the area.
- 3.4.15. (Grid Connectivity) Relevant CERC/ GERC regulations and grid code as amended and revised from time to time shall be complied with.
- 3.4.16. All three phases shall be supervised with respect to rise/ fall in programmable threshold values of frequency.
- 3.4.17. The inverter output shall always follow the grid in terms of voltage and frequency. This shall be achieved by sensing the grid voltage and phase and feeding this information to the feedback loop of the inverter. Thus, control variable then should control the output

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voltage and frequency of the inverter, so that inverter is always synchronized with the grid.

- 3.4.18. The inverter shall be capable of synchronizing with the grid in less than 1 (one) minute.
- 3.4.19. The inverter shall automatically "wake up" in the morning and begin to export power provided there is sufficient solar energy and the grid voltage and frequency is in range.
- 3.4.20. Sleep Mode: Automatic sleep mode shall be provided so that unnecessary losses are minimized at night. The power conditioner must also automatically re-enter standby mode when threshold of standby mode reached.
- 3.4.21. Stand-by Mode: The control system shall continuously monitor the output of the solar power plant until pre-set value is exceeded & that value to be indicated.
- 3.4.22. Basic System Operation (Full Auto Mode): The control system shall continuously monitor the output of the solar power plant until pre-set value is exceeded and that value to be indicated.
- 3.4.23. The inverter shall include appropriate self-protective and self-diagnostic features to protect itself and the PV array from damage in the event of inverter component failure or from parameters beyond the inverter's safe operating range due to internal or external causes. The self-protective features shall not allow signals from the inverter front panel to cause the inverter to be operated in a manner which may be unsafe or damaging. Faults due to malfunctioning within the inverter, including commutation failure, shall be cleared by the inverter's protective devices. In addition, the inverter shall have following minimum protection against various possible faults:
  - (a) Ground fault monitoring
  - (b) Gird monitoring
  - (c) DC surge protection, Type II (if the inverter does not have integrated DC surge arrestors, then the surge arrestors shall be separately installed in the DC junction box on the positive and negative DC inputs)
  - (d) DC reverse polarity
  - (e) AC short-circuit capability
  - (f) Over-voltage and over-current
  - (g) Anti-islanding (as per IEEE 1547/UL 1741/ equivalent BIS standard)
  - (h) Balancing of unequal phases
  - (i) Negative earthing
  - (j) Manual DC isolator

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- 3.4.24. Reactive Power: The output power factor of the inverter shall be of suitable range to supply or sink reactive power. The inverter shall have internal protection arrangement against any sustained fault in the feeder line and against lightning in the feeder line.
- 3.4.25. Inverter shall meet the reactive Power requirement of the induction motor pump set installed in Agriculture connections.
- 3.4.26. DC inputs of the inverters shall have suitably rated isolators on both positive and negative DC inputs to allow safe start up and shut down of the system. Circuit breakers used in the DC lines must be rated suitably.
- 3.4.27. No load loss < 1% of rated power and maximum loss in sleep mode shall be less than 0.05%.
- 3.4.28. The inverter shall have the facility of unit wise and integrated data logging.
- 3.4.29. The inverter shall be entirely self-managing and stable in operation. A self-diagnostic system check should occur on start-up. Functions should include a test of key parameters on start up.
- 3.4.30. The inverters shall be tested from the MNRE approved test centres/ NABL/ BIS/ IEC-accredited testing/ calibration laboratories.
- 3.4.31. Maximum power point tracker (MPPT) shall be integrated in the inverter to maximize energy drawn from the Solar PV array. The MPPT shall be microprocessor-based to minimize power losses. The MPPT unit shall confirm to IEC 62093 for design qualification and efficiency of MPPT shall be greater than 99%.
- 3.4.32. Inverter shall be capable to convert the DC using its MPPT feature to produce AC power as per following:
  - (a) The AC output voltage and frequency of the inverter must synchronize automatically to the exact AC voltage and frequency of the grid. Grid voltage shall be continuously monitored and in the event of voltage dip or rise above a pre-set value, the solar system shall be disconnected from the grid within the set time.
  - (b) In the case of inverters connected on different phases in the plant shall be capable of communicating with other and in the event of the fault even on a single phase all the inverters must be disconnected from the grid.
  - (c) Inverters shall have adjustable voltage setting and time settings. The output power factor should be of suitable range to supply or sink reactive power.
- 3.4.33. The inverter shall have an RS-485 interface and support communication of its operational parameters and logs over Modbus protocol. The register mapping/ memory mapping of

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the inverter data shall be made available by the Empanelled Agency from the inverter supplier and the Empanelled Agency/ inverter supplier shall provide full support for integration of inverter's communication data with third-party software and hardware as directed by the DisCom/ GUVNL.

3.4.34. DisCom/ GUVNL or the TPI Agency reserves the right to inspect the inverters at the manufacturer's site prior to dispatch.

### 3.5. Module Mounting Structure

- 3.5.1. Supply, installation, erection and acceptance of module mounting structure (MMS) with all necessary accessories, auxiliaries and spare part shall be in the scope of the Empanelled Agency.
- 3.5.2. The PV modules shall be mounted on fixed metallic structures having adequate strength and appropriate design, which can withstand the load of the modules and high wind velocities as per the relevant wind zone and IS of the location of installation.
- 3.5.3. The MMS shall be designed and constructed such that it complies with the necessary mounting requirements of PV modules in order to maintain the PV module's warranty.
- 3.5.4. MMS and its foundation shall be designed considering life span of 25 years.
- 3.5.5. The lowest point of the Module shall be the higher of (i) highest flood-level (HFL) of the location of installation, and (ii) 900 mm from the ground.
- 3.5.6. Design of the MMS shall take into consideration site conditions, soil report, loading data, wind data and design standards as per latest applicable IS standard.
- 3.5.7. The structure shall be designed for simple mechanical and electrical installation. It shall support SPV modules at a given orientation and tilt, absorb and transfer the mechanical loads to the ground properly.
- 3.5.8. The Empanelled Agency shall be fully responsible for any damages caused by high wind velocity within guarantee period. The parameters of prevailing wind speed, soil conditions, load, and upward lift should be taken care of while preparing the design and the same is required to be mentioned on design.
- 3.5.9. MMS shall be made of hot dip Galvanized steel per ASTM A123. Minimum thickness of HDGI zinc coating should be 70 micron at any point when measured. No averaging is allowed in the measurement of coating thickness. Necessary testing provision for MMS to be made available by Bidder at site.

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- 3.5.10. All bolts, nuts, panel mounting clamps fasteners shall be of stainless steel of grade SS 304 and must sustain the adverse climatic conditions.
- 3.5.11. MMS shall be designed and positioned such that the PV modules are completely shadow-free solar during generation hours.
- 3.5.12. All solar panels shall be easily accessible for cleaning and person shall not be inclined to climb on the MMS or PV modules for cleaning the PV modules.
- 3.5.13. Junction boxes shall be mounted on the MMS such that they are easily accessible and are protected from direct sunlight and harsh weather.
- 3.5.14. Civil foundation design for MMS shall be made in accordance with the IS and prevailing soil conditions with the help of Chartered Structural Designer having substantial experience in similar work.
- 3.5.15. All the cables shall be aesthetically tied to module mounting structure.
- 3.5.16. Cutting, Welding, drilling etc. at site is not allowed for MMS. Bidder shall carry out all correction in structure (if required) at his works. If any cutting, welding, drilling is required to be done after material arrived at site then material shall be again sent for hot dip galvanisation. No zinc spray shall be allowed on the MMS.
- 3.5.17. Empanelled Agency shall submit the all the quality test documents and test certificates complying with the requirement of the structure.
- 3.5.18. Acceptable make of structural steel shall be: SAIL, TISCO, RINL, Jindal, ESSAR (Any other make of steel shall be acceptable only after prior written approval of the DisCom/ GUVNL which shall be based on quality and make of product).
- 3.5.19. Empanelled Agency shall submit detailed drawings of the MMS and its civil foundations, results of design computations and stability calculations for foundations, and structural fitness of PV module mounting structures as per STADD Pro analysis.
- 3.5.20. DisCom/ GUVNL or the TPI Agency reserves the right to inspect the MMS at the manufacturer's site prior to dispatch.

# 3.6. DC Junction Box

3.6.1. The Bidder shall provide sufficient numbers of array junction boxes/ PV combiner boxes/ DC distribution boxes to comply with design requirements of the PV system.

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- 3.6.2. All switch boards shall be provided with adequately rated bus-bar, incoming control, outgoing control etc. as a separate compartment inside the panel to meet the requirements of the Chief Electrical Inspector of Government (CEIG). All live terminals and busbars shall be shrouded. The outgoing terminals shall be suitable to receive suitable runs and size of cables required for the inverter/ transformer rating.
- 3.6.3. The degree of protection for junction boxes shall be:
  - (a) Indoor Junction box: IP 21(Minimum)
  - (b) Outdoor Junction Box: IP 65 (Minimum)
- 3.6.4. Junction boxes including the module junction box, string junction box, should be equipped with appropriate functionality, safety (including fuses, grounding, etc.), and protection (surge, etc.) if not provided on the DC-side of the inverter.
- 3.6.5. The terminals shall be connected to busbar arrangement of proper sizes to be provided. The junction boxes shall have suitable cable entry points fitted with cable glands of appropriate sizes for both incoming and outgoing cables. Suitable markings shall be provided on the busbars for easy identification and cable ferrules will be fitted at the cable termination points for identification.
- 3.6.6. For array junction box/ PV combiner box, Empanelled Agency may also provide polyamide glands and MC4 Connectors. The rating of the junction box shall be suitable with adequate safety factor to interconnect the Solar PV array.
- 3.6.7. The junction boxes shall be dust, vermin, and waterproof and made of thermoplastic/metallic in compliance with IEC 62208, which should be sunlight/ UV-resistive as well as fire retardant and Protection Class II or higher.
- 3.6.8. The current carrying rating of the Junction Boxes shall be rated with standard safety factor to interconnect the Solar PV array.
- 3.6.9. Suitable markings shall be provided on the bus-bars for easy identification and cable ferrules will be fitted at the cable termination points for identification.
- 3.6.10. Detailed junction box specifications, certifications and data sheet shall be provided by the Empanelled Agency for approval during project execution.
- 3.6.11. DisCom/ GUVNL or the TPI Agency reserves the right to inspect the junction box at the manufacturer's site prior to dispatch.

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3.6.12. It is recommended that the interim, the cables of 1000 Volts DC for outdoor installations should comply with the draft EN 50618 for service life expectancy of 25 years.

#### 3.7. AC Distribution Board

- 3.7.1. The inverter output shall have the necessary rated AC surge arrestors and MCB/ MCCB. MCB shall be used for currents up to 63 Amperes, and MCCB shall be used for currents greater than 63 Amperes. RCCB shall be used by the Agency if required for successful operation of the PV system.
- 3.7.2. AC Distribution Board (ACDB) shall house all the equipment described above.
- 3.7.3. All switches and the circuit breakers, connectors should conform to IEC 60947, part I, II and III.
- 3.7.4. All the 415 VAC devices/ equipment like bus support insulators, circuit breakers, SPDs, VTs etc., mounted inside the switchgear shall be suitable for continuous operation and satisfactory performance under the following supply conditions:

(a) Variation in supply voltage: +/- 15 %(b) Variation in supply frequency: +/- 3 Hz

#### 3.8. Cables and Wires

- 3.8.1. All cables and connectors for use for installation of solar field must be of solar grade which can withstand harsh environment conditions for 25 years and voltages as per latest IEC standards. (Note: IEC standards for DC cables for PV systems is under development, the cables of 1000 volts DC for outdoor installations should comply with the draft EN 50618 for service life expectancy of 25 years.)
- 3.8.2. Wires with sufficient ampacity and parameters shall be designed and used so that average voltage-drop at full power from the PV modules to inverter should not be more than 2% (including diode voltage drop). PV Modules should be connected with USE-2/RHW-2 cables array to junction box conductors and junction box to photovoltaic disconnector with the sunlight resistant insulation cable. Due consideration shall be made for the de-rating of the cables with respect to the laying pattern in buried trenches/ on cable trays, while sizing the cables. The Bidder shall provide voltage drop calculations in excel sheet during the design approvals.
- 3.8.3. All cables shall be supplied in the single largest length to restrict the straight-through joints to the minimum number. Only terminal cable joints shall be accepted. No cable joint to join two cable ends shall be accepted. All wires used on the LT side shall conform to IS and should be of appropriate voltage grade. Only copper conductor wires of reputed

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make shall be used for DC connections, while copper or aluminium conductor wires may be us used for AC connections.

- 3.8.4. All cables should be XLPE insulated grade conforming to IS 7098-I.
- 3.8.5. Irrespective of utilization voltage and current rating all type of power cables shall be minimum of 1100 V grade XLPE/ PVC insulated conforming to IS 7098/ 1554/ IS 694. For working voltage less than, 150 V control cable shall be of minimum 500 V grade. All LT XLPE cables shall confirm to IS: 7098 Part I.
- 3.8.6. Cable routing/ marking: All cable/ wires are to be suitably tagged and marked with proper manner by good quality ferule or by other means so that the cable easily identified.
- 3.8.7. The cables shall be adequately insulated for the voltage required and shall be suitably colour coded for the required service. Bending radius for cables shall be as per manufacturer's recommendations and IS: 1255.
- 3.8.8. All the cables required for the installation provided by the Empanelled Agency. All cable schedules/ layout drawings shall be submitted by the Empanelled Agency for approval of the DisCom/ GUVNL or TPI Agency prior to installation.
- 3.8.9. Multi-strand, annealed high conductivity copper conductor PVC type 'A' pressure extruded insulation or XLPE insulation. Overall PVC/ XLPE insulation for UV protection Armoured cable shall be used for underground laying. All cable trays including covers to be provided. All cables conform to latest edition of IEC/ equivalent BIS Standards as specified below: BoS item / component Standard Description Standard Number Cables General Test and Measuring Methods, PVC/XLPE insulated cables for working Voltage up to and including 1100 V ,UV resistant for outdoor installation IS/ IEC 69947.
- 3.8.10. Technical Specification Of LT XLPE Cables: General Constructional Features
  - (a) The medium voltage cables shall be supplied, laid, connected, tested and commissioned in accordance with the drawings, specifications, relevant Indian Standards specifications, manufacturer's instructions. The cables shall be delivered at site in original drums with manufacturer's name, size, and type, clearly written on the drums.
  - (b) Material: Medium voltage cable shall be XLPE insulated. PVC sheathed, aluminium or copper conductor, armoured conforming to IS: 7098 Part I.

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- (c) Conductor: Uncoated, annealed copper, of high conductivity up to 4 mm<sup>2</sup> size, the conductor shall be solid and above 4 mm<sup>2</sup>, conductors shall be concentrically stranded as per IEC:228.
- (d) Insulation: XLPE rated 70° c. extruded insulation.

(e) Core Identification:

Two core : Red and Black

Three core : Red, Yellow and Blue

Four core : Red, Yellow, Blue and Black

Single core : Green cable with Yellow strips for earthing

Black shall always be used for neutral. Solar DC cable shall be black with red strip

for positive and black for negative in colour.

- 3.8.11. Armour: All cables laid underground shall be armoured. And laid in ground at a minimum depth of 1.5 meter. Armour shall be of galvanised steel flat strip/ round wires applied helically in single layers complete with covering the assembly of cores.
  - (a) For cable size up to 25 Sq. mm. Armour of 1.4 mm dia G.I. round wire
  - (b) For cable size above 25 Sq. mm. Armour of 4 mm wide 0.8 mm thick G.I strip

The Agency has to use the armour consist of galvanized round steel wires where the calculated diameter below the armouring is less than 13 mm. Agency may use either galvanized round wire

- 3.8.12. Sheath: The cable shall be rated extruded for XLPE 90°C. Inner sheath shall be extruded type and shall be compatible with the insulation provided for the cables. Outer sheath shall be of an extruded type layer of suitable PVC material compatible with the specified ambient temp 50°C and operating temperature of cables. The sheath shall be resistant to water, ultraviolet radiation, fungus, termite and rodent attacks. The colour of outer sheath shall be black. Sequential length marking required at every 1.0 meter interval on outer sheath shall be available. The Empanelled Agency shall furnish resistance/ reactance/ capacitances of the cable in the technical datasheet. Packing and marking shall be as per Clause No. 18 of IS 7098 (part I)/ 1988 amended up to date.
- 3.8.13. Cable terminations shall be made with suitable cable lugs and sockets, crimped properly and passed through brass compression type cable glands at the entry and exit point of the cubicles.
- 3.8.14. All cable/ wires shall be provided with Punched Aluminium tags only. The marking on tags shall be done with good quality letter and number ferrules of proper sizes so that the cables can be identified easily.

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- 3.8.15. The DC cables from the PV module array shall run through a UV-stabilized PVC conduit pipe of adequate diameter with a minimum wall thickness of 1.5mm.
- 3.8.16. The wiring for modules interconnection shall be in the GI/ HDPE/ DWC Pipe of reputed make.
- 3.8.17. The RS-485 cable from inverter to the metering box shall be armoured and may be laid along with the AC power cables only if there is no mutual interference. In case any interference is found between the power cables and the RS-485 cable, the Empanelled Agency shall separately lay the RS-485 cable at its own cost.

# 3.9. Lightening Protection for PV Array

- 3.9.1. All PV systems shall have lightning protection.
- 3.9.2. The source of over voltage can be lightning or other atmospheric disturbance. Main aim of over voltage protection is to reduce the over voltage to a tolerable level before it reaches the PV or other sub-system components as per IS: 2309 1989 (Reaffirmed-2005), Edition 3.1 (2006-01).
- 3.9.3. Necessary foundation/ anchoring for holding the lightning conductor in position to be made after giving due consideration to shadow on PV array, maximum wind speed and maintenance requirement at site in future.
- 3.9.4. The lightning conductor shall be earthed through flats and connected to the earth mats as per applicable Indian Standards with earth pits. Two earth pits shall be provided for each lightening arrestor. Each lightning conductor shall be fitted with individual earth pit as per required Standards including accessories, and providing masonry enclosure with cast iron cover plate having locking arrangement, watering pipe using charcoal or coke and salt as required as per provisions of IS & Earth Resistance of Lightening System must be less than one (1) Ohm. All the earthing required as per technical specification should be maintenance free earthing instead of conventional coal-salt earthing
- 3.9.5. If necessary more numbers of lightning conductors may be provided. The Bidder is also free to provide franklin rod/ early streamer type of lightning arrestors on the MMS structure designed in such a way not to cast shadow on the next raw of solar PV modules.
- 3.9.6. The Empanelled Agency shall submit the drawings and detailed specifications of the PV array lightning protection equipment to the DisCom/ GUVNL or TPI Agency for approval before installation of system.
- 3.9.7. Empanelled Agency shall provide dedicated earth pits for Lightening Arrestor as per relevant IS standard.

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#### 3.10. Power evacuation

- 3.10.1. Individual plant shall be connected to grid as per guidelines of CEA, GERC and Chief Electrical Inspector.
- 3.10.2. The output power from PV array would be fed to the inverters which converts DC produced by PV array to AC and feeds it into the main electricity grid after synchronization. In case of grid failure, or low or high voltage, solar PV system shall be out of synchronization and shall be disconnected from the grid.
- 3.10.3. Bidder shall follow the maximum capacity for interconnection with the grid at a specific voltage level shall be as specified in the Distribution Code/ Supply Code of the State and amended from time to time.
- 3.10.4. Interconnection Voltage level: All solar plant interconnection voltage level shall be at LT 415VAC, 3-phase, 50 Hz.

### 3.11. Earthing

- 3.11.1. Each array structure of the PV yard, LT power system, earthing grid for switchyard, all electrical equipment, inverter, all junction boxes, etc. shall be grounded properly as per IS 3043-1987. All metal casing/ shielding of the plant shall be thoroughly grounded in accordance with Indian Electricity Act/ Rules.
- 3.11.2. Each string/ array and MMS of the plant shall be grounded properly. The array structures are to be connected to earth pits as per IS standards. Necessary provision shall be made for bolted isolating joints of each earthing pit for periodic checking of earth resistance.
- 3.11.3. The complete earthing system shall be mechanically and electrically connected to provide independent return to earth.
- 3.11.4. Earthing bus bar shall be terminated at both ends of the switchgear to suit the connections to outside earthing conductor. All components and the module are required to be earthed individually and are to be looped and connected to the earthing grid.
- 3.11.5. Separate earth pits shall be prepared for equipment body earthing. Lightning arrestor earth pits and equipment earth pit are to be kept separate.
- 3.11.6. Earthing system shall consist of earth grids and electrodes buried in soil in the plant area, embedded in concrete inside the buildings/ rooms to which all the electrical equipment, metallic structures are connected to have earth continuity for safety reasons.

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- 3.11.7. All the bolts of earthing system shall be of Stainless steel (SS) type.
- 3.11.8. Minimum earthing conductor size shall be 50 x 6 Sq. mm for aluminium strips, or 6  $\text{mm}^2$  for copper conductors.
- 3.11.9. The earthing system shall be designed with consideration of the earth resistivity of the project area. The earth resistivity values shall be measured prior to designing the earthing system. Unless otherwise specified, earthing system shall be in accordance with IS: 3043 and IEEE 80-2000, Indian Electricity Rules, Codes of practice and regulations existing in the location where the system is being installed. All the earthing required as per technical specification should be maintenance free earthing instead of conventional coal-salt earthing
- 3.11.10. The earthing shall be maintenance free earthing and shall be done through 3 meter long copper coated steel rod (solid round) with 250 Micron copper coating appropriate to the soil resistivity subject to not compromising quality/warranty/safety of the system and All the earthing required as per technical specification should be maintenance free earthing instead of conventional coal-salt earthing.

# 3.12. Low voltage (LV) Switchgears

- 3.12.1. LV switchboard shall be IP 21 for indoor and IP 65 for outdoor application made with heavy duty PVC/ metal enclosure.
- 3.12.2. LV switchboard with metal enclosure shall be minimum 2 mm thick and with properly coated.
- 3.12.3. MCB/ MCCB/ RCCB and cables shall be rated as per rated current of the circuit, application voltage class, short circuit capacity.
- 3.12.4. All switchboards shall be supplied completely wired internally up to the terminals, ready to receive external cables.
- 3.12.5. No extra holes shall be allowed in the gland plate. Proper vermin proofing of the panel is required.
- 3.12.6. Suitable cable entry shall be provided considering bending radius of the incoming and outgoing cable.
- 3.12.7. All cables, MCB, MCCB, RCCB shall be of reputed make.

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### 3.13. Civil Work

- 3.13.1. The scope works shall cover for all services required for completion of civil works in all respect for PV plant. All machineries, tools and designs to be arranged by Bidder.
- 3.13.2. Empanelled Agency shall carry out geotechnical survey prior to design and installation of the PV system.
- 3.13.3. The work shall be executed according to the specifications and good standard practice necessary to fulfil the objective of the survey work, strictly in accordance with the instructions and satisfaction of the Owner.

#### 3.13.4. Foundations:

- (a) The Bidder is responsible for the detailed soil investigation and subsequent foundation design of the structures in the plant. Minimum 5 (five) numbers of soil exploration is to be carried out for each feeder. The foundation of the module mounting structures foundation and other important equipment foundation must be approved through DisCom/ GUVNL or TPI Agency prior to construction. The Bidder shall provide the detailed design report with calculations of the proposed foundation. Pedestals over the MMS foundation shall be projected minimum 150 mm above the finished ground level.
- (b) The foundations shall be designed considering the weight and distribution of the load of structure and its assembly. The foundation shall be design in accordance to recommendation and results of soil investigation reports and mounting structure shall be designed for maximum wind speed as per the wind zone of the location and relevant IS. Seismic effect relevant to the seismic zone of the area and highest water logging level has to be considered while making the design of the foundation.
- (c) The MMS foundation shall be constructed using RCC concrete pile foundation of required diameter and depth based on approved design.
- (d) The elevated structure has to be securely anchored to the supporting surface, also bolted with anchor bolts of appropriate strength for elevated structures mounted on RCC surfaces.

#### 3.14. Caution Signs

3.14.1. In addition to the standard caution and danger boards or labels as per Indian Electricity Rules, the AC distribution box near the solar grid inverter and the distribution board to

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which the AC output of the solar PV system is connected shall be provided with a noncorrosive caution label with the following text:

WARNING – DUAL POWER SOURCE SECOND SOURCE IS SOLAR SYSTEM

3.14.2. The size of the caution label shall be 105mm (width) x 20mm (height) with white letters on a red background.

# 3.15. Sign Boards

- 3.15.1. The sign board containing brief description of various components of the power plant as well as the complete power plant in general shall be installed at appropriate location near the PV system.
- 3.15.2. The Signboard shall be made of MS angle or pipe for vertical post with ACP (Aluminium Composite Panel) sheet of not less than 3 mm. The Bidder shall provide detailed specifications of the sign boards as per requirement of the DisCom/ GUVNL.
- 3.15.3. Name Plate: Name Plate in Gujarati language of size 600 mm x 600 mm x 2 mm on iron plate is required to be prepared as per following details and required to be fixed on the system for every installation.

"Solar Grid Connected Agriculture Pump-set"			
1.	Name of beneficiary (farmer)		
2.	Consumer Number		
3.	Category of the beneficiary		
4.	Village name		
5.	Taluka /District		
6.	Sub division		
7.	Existing Contracted Load in HP		
8.	Grid connected Solar PV capacity in kWp		
9.	Name of Empanelled Agency of the system		
10.	Address and Contact no of Empanelled		
	Agency'sService center for informing faults		
	in the system		
11.	Contact number of the service centre		
12.	e-mail ID of the Empanelled Agency's		
	/service center		
13.	Date of installation		

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# 3.16. Drawings & Manuals

- 3.16.1. Two sets of engineering, electrical drawings and Installation and O&M manuals are to be supplied. Bidder shall provide complete technical data sheets for each equipment giving details of the specifications along with make/makes in their bid along with basic design of the PV Installation setup and power evacuation, synchronization along with protection equipment.
- 3.16.2. The Empanelled Agency shall furnish the following drawings Award/ Intent and obtain approval:
  - (a) General arrangement and dimensioned layout.
  - (b) Schematic drawing showing the requirement of PV panel, Power conditioning Unit(s)/inverter, Junction Boxes, AC and DC Distribution Boards, meters etc.
  - (c) Routing diagram of cables and wires.
  - (d) Data sheets and user manuals of the solar PV panels and the solar grid inverter.
  - (e) Structural drawing along with foundation details for the structure.
  - (f) Itemized bill of material for complete SV plant covering all the components and associated accessories.
  - (g) Layout of solar Power Array
  - (h) Shadow analysis of the site
  - (i) Maintenance register.
- 3.16.3. Approved ISI and reputed makes for equipment be used.
- 3.16.4. For complete electromechanical works, Empanelled Agency shall supply complete design, details and drawings for approval to DisCom/ GUVNL and TPI Agency before progressing with the installation work.

#### 3.17. Planning & Designing

- 3.17.1. The DisCom/ GUVNL reserves the right to modify the layout and specification of subsystems and components at any stage as per local site conditions/ requirements.
- 3.17.2. The Empanelled Agency shall submit preliminary drawing for approval and based on any modification or recommendation, if any. The Empanelled Agency shall submit three sets and soft copy in CD of final drawing for formal approval to proceed with construction work.

# 3.18. Safety Measures

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3.18.1. The Empanelled Agency shall take entire responsibility for electrical safety of the installation(s) including connectivity with the grid and follow all the safety rules & regulations applicable as per Electricity Act, 2003 and CEA guidelines etc.

#### 4. MAINTENANCE AND GENERATION GUARANTEE

#### 4.1. Comprehensive Maintenance

- 4.1.1. The Empanelled Agency shall undertake comprehensive maintenance of the PV system including all its equipment and subsystems for a period of 7 (seven) years from the date of commissioning of the PV system.
- 4.1.2. The Empanelled Agency shall attend to any complaint from the Agriculture Consumer and rectify any faults or breakdown within a timeframe of 48 (forty eight) hours from such complaint. The Empanelled Agency shall be liable for any loss of generation from the PV system arising from persisting fault beyond the 48-hour period and shall compensate the Agriculture Consumer at the rate of Rs. 7.00 per kWh of generation loss beyond the 48-hour period.

#### 4.2. Generation Guarantee

- 4.2.1. The Bidder shall provide a minimum generation guarantee corresponding to a capacity utilization factor (CUF) of 18.3% (the "Guaranteed CUF") with respect to the AC capacity of the PV system.18.3% CUF will be evaluated on 90% of feeder availability irrespective of actual availability irrespective of actual availability irrespective of actual availability is less than 90 % the agency shall not be penalized due to non availability of the feeder.
- 4.2.2. This Guaranteed CUF shall be calculated on an annual basis and shall be verified by the UGVCL at the end of each year during the 7( seven) year guarantee period.
- 4.2.3. There shall be 1 % Degradation in Guaranteed CUF every year-on-year bases for 7 (seven) year will be considered.
- 4.2.4. In case of energy generation corresponding to the average of surrounding 10 such locations is less or less than the Guaranteed CUF, whichever is higher, the UGVCL shall recover an amount at the rate of Rs. 7.00 + Applicable GST per kWh from the Empanelled Agency for such shortfall at the end of the contract year to compensate the same to the Agriculture Consumer.

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4.2.5. It is clarified that the penalty for loss in generation shall not be duplicated with the penalty for delay in rectification of fault beyond 48 hours of complaint.

#### 5. PROJECT MANAGEMENT

### 5.1. Testing and Third-Party Inspection

- 5.1.1. Gujarat Energy Research and Management Institute (GERMI) shall be the Third-Party Inspection Agency (the "TPI Agency").
- 5.1.2. The Empanelled Agency shall provide all relevant plant and equipment specifications, data sheets, certificates, designs, drawings, etc. to the DisCom/ GUVNL and TPI Agency for approval prior to commencement of installation. Structural designs shall be provided to the TPI Agency in STAAD Pro format for verification and approval.
- 5.1.3. The DisCom/ GUVNL and the TPI Agency shall have, at all times, access to the Empanelled Agency's premises and also shall have the power to inspect and examine the materials and workmanship of project work during its manufacturing, shop assembly and testing. If part of the equipment is required to be manufactured in the premises other than the Empanelled Agency's, the necessary permission for inspection shall be obtained by the Empanelled Agency on behalf of the DisCom/ GUVNL and the TPI Agency.
- 5.1.4. The DisCom/ GUVNL and the TPI Agency shall have the right to serve notice in writing to the Empanelled Agency on any grounds of objections, which they may have in respect of the work. The Empanelled Agency shall have to satisfy the objection, otherwise, the DisCom/ GUVNL at its liberty may reject any or all components of equipment or workmanship connected with such work.
- 5.1.5. The Empanelled Agency shall issue request letter to respective DisCom for testing of any component of the plant, which is ready for testing at least 15 (fifteen) days in advance from the date of actual date of testing at the premises of the Empanelled Agency or elsewhere. When the inspection and the tests have been satisfactorily completed at the Empanelled Agency's works, DisCom/ GUVNL or the TPI Agency shall issue a certificate to that effect. However, DisCom/ GUVNL at its own discretion may waive the inspection and testing in writing. In such case, the Empanelled Agency may proceed with the tests which shall be deemed to have been made in the DisCom/ GUVNL or the TPI Agency's presence, and it shall forthwith forward 6 (six) sets of duly certified copies of test results and certificates to the DisCom/ GUVNL and the TPI Agency for approval of DisCom/ GUVNL. The Empanelled Agency, on receipt of written acceptance from DisCom/ GUVNL or the TPI Agency, may dispatch the equipment for erection and installation.

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- 5.1.6. For all tests to be carried out, whether in the premises of the Empanelled Agency or any subcontractor or the supplier, the Empanelled Agency shall provide labour, materials, electricity, fuel, water, stores, apparatus and instruments etc. free of charge as may reasonably be demanded to carry out such tests of the equipment. The Empanelled Agency shall provide all facilities to DisCom/ GUVNL and the TPI Agency to accomplish such testing.
- 5.1.7. The DisCom/ GUVNL or the TPI Agency shall have the right to carry out inward inspection of the items on delivery at the Site and if the items have been found to be not in line with the approved specifications, shall have the liberty to reject the same.
- 5.1.8. Neither the waiving of inspection nor acceptance after inspection by the DisCom/ GUVNL or the TPI Agency shall, in anyway, absolve the Empanelled Agency of the responsibility of supplying the equipment strictly in accordance with requisite standards and specifications.
- 5.1.9. DisCom/ GUVNL and/ or the TPI Agency shall undertake final commissioning test of the PV system including its design, specification, safety and performance.

--- End of Section ---

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