

# MADHYA PRADESH URJA VIKAS NIGAM LTD.

Urja Bhawan, Near 5 no. Bus stop, Shivaji Nagar, Bhopal –  
462016

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Web site: [www.mprenewable.nic.in](http://www.mprenewable.nic.in)

NIT No: MPUVNL/DDG/Tender/2015-16/3171, Bhopal,

Date 24.03.16

## NOTICE INVITING TENDER

Madhya Pradesh Urja Vikas Nigam Limited (MPUVNL) invites online lowest rate Bid(s) from eligible prospective Bidders, as per eligibility criteria prescribed in this RfP document of MPUVNL, for design, supply, installation, commissioning and operation, for 5 years, of SPV based decentralized distributed generating system as per following Projects in various districts of Madhya Pradesh on Build, Operate, Maintain and Transfer (BOMT) basis. Project-wise estimated load requirement is mentioned below:

Item No.	Project No.	Name of Village	Block	District	DDG Capacity (kW)	Estimated Total Project Cost (INR lakh)	EMD (INR)	RfP Fee (INR)
1	1	Kusumba	Katthiwada	Alirajpur	14	33.86	67720	2000+e-Tendering fee
2	2	Nanibar	Katthiwada	Alirajpur	8	22.02	44040	2000+e-Tendering fee
3	3	Motibar	Katthiwada	Alirajpur	7	19.40	38800	2000+e-Tendering fee
4	4	Panguda	Katthiwada	Alirajpur	47	97.20	194400	2000+e-Tendering fee
5	5	Harod	Katthiwada	Alirajpur	18	39.92	79848	2000+e-Tendering fee
6	6	Dokarbariya	Katthiwada	Alirajpur	8	21.41	42820	2000+e-Tendering fee
7	7	Bhadal	Pati	Barwani	21	48.51	97020	2000+e-Tendering fee
8	8	Kari	Pati	Barwani	12	30.22	60440	2000+e-Tendering fee
9	9	Tuwarkheda	Pati	Barwani	8	22.83	45660	2000+e-Tendering fee
10	10	Dhajara	Pati	Barwani	8	23.08	46160	2000+e-Tendering fee
11	11	Kotbandhani	Pati	Barwani	26	58.52	117040	2000+e-Tendering fee
12	12	Niliyar Bawadi	Niwali	Barwani	23	51.04	102080	2000+e-Tendering fee
13	13	Jalyapani	Pansamal	Barwani	90	178.88	357752	2000+e-Tendering fee
14	14	Gondikachli	Niwali	Barwani	26	56.92	113832	2000+e-Tendering fee
15	15	Dolijhar amba	Pansamal	Barwani	24	53.72	107432	2000+e-Tendering fee
16	16	Bundala	Amla	Betul	41	84.26	168528	2000+e-Tendering fee
17	17	Kasai	Bhainsdehi	Betul	24	52.08	104168	2000+e-Tendering fee
18	18	Nishana	Godadongari	Betul	12	27.40	54808	2000+e-Tendering fee
19	19	Brahmanwada	Godadongari	Betul	12	27.24	54472	2000+e-Tendering fee
20	20	Palanga	Bhimpura	Betul	9	22.71	45424	2000+e-Tendering fee

Item No.	Project No.	Name of Village	Block	District	DDG Capacity (kW)	Estimated Total Project Cost (INR lakh)	EMD (INR)	RfP Fee (INR)
21	21	Dharakhoh	Betul	Betul	8	20.53	41024	2000+e-Tendering fee
22	22	Sital Khedi	Godadongari	Betul	10	22.65	45304	2000+e-Tendering fee
23	23	Jamukheda	Bhainsdehi	Betul	6	15.700	31400	2000+e-Tendering fee
24	24	Utari	Bhimpur	Betul	57	126.98	253968	2000+e-Tendering fee
25	25	Doda jam	Bhimpur	Betul	55	117.64	235280	2000+e-Tendering fee
26	26	Kekadiya Kalan	Bhimpur	Betul	30	64.24	128488	2000+e-Tendering fee
27	27	Birpura	Bhimpur	Betul	23	49.73	99456	2000+e-Tendering fee
28	28	kidding raiyat	Bhimpur	Betul	15	32.64	65280	2000+e-Tendering fee
29	29	Labada raiyat	Bhimpur	Betul	20	41.86	83720	2000+e-Tendering fee
30	30	Ghorpad Ryt	Bhimpura	Betul	9	22.55	45104	2000+e-Tendering fee
31	31	Rahani(Rohni)	Bhimpur	Betul	21	43.82	87648	2000+e-Tendering fee
32	32	Kharigayawani Ryt	Amla	Betul	40	84.88	169768	2000+e-Tendering fee
33	33	Ghogal	Bhainsdehi	Betul	24	52.07	104136	2000+e-Tendering fee
34	34	Bondyakund	Bhainsdehi	Betul	21	46.53	93056	2000+e-Tendering fee
35	35	Harra	Bhimpura	Betul	24	51.81	103624	2000+e-Tendering fee
36	36	Behda	Bhimpur	Betul	32	67.79	135576	2000+e-Tendering fee
37	37	Matka	Athner	Betul	31	65.03	130064	2000+e-Tendering fee
38	38	Tanki	Athner	Betul	29	61.31	122624	2000+e-Tendering fee
39	39	Jamnagari	Chicholi	Betul	24	52.03	104056	2000+e-Tendering fee
40	40	Dariyaganj	Chicholi	Betul	26	57.40	114808	2000+e-Tendering fee
41	41	Bhatodi	Godadongari	Betul	20	41.85	83704	2000+e-Tendering fee
42	42	Chilwal	Bhimpur	Betul	27	57.32	114640	2000+e-Tendering fee
43	43	Ghogri	Godadongari	Betul	18	38.32	76648	2000+e-Tendering fee
44	44	Potla	Bhimpur	Betul	25	53.47	106944	2000+e-Tendering fee
45	45	Behda	Bhimpur	Betul	31	64.44	128880	2000+e-Tendering fee
46	46	Bijori	Bhimpur	Betul	21	44.61	89216	2000+e-Tendering fee
47	47	Dhengna	Bhimpur	Betul	22	46.05	92096	2000+e-Tendering fee
48	48	Duliya	Bhimpur	Betul	28	59.12	118248	2000+e-Tendering fee
49	49	Tingariya	Bhimpur	Betul	30	62.56	125112	2000+e-Tendering fee
50	50	Khaira	Bhimpur	Betul	70	145.39	290776	2000+e-Tendering fee
51	51	Desli	Bhimpur	Betul	93	184.08	368160	2000+e-Tendering fee
52	52	Hidli	Bhimpur	Betul	62	124.52	249032	2000+e-Tendering fee
53	53	Kalyanpur	Bhimpur	Betul	65	130.14	260272	2000+e-Tendering fee
54	54	Tekapar	Bichuha	Chhindwada	15	34.46	68920	2000+e-Tendering fee
55	55	Amjhir	Jabera	Damoh	6	16.46	32920	2000+e-Tendering fee
56	56	Naipar	Hatta	Damoh	6	16.46	32920	2000+e-Tendering fee
57	57	Jharyar	Hatta	Damoh	8	20.50	41000	2000+e-Tendering fee
58	58	Sajpani	Tendukheda	Damoh	10	22.54	45080	2000+e-Tendering fee
59	59	Viroli	Bamori	Guna	25	57.41	114816	2000+e-Tendering fee
60	60	Narwada	Bamori	Guna	25	55.79	111584	2000+e-Tendering fee
61	61	Patan	Raghogarh	Guna	34	72.78	145560	2000+e-Tendering fee
62	62	Khohri	Bamori	Guna	14	32.65	65304	2000+e-Tendering fee
63	63	Sarkheda	Bamori	Guna	17	37.80	75600	2000+e-Tendering fee
64	64	Bishankheda	Aron	Guna	42	88.86	177720	2000+e-Tendering fee
65	65	Rampuriya	Bamori	Guna	18	40.16	80328	2000+e-Tendering fee
66	66	Sonda	Bamori	Guna	15	39.12	78240	2000+e-Tendering fee
67	67	Lakhna khedi	Bamori	Guna	15	34.60	69200	2000+e-Tendering fee
68	68	Kishangarh	Raghogarh	Guna	21	48.32	96640	2000+e-Tendering fee
69	69	Padru	Raghogarh	Guna	11	27.20	54400	2000+e-Tendering fee
70	70	Bhaisalaya	Aron	Guna	30	68.22	136440	2000+e-Tendering fee
71	71	Bhaupura	Bamori	Guna	20	45.40	90808	2000+e-Tendering fee
72	72	Mirwada	Bamori	Guna	18	40.19	80376	2000+e-Tendering fee
73	73	Palasi	Seoni Malwa	Hoshangabad	15	34.16	68320	2000+e-Tendering fee
74	74	Amakatara	Seoni Malwa	Hoshangabad	12	28.70	57400	2000+e-Tendering fee
75	75	Bent	Seoni Malwa	Hoshangabad	7	18.78	37560	2000+e-Tendering fee
76	76	Banspani	Seoni Malwa	Hoshangabad	10	23.75	47500	2000+e-Tendering fee
77	77	Jatamau	Seoni Malwa	Hoshangabad	16	35.98	71960	2000+e-Tendering fee
78	78	Podar	Kesla	Hoshangabad	24	52.30	104600	2000+e-Tendering fee
79	79	Ratibandar	Kesla	Hoshangabad	19	41.44	82880	2000+e-Tendering fee
80	80	Barasel	Seoni Malwa	Hoshangabad	26	56.70	113400	2000+e-Tendering fee
81	81	Geedkheda	Seoni Malwa	Hoshangabad	13	30.52	61040	2000+e-Tendering fee
82	82	Khamkheda	Jabalpur	Jabalpur	9	24.80	49600	2000+e-Tendering fee
83	83	Nakatiya	Shahpura	Jabalpur	20	44.78	89560	2000+e-Tendering fee
84	84	Kharhata	Dheemarkheda	Katni	8	21.10	42200	2000+e-Tendering fee
85	85	Shahdar	Dheemarkheda	Katni	12	28.70	57400	2000+e-Tendering fee
86	86	Madanpur	Dheemarkheda	Katni	9	23.73	47460	2000+e-Tendering fee
87	87	Ghughari	Narayan Ganj	Mandla	15	34.92	69840	2000+e-Tendering fee

Item No.	Project No.	Name of Village	Block	District	DDG Capacity (kW)	Estimated Total Project Cost (INR lakh)	EMD (INR)	RfP Fee (INR)
88	88	Umariya	Bichiya	Mandla	36	77.63	155260	2000+e-Tendering fee
89	89	Manori	Mawai	Mandla	25	54.88	109760	2000+e-Tendering fee
90	90	Bhimori	Mawai	Mandla	23	51.24	102480	2000+e-Tendering fee
91	91	Cheetapakhna	Ghughari	Mandla	24	53.06	106120	2000+e-Tendering fee
92	92	Bateshvra	Sabargarh	Morena	68	137.70	275400	2000+e-Tendering fee
93	93	Mahuakheda baghedhi	Sanchi	Raisen	62	128.30	256600	2000+e-Tendering fee
94	94	Agariya Nayapura	Sanchi	Raisen	42	90.38	180760	2000+e-Tendering fee
95	95	Sans	Pali	Umaria	34	78.86	157720	2000+e-Tendering fee
96	96	Chirki	Pali	Umaria	38	86.14	172280	2000+e-Tendering fee
97	97	Gadraulla	Pali	Umaria	23	51.24	102480	2000+e-Tendering fee
98	98	Kathai	Pali	Umaria	45	92.80	185600	2000+e-Tendering fee
99	99	Jamuhai	Pali	Umaria	35	73.08	146160	2000+e-Tendering fee
100	100	Gajwahi	Pali	Umaria	18	41.14	82280	2000+e-Tendering fee
101	101	Makra	Pali	Umaria	24	55.38	110760	2000+e-Tendering fee
102	102	Patpariha	Pali	Umaria	17	37.80	75600	2000+e-Tendering fee
103	103	Bhagannara	Pali	Umaria	28	60.34	120680	2000+e-Tendering fee
104	104	Beli	Pali	Umaria	17	39.32	78640	2000+e-Tendering fee

Important note: The above mentioned figures against each Project are indicative. Bidders are advised to conduct on-ground surveys related to Project(s) at their own cost and risk and submit Bid(s), including financial bid, based on actual survey.

1. A Bidder can submit Bid for one or more than one Project. Each Bidder shall submit one Bid along with only one set of all relevant documents in support of eligibility. Bidder submitting for one Project, shall submit RfP fees and EMD as prescribed in RfP. However, Bidder(s) submitting Bid(s) for more than one Project, shall submit cumulative RfP fees and cumulative EMD required for all Projects being Bid for. Only one set of all technical & commercial qualification related documents shall be submitted, in a separate envelop, by a Bidder bidding for more than one Projects.
2. Evaluation of Bid(s) shall be done individually for each Project as per terms and conditions of RfP. The Contract would be awarded to/ carried out by the lowest Bidder of each Project, subject to available capacity of the lowest Bidder. The approved lowest Bidder shall be required to furnish unconditional acceptance to execute the Work at the lowest turnkey contract value and as per specifications and terms & conditions of this RfP.
3. In case if any Project is dropped before signing of Agreement due to appropriate reasons (already electrified, abandoned, or not compatible with DDG Guidelines), by the competent authority of MPUVNL, the RfP for such Projects shall stand cancelled.
4. Bidder(s) can download RfP document by paying required processing fees/ portal

charges online at <http://mpeproc.gov.in>. Bidder(s) shall furnish RfP fees of required value in the form of crossed Demand Draft drawn in favour of ‘M.P. Urja Vikas Nigam Ltd. Bhopal’, payable at Bhopal, from any Nationalized /Scheduled Bank (duly discharged). Bidder(s) bidding for more than one Project shall have to furnish Demand Draft of a value equivalent to RfP fees for all Projects Bidder(s) bidding for.

5. Bid submission (for detailed instruction, please refer to section 8 of RfP):
- a. **Online submission:** Bidders shall have to submit their financial bid and the following documents/ certificates online (duly encrypted bids) as per time schedule:
    - i. Folder ‘A’ shall have scanned copies of RfP fees and EMD etc.;
    - ii. Folder ‘B’ shall contain scanned copy of experience certificates and CA certificate regarding turnover criteria etc.,
    - iii. Folder ‘C’ shall contain financial bid only.
  - b. **Physical submission:** Bidder shall submit hard copies of the following required and relevant documents in the following manner:
    - i. Envelop A: EMD of Project(s) (in original), RfP fees of Project(s) (in original), a summary sheet containing a table describing all Projects Bidder is placing Bid & Project preference summary;
    - ii. Envelop B: Cover letter along with all support documents, including experience certificates, financial certificates and copy of this RfP document etc., duly sealed & signed on all pages. Bidders submitting Bids for more than one Project, shall submit only one set of these documents.
  - c. Both Envelop-A and Envelop-B shall be put inside a bigger envelop and shall be send to the office of the undersigned so as to reach the office by 20/04/2016 up to 11.30 am.
6. **Important Dates:** Following dates and schedule shall be adhered to for this RfP. In case any public holiday falls on these dates, next working day shall be considered for the purpose of only concerned event; all other dates and schedule shall remain unchanged, unless informed otherwise by the office of the undersigned.

Event	Date	Time (Hrs.)
Purchase of RfP start date	24-03-2016	20:00

<b>Event</b>	<b>Date</b>	<b>Time (Hrs.)</b>
Pre bid meeting date and time	06-04-2016	11:00
Purchase of RfP end date	17-04-2016	22:00
Online bid submission end date	18-04-2016	22:00
Physical submission (in original) Technical Bid & EMD (Envelop A & B)	20-04-2016	up to 11:30
Opening of Technical Bid & EMD	20-04-2016	from 12:00
Opening of Financial Bid	27-04-2016	15:00

7. The Bidders shall have to submit their financial bids **ONLINE ONLY** (duly encrypted bids) and upload the required relevant documents as per time schedule (Important Dates).
8. Since Bidders are required to digitally sign their bids for online submission using Class III - Digital Certificates only, Bidders are advised to obtain the same at the earliest. For further information, Bidders are requested to contact with TATA CONSULTANCY SERVICES, 5th Floor, D.B.Mall, M.P.Nagar, Bhopal, Phone-18002588684, 18002748484. (Note: It may take up to 7 working days to issue Digital Certificates. So the Bidders are advised to take appropriate action.)
9. Bidders intending to participate in the RfP are required to get themselves trained on the e-Procurement System. The Bidders are required to contact the service provider – TATA CONSULTANCY SERVICES, 5th Floor, D.B.Mall, M.P.Nagar, Bhopal, Phone-18002588684, 18002748484.
10. The Earnest Money Deposit should be deposited in the form of crossed Demand Draft drawn in favour of ‘M.P. Urja Vikas Nigam Ltd. Bhopal’, payable at Bhopal or in the form of F.D.R. in favor of ‘M.P. Urja Vikas Nigam Ltd. Bhopal’ - A/C of the Bidder, from any Nationalized /Scheduled Bank (duly discharged), of the equivalent amount, valid up to 31/08/2016 (No other form of EMD will be acceptable). The Bid(s) without EMD(s) of appropriate value(s) shall be rejected.
11. All interested bidders can clarify their queries relating to the RfP & e-tendering process during pre-bid meeting organized by MPUVN on 06-04-2016 at 11.00 AM at MPUVNL’s conference hall.
12. Validity period for financial bids will be for 120 days from the date of opening of the financial bid. During this period, the Agreement shall be signed.
13. At MPUVNL, single point contact will be an officer of the State Implementing Agency (SIA) who will be the DDG Nodal Officer (Add. Executive Engineer/ Executive Engineer, MPUVNL in office or at 0755-2553595).
14. The Managing Director, M.P. Urja Vikas Nigam Ltd., Bhopal shall have full

rights to accept or reject any or all Bids without assigning any reason thereof.

15. Other details can be seen in the RfP document.

Managing Director

## 1. CHECKLIST OF IMPORTANT DOCUMENTS

<b>S. no.</b>	<b>Document</b>	<b>Submitted (Y/N)</b>
1	Required EMD & RfP fees	
2	Agreement in case of JV (Annexure-8)	
3	Certificates according to requirement as per eligibility criteria Annexures-6 to 9	
4	MAAT certificate duly certified by CA as per commercial eligibility criteria	
5	Balance sheet with profit and loss of last Five years (CA certified)	
6	Summary sheet containing a table describing all Projects for which Bidder is placing Bid and preference list (no.1,2,3, etc) of all such Projects	
7	Civil work design, size of control room, positioning of battery and inverters free space, ventilation provisions	
8	Strategic plan to maintain system for 5 years	
9	Commitment letter of IEC certified manufacturers to cater	
10	TIN, PAN, Service tax no. (ST-2 photo copy)	
11	Signed & seal affixed copy of RfP document (each page)	

## 2. GENERAL CRITERIA

2.1. **QUALIFICATIONS:** All interested Bidders who meet the following eligibility criteria can participate and submit bids as individual firms or as Joint Venture (JV) of firms:

### 2.2. **Technical eligibility:**

2.2.1. **Technical criteria for Individual firm:** The Bidder must have successfully erected, tested and commissioned Generation (including Renewable Energy), Transmission or sub-transmission & Distribution works/ stations in last 7 years as on the scheduled date of bid opening, having at least:

- a) 80% kW capacity (of generation or transmission/distribution network or operation and maintenance works) stipulated in bid in single completed work; OR
- b) 50% kW capacity each (of generation or transmission/ distribution network or operation and maintenance works) stipulated in bid in two completed works; OR
- c) 40% kW capacity each (of generation or transmission/ distribution network or operation and maintenance works) stipulated in bid in three completed works; OR
- d) Technical experience of erection, testing and commissioning of at least one DDG project, whose generation capacity shall be higher than the maximum of the individual DDG projects covered in the bid. (For example: a bid of DDG projects of 50 kW 2 Nos., 40 kW 5 Nos., 30 kW 5 Nos. projects is floated; individual firm having experience of 50 kW single project can quote for all the 12 projects in the bid, whereas single firm having experience of one No 30 kW project can quote for 5 Nos. 30 kW projects only) and the system so created/ maintained must be in satisfactory operation for at least one (1) year as on date of opening of bid.

2.2.2. **Technical criteria for Joint Venture (JV):** Bids may be submitted by joint venture firms (having not more than three partners with one partner as a lead partner), wherein:

- a) All the partners should jointly meet qualification requirements set forth at point (a) or (b) or (c) or (d) of 2.2.1 above;

AND



- b) Successfully erected, tested and commissioned or completed at least single similar works/project in last 7 years as on the date of bid opening:
  - i. A single turnkey contract, having at least 50% of the kw capacity experience as considered in proposed bid by at least one partner;  
AND
  - ii. A single turnkey contract, having at least 30% of the kW capacity considered in proposed bid, by each of remaining partner(s).

**2.3. Commercial Eligibility**

**2.3.1. For individual Firm:**

- a) The Bidder shall meet the following minimum commercial criteria in past 7 years of work of electrical erection, testing and commissioning or electrical O&M services in Generation, Transmission or sub-transmission & Distribution projects/stations:
  - i. 80% of estimated amount of Project in a single completed work;  
OR
  - ii. 50% of estimated amount of Project in each of two completed works individually; OR
  - iii. 40% of the estimated amount of the Project in each of three completed works individually.
- b) Minimum Average Annual Turnover (MAAT) for best three years out of last five financial years of the Bidder should not be less than 30% of the estimated cost of the project.
- c) For Bidders to qualify for more than one Project, the MAAT requirement shall be the sum of MAAT requirement (as specified in sub clause (b) of clause 2.3.1) of the Projects, they proposed to qualify.

**2.3.2. For Joint Ventures**

- a) The Bidder shall meet the following minimum commercial criteria in past 7 years of electrical work of erection, testing and commissioning or of electrical O&M services in Generation, Transmission or sub-transmission & Distribution projects/stations:
  - i. 80% of the estimated amount of the Project in a single completed work; OR

- ii. 50% of the estimated amount of the Project in two completed works individually; OR
    - iii. 40% of the estimated amount of the Project in three completed works individually.
  - b) The figures for each of the partner of the joint venture shall be added together to determine the Bidder compliance with the minimum qualifying criteria set out; however, in order for a joint venture to qualify, the partner(s) of joint venture must meet the following minimum criterion.
    - i. The lead partner shall meet, not less than 40% of the minimum criterion given in MAAT;
    - ii. Each of the other partner(s) shall meet not less than 25% of the criterion given in MAAT.
  - c) For Bidder to qualify for more than one Project, the sum of requirements of individual Projects shall be considered for determination of Qualifying Requirement of the Bidder.
- 2.4. If the Company has formed in last 2 years (i.e. formed after FY13-14), total turnover<sup>1</sup> shall be divided by three and shall be compared with MAAT requirement of the bid. In case, turnover so calculated is more than MAAT requirements, agency shall be commercially accepted for participation in the bidding. However no such relaxation shall be available for Company formed less than 2 years before.
- 2.5. For the purpose of this RfP, turnover does not include other income and taxes, if any, shown in the income and expenditure statement of Bidder.

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<sup>1</sup> Calculated as sum of FY 14-15 and FY 15-16 from its audited financial statements

### 3. IMPORTANT INSTRUCTIONS

- 3.1. A Bidder quoting for one Project only, financial bid shall be opened if the Bidder qualifies on technical and commercial criteria.
- 3.2. Technical eligibility of a Bidder quoting for more than one Project would be assessed at the Project level, without aggregating Bid capacity for individual Projects. However, commercial eligibility of such bidder would be assessed at the cumulative level, considering all Projects for which the Bidder is the lowest cost bid. For such assessment, each Bidder, who is applying for multiple Projects, shall have to mention the order of preference amongst Projects applied for (Table 7: Preference among the Projects applied for). This would be referred while assessing the sufficiency of eligibility criteria of such Bidder while awarding such Projects.

**Explanation:** Financial bid of all those Bidders who qualify technical criteria shall be opened. Subsequently, lowest financial bid for all Projects shall be identified. For a Bidder quoting for one or more than one Project:

- i. Projects shall be awarded amongst those in which the Bidder is lowest cost Bidder;
  - ii. The above award of Projects shall be in the order of preference given by the Bidder (as per Table 7: Preference among the Projects applied for) till its MAAT capability is adequately exhausted. Once the MAAT capability is exhausted, the said Bidder's Bids would not be considered any more for the remaining Projects, and those Projects would be awarded to the remaining lowest cost Bidder.
- 3.3. In case more than one Bidder qualify as lowest cost Bidder (tie situation) for a Project, the selection of Successful Bidders shall be through tie-breaker as provided below :
  - 3.3.1. A Bidder who has successfully implemented higher number of DDG projects of the size of the Project concerned, or bigger size, shall be given priority;
  - 3.3.2. If tie situation persists even after the application of the above provision at 3.3.1, Bidder whose cumulative cost of all completed assignments for generation, transmission or sub-transmission and distribution, as shown in experience certificate, is higher shall be given priority.

- 3.4. The Bidder should mention the name of manufacturer of IEC certified solar module, battery or PCU/inverter manufacturer and their commitment to cater the requirement of Bidder on priority basis(within scheduled timeframe).
- 3.5. All relevant documents (experience, commitment etc.) should be submitted along with the technical bid; otherwise bid submitted will not be shortlisted for evaluation of financial bid.
- 3.6. The financial bid shall remain firm and no price variation shall be allowed during financial bid validity period.
- 3.7. RfP document can be purchased online by paying processing/ portal charges through <http://mpeproc.gov.in>. Bidder(s) shall furnish RfP fees of required value in the form of crossed Demand Draft drawn in favour of ‘M.P. Urja Vikas Nigam Ltd. Bhopal’, payable at Bhopal, from any Nationalized /Scheduled Bank (duly discharged). Bidder(s) bidding for more than one Project shall have to furnish Demand Draft of a value equivalent to RfP fees for all Projects Bidder is bidding for.
- 3.8. Duly prepared Bid with all relevant documents should be put and sealed in proper envelopes for physical submission. Bid and documents which are to be uploaded by the Bidders online should be submitted online as per time schedule (important dates) specified in this RfP.
- 3.9. **Bid submission**
- 3.9.1. **Online submission:** Bidders shall have to submit their financial bid and the following documents/ certificates online as per time schedule (Important Dates)
- a) Folder ‘A’ shall contain scanned copies of RfP fees & EMD etc.;
  - b) Folder ‘B’ shall contain scan copy of experience certificate and CA certificate regarding MAAT etc.;
  - c) Folder ‘C’ shall contain financial bid only (duly encrypted).
- 3.9.2. **Physical submission:** Technical bid containing the following documents in appropriate envelopes should reach the undersigned by 20/04/2016 up to 11:30 am. These documents for physical submission shall be arranged in Envelop A & Envelop B as suggested below:
- a) Envelop A: It shall contain EMD of equivalent value required for Project(s) Bid for and RfP fees of equivalent value required for Project(s) Bid for, along with a summary sheet containing a table describing all Projects for

which Bidder is placing Bids

b) Envelop B: It shall contain all other support documents, including experience certificates, financial certificates, signed copy of this RfP document etc. Bidders submitting Bid(s) for more than one Project, shall submit only one set of these documents.

3.9.3. Since the online bids are required to be signed using Class III - Digital Certificates only, Bidders are advised to obtain the same at the earliest. For further information, Bidders are requested to contact at:

*Tata Consultancy Services*

*5<sup>th</sup> Floor, D. B. Mall, Bhopal*

*Help desk: 1800-2588-684 (10 Am to 7 PM)*

(Note: It may take up to 7 working days to issue Digital Certificates.)

3.10. Bidder intending to participate in the RfP are required to get themselves trained on the e-procurement system. The Bidders are required to contact the service provider **TATA CONSULTANCY SERVICES** to confirm their session in advance.

3.11. The EMD should be deposited, for each Project individually in respective envelopes, in the form of cross Demand Draft drawn in favour of “M.P. Urja Vikas Nigam Ltd. Bhopal” payable at Bhopal from a nationalized/scheduled bank, or FDR in favour of M.P. Urja Vikas Nigam Ltd., Bhopal A/C of bidder.

3.12. Validity of financial bids will be for 120 days from the date of opening of the financial bid. During this period, the Agreement shall be signed.

3.13. At MPUVNL, single point contact will be an officer of the State Implementing Agency (SIA) who will be the DDG Nodal Officer (Add. Executive Engineer/ Executive Engineer, MPUVNL in office or at 0755-2553595).

3.14. The Managing Director, M.P. Urja Vikas Nigam Ltd., Bhopal shall have full rights to accept or reject any or all the Bids, in part or full, without assigning any reason thereof.

3.15. Other details can be referred to in the RfP document.

#### 4. DEFINITIONS

Terms and conditions not defined herein shall have the same meaning as are assigned to them, in the Indian Contract Act or any other Act in vogue, or by any person of common knowledge and prudence. In General Conditions of Contract, the specifications and bill of quantity, the following words shall have the meanings hereby indicated, unless there is something in the subject matter or content inconsistent with the subject.

1. **“Agreement”** shall mean an agreement signed between MPUVNL and Successful Bidder for implementation of Project as per terms and conditions laid therein.
2. **“Beneficiaries”** shall mean the households of the Project Area.
3. **“Bid(s)”** shall mean response by an eligible Bidder against this RfP.
4. **“Bidder(s)”** means eligible firms/ JVs who submit Bid(s) in response to this RfP.
5. **“Contract”** shall mean and include the general conditions, specifications, schedules, drawings, Agreement, work orders issued against the lowest financial bid.
6. **“Contract Price”** shall mean the financial bid of the Bidder to whom Contract is awarded.
7. **“DDG”** shall mean Decentralized Distributed Generation system including PDN.
8. **“DDG-SPV”** shall mean solar photovoltaic based DDG system.
9. **“DDUGJY”** shall mean Deen Dayal Upadhyay Gram Jyoti Yojna of Ministry of Power, Government of India.
10. **“Engineer”** shall mean the Engineer or Engineers authorized by MPUVNL to supervise, inspect, verify and certify the work, for the purpose of this contract.
11. **“General Conditions”** shall mean the General conditions of Contract.
12. **“Implementing Agency (IA)”** shall mean Madhya Pradesh Urja Vikas Nigam Limited (MPUVNL).
13. **“Month”** shall mean calendar month.
14. **“Nodal Agency”** shall mean Rural Electrification Corporation, Ministry of Power, Govt. of India.
15. **“Performance Guarantee Test (PGT)”** shall mean performance test to be conducted by Nodal Agency/ MPUVNL during 6 months after Project commissioning to ensure desired performance. Accordingly, PGT period shall be construed as a period of 6 months from Project commissioning.
16. **“Project”** shall mean such DDG projects which are approved by Nodal Agency for

implementation.

17. **“Project Area”** shall mean the village/ hamlet for which Project is approved and shall be implemented.
18. **“Proposal”** shall mean technical proposal and/ or financial proposal submitted by Bidder in response to this RfP.
19. **“PDN”** shall mean Power Distribution Network for distribution of electricity in the Project Area.
20. **“RfP”** shall mean this RfP document, its formats & annexures and amendments, if any.
21. **“Site”** shall mean the area where Project is proposed to be implemented and includes the piece of land where the DDG system shall be installed.
22. **“Successful Bidder”** shall mean a Bidder declared successful after Bid evaluation and awarded with the contract or their successors and permitted assigns.
23. **“Work”** shall mean any work entrusted to the Successful Bidder for successful commissioning of DDG system as per scope of work and Agreement.
24. **“Writing”** shall include any manuscript, typewritten, printed or other statement reproduced in any visible form whether under seal or written by hand.

## 5. SCOPE OF WORK

- 5.1. Design, supply, installation, commissioning and operation, for 5 years, of decentralised distributed SPV Power Plants along with PDN, all associated civil works etc. on Build, Operate, Maintain & Transfer (“BOMT”) basis in various villages of Madhya Pradesh, as per Projects mentioned in Table 1, on turnkey basis as per details given therein.
- 5.2. Operation & maintenance of DDG system for five years, as per guidelines of DDG, as amended/ replaced/ sub-assumed, under DDUGJY in the following Projects as mentioned in the RfP document.
- 5.3. Design, Construction of suitable control rooms of DDG-SPV for installation of battery bank, Power Conditioning Unit (PCU) & control panels required for defined capacity of DDG-SPV Power Plant at all the locations given below.

*Table 1: Estimated load and power requirement*

Item No.	Project No.	Name of Village	Block	District	DDG Capacity (kW)	Estimated Total Project Cost (INR lakh)	EMD (INR)	RfP Fee (INR)
1	1	Kusumba	Katthiwada	Alirajpur	14	33.86	67720	2000+e-Tendering fee
2	2	Nanibar	Katthiwada	Alirajpur	8	22.02	44040	2000+e-Tendering fee
3	3	Motibar	Katthiwada	Alirajpur	7	19.40	38800	2000+e-Tendering fee
4	4	Panguda	Katthiwada	Alirajpur	47	97.20	194400	2000+e-Tendering fee
5	5	Harod	Katthiwada	Alirajpur	18	39.92	79848	2000+e-Tendering fee
6	6	Dokarbariya	Katthiwada	Alirajpur	8	21.41	42820	2000+e-Tendering fee
7	7	Bhadal	Pati	Barwani	21	48.51	97020	2000+e-Tendering fee
8	8	Kari	Pati	Barwani	12	30.22	60440	2000+e-Tendering fee
9	9	Tuwarkheda	Pati	Barwani	8	22.83	45660	2000+e-Tendering fee
10	10	Dhajara	Pati	Barwani	8	23.08	46160	2000+e-Tendering fee
11	11	Kotbandhani	Pati	Barwani	26	58.52	117040	2000+e-Tendering fee
12	12	Niliyar Bawadi	Niwali	Barwani	23	51.04	102080	2000+e-Tendering fee
13	13	Jalyapani	Pansamal	Barwani	90	178.88	357752	2000+e-Tendering fee
14	14	Gondikachli	Niwali	Barwani	26	56.92	113832	2000+e-Tendering fee
15	15	Dolijhar amba	Pansamal	Barwani	24	53.72	107432	2000+e-Tendering fee
16	16	Bundala	Amla	Betul	41	84.26	168528	2000+e-Tendering fee
17	17	Kasai	Bhainsdehi	Betul	24	52.08	104168	2000+e-Tendering fee
18	18	Nishana	Godadongari	Betul	12	27.40	54808	2000+e-Tendering fee
19	19	Brahmanwada	Godadongari	Betul	12	27.24	54472	2000+e-Tendering fee
20	20	Palanga	Bhimpura	Betul	9	22.71	45424	2000+e-Tendering fee
21	21	Dharakhoh	Betul	Betul	8	20.53	41024	2000+e-Tendering fee
22	22	Sital Khedi	Godadongari	Betul	10	22.65	45304	2000+e-Tendering fee
23	23	Jamukheda	Bhainsdehi	Betul	6	15.700	31400	2000+e-Tendering fee
24	24	Utari	Bhimpur	Betul	57	126.98	253968	2000+e-Tendering fee
25	25	Doda jam	Bhimpur	Betul	55	117.64	235280	2000+e-Tendering fee
26	26	Kekadiya Kalan	Bhimpur	Betul	30	64.24	128488	2000+e-Tendering fee
27	27	Birpura	Bhimpur	Betul	23	49.73	99456	2000+e-Tendering fee
28	28	kidding raiyat	Bhimpur	Betul	15	32.64	65280	2000+e-Tendering fee
29	29	Labada raiyat	Bhimpur	Betul	20	41.86	83720	2000+e-Tendering fee
30	30	Ghorpad Ryt	Bhimpura	Betul	9	22.55	45104	2000+e-Tendering fee
31	31	Rahani(Rohni)	Bhimpur	Betul	21	43.82	87648	2000+e-Tendering fee
32	32	Kharigayawani Ryt	Amla	Betul	40	84.88	169768	2000+e-Tendering fee



Item No.	Project No.	Name of Village	Block	District	DDG Capacity (kW)	Estimated Total Project Cost (INR lakh)	EMD (INR)	RfP Fee (INR)
33	33	Ghokal	Bhainsdehi	Betul	24	52.07	104136	2000+e-Tendering fee
34	34	Bondyakund	Bhainsdehi	Betul	21	46.53	93056	2000+e-Tendering fee
35	35	Harra	Bhimpura	Betul	24	51.81	103624	2000+e-Tendering fee
36	36	Behda	Bhimpur	Betul	32	67.79	135576	2000+e-Tendering fee
37	37	Matka	Athner	Betul	31	65.03	130064	2000+e-Tendering fee
38	38	Tanki	Athner	Betul	29	61.31	122624	2000+e-Tendering fee
39	39	Jamnagari	Chicholi	Betul	24	52.03	104056	2000+e-Tendering fee
40	40	Dariyaganj	Chicholi	Betul	26	57.40	114808	2000+e-Tendering fee
41	41	Bhatodi	Godadongari	Betul	20	41.85	83704	2000+e-Tendering fee
42	42	Chilwal	Bhimpur	Betul	27	57.32	114640	2000+e-Tendering fee
43	43	Ghogri	Godadongari	Betul	18	38.32	76648	2000+e-Tendering fee
44	44	Potla	Bhimpur	Betul	25	53.47	106944	2000+e-Tendering fee
45	45	Behda	Bhimpur	Betul	31	64.44	128880	2000+e-Tendering fee
46	46	Bijori	Bhimpur	Betul	21	44.61	89216	2000+e-Tendering fee
47	47	Dhengna	Bhimpur	Betul	22	46.05	92096	2000+e-Tendering fee
48	48	Duliya	Bhimpur	Betul	28	59.12	118248	2000+e-Tendering fee
49	49	Tingariya	Bhimpur	Betul	30	62.56	125112	2000+e-Tendering fee
50	50	Khaira	Bhimpur	Betul	70	145.39	290776	2000+e-Tendering fee
51	51	Desli	Bhimpur	Betul	93	184.08	368160	2000+e-Tendering fee
52	52	Hidli	Bhimpur	Betul	62	124.52	249032	2000+e-Tendering fee
53	53	Kalyanpur	Bhimpur	Betul	65	130.14	260272	2000+e-Tendering fee
54	54	Tekapar	Bichuha	Chhindwada	15	34.46	68920	2000+e-Tendering fee
55	55	Amjhir	Jabera	Damoh	6	16.46	32920	2000+e-Tendering fee
56	56	Naipar	Hatta	Damoh	6	16.46	32920	2000+e-Tendering fee
57	57	Jharyar	Hatta	Damoh	8	20.50	41000	2000+e-Tendering fee
58	58	Sajpani	Tendukheda	Damoh	10	22.54	45080	2000+e-Tendering fee
59	59	Viroli	Bamori	Guna	25	57.41	114816	2000+e-Tendering fee
60	60	Narwada	Bamori	Guna	25	55.79	111584	2000+e-Tendering fee
61	61	Patan	Raghogarh	Guna	34	72.78	145560	2000+e-Tendering fee
62	62	Khohri	Bamori	Guna	14	32.65	65304	2000+e-Tendering fee
63	63	Sarkheda	Bamori	Guna	17	37.80	75600	2000+e-Tendering fee
64	64	Bishankheda	Aron	Guna	42	88.86	177720	2000+e-Tendering fee
65	65	Rampuriya	Bamori	Guna	18	40.16	80328	2000+e-Tendering fee
66	66	Sonda	Bamori	Guna	15	39.12	78240	2000+e-Tendering fee
67	67	Lakhna khedi	Bamori	Guna	15	34.60	69200	2000+e-Tendering fee
68	68	Kishangarh	Raghogarh	Guna	21	48.32	96640	2000+e-Tendering fee
69	69	Padru	Raghogarh	Guna	11	27.20	54400	2000+e-Tendering fee
70	70	Bhaisalaya	Aron	Guna	30	68.22	136440	2000+e-Tendering fee
71	71	Bhaupura	Bamori	Guna	20	45.40	90808	2000+e-Tendering fee
72	72	Mirwada	Bamori	Guna	18	40.19	80376	2000+e-Tendering fee
73	73	Palasi	Seoni Malwa	Hoshangabad	15	34.16	68320	2000+e-Tendering fee
74	74	Amakatara	Seoni Malwa	Hoshangabad	12	28.70	57400	2000+e-Tendering fee
75	75	Bent	Seoni Malwa	Hoshangabad	7	18.78	37560	2000+e-Tendering fee
76	76	Banspani	Seoni Malwa	Hoshangabad	10	23.75	47500	2000+e-Tendering fee
77	77	Jatamau	Seoni Malwa	Hoshangabad	16	35.98	71960	2000+e-Tendering fee
78	78	Podar	Kesla	Hoshangabad	24	52.30	104600	2000+e-Tendering fee
79	79	Ratibandar	Kesla	Hoshangabad	19	41.44	82880	2000+e-Tendering fee
80	80	Barasel	Seoni Malwa	Hoshangabad	26	56.70	113400	2000+e-Tendering fee
81	81	Geedkheda	Seoni Malwa	Hoshangabad	13	30.52	61040	2000+e-Tendering fee
82	82	Khamkheda	Jabalpur	Jabalpur	9	24.80	49600	2000+e-Tendering fee
83	83	Nakatiya	Shahpura	Jabalpur	20	44.78	89560	2000+e-Tendering fee
84	84	Kharhata	Dheemarkheda	Katni	8	21.10	42200	2000+e-Tendering fee
85	85	Shahdar	Dheemarkheda	Katni	12	28.70	57400	2000+e-Tendering fee
86	86	Madanpur	Dheemarkheda	Katni	9	23.73	47460	2000+e-Tendering fee
87	87	Ghughari	Narayan Ganj	Mandla	15	34.92	69840	2000+e-Tendering fee
88	88	Umariya	Bichiya	Mandla	36	77.63	155260	2000+e-Tendering fee
89	89	Manori	Mawai	Mandla	25	54.88	109760	2000+e-Tendering fee
90	90	Bhimori	Mawai	Mandla	23	51.24	102480	2000+e-Tendering fee
91	91	Cheetapakhna	Ghughari	Mandla	24	53.06	106120	2000+e-Tendering fee
92	92	Bateshvra	Sabargarh	Morena	68	137.70	275400	2000+e-Tendering fee

Item No.	Project No.	Name of Village	Block	District	DDG Capacity (kW)	Estimated Total Project Cost (INR lakh)	EMD (INR)	RfP Fee (INR)
93	93	Mahuakheda baghedi	Sanchi	Raisen	62	128.30	256600	2000+e-Tendering fee
94	94	Agariya Nayapura	Sanchi	Raisen	42	90.38	180760	2000+e-Tendering fee
95	95	Sans	Pali	Umaria	34	78.86	157720	2000+e-Tendering fee
96	96	Chirki	Pali	Umaria	38	86.14	172280	2000+e-Tendering fee
97	97	Gadraulla	Pali	Umaria	23	51.24	102480	2000+e-Tendering fee
98	98	Kathai	Pali	Umaria	45	92.80	185600	2000+e-Tendering fee
99	99	Jamuhai	Pali	Umaria	35	73.08	146160	2000+e-Tendering fee
100	100	Gajwahi	Pali	Umaria	18	41.14	82280	2000+e-Tendering fee
101	101	Makra	Pali	Umaria	24	55.38	110760	2000+e-Tendering fee
102	102	Patpariha	Pali	Umaria	17	37.80	75600	2000+e-Tendering fee
103	103	Bhagannara	Pali	Umaria	28	60.34	120680	2000+e-Tendering fee
104	104	Beli	Pali	Umaria	17	39.32	78640	2000+e-Tendering fee

5.4. Details of BPL / APL households and other productive / community load is given below in Table-2

Table 2: Tentative household & productive load breakup

Item No.	Project No.	Village	District	Households			Domestic load (kW)	Community load (kW)	Water Pumping load (kW)	Atta Chakki load (kW)	DDG Capacity (kW)
				BPL	APL	Total					
1	1	Kusumba	Alirajpur	45	14	59	5.90	1.00	0.00	3.75	14.00
2	2	Nanibar	Alirajpur	22	10	32	3.20	0.40	2.24	0.00	8.00
3	3	Motibar	Alirajpur	19	8	27	2.70	0.40	2.24	0.00	7.00
4	4	Panguda	Alirajpur	83	200	283	28.30	1.62	2.24	3.75	47.00
5	5	Harod	Alirajpur	48	20	68	6.80	1.00	2.24	3.75	18.00
6	6	Dokarbariya	Alirajpur	24	6	30	3.00	0.40	2.24	0.00	8.00
7	7	Bhadal	Barwani	97	0	97	9.70	0.99	2.24	3.75	21.00
8	8	Kari	Barwani	52	0	52	5.20	0.90	0.00	3.75	12.00
9	9	TuwarKheda	Barwani	38	0	38	3.80	0.81	2.24	0.00	8.00
10	10	Dhajara	Barwani	39	0	39	3.90	0.81	2.24	0.00	8.00
11	11	Kotbandhani	Barwani	128	0	128	12.80	1.13	2.24	3.75	26.00
12	12	Niliyar Bawadi	Barwani	70	30	100	10.00	0.67	2.24	3.75	23.00
13	13	Jalyapani	Barwani	522	0	522	52.20	3.82	4.48	7.50	90.00
14	14	Gondikachli	Barwani	122	0	122	12.20	0.99	2.24	3.75	26.00
15	15	Dolijhar amba	Barwani	82	27	109	10.90	0.76	2.24	3.75	24.00
16	16	Bundala	Betul	33	191	224	22.40	2.31	2.24	3.75	41.00
17	17	Kasai	Betul	68	44	112	11.20	0.90	2.24	3.75	24.00
18	18	Nishana	Betul	28	17	45	4.50	0.89	0.00	3.75	12.00
19	19	Brahmanwada	Betul	7	35	42	4.20	0.63	0.00	3.75	12.00
20	20	Palanga	Betul	24	16	40	4.00	0.55	2.24	0.00	9.00
21	21	Dharakhoh	Betul	4	28	32	3.20	0.40	2.24	0.00	8.00
22	22	Sital Khedi	Betul	14	18	32	3.20	0.48	0.00	3.75	10.00
23	23	Jamukheda	Betul	12	8	20	2.00	0.09	2.24	0.00	6.00
24	24	Utari	Betul	23	243	266	26.60	3.65	4.48	7.50	57.00

Item No.	Project No.	Village	District	Households			Domestic load (kW)	Community load (kW)	Water Pumping load (kW)	Atta Chakki load (kW)	DDG Capacity (kW)
				BPL	APL	Total					
25	25	Doda jam	Betul	70	180	250	25.00	4.70	4.48	7.50	55.00
26	26	Kekadiya Kalan	Betul	33	111	144	14.40	2.10	2.24	3.75	30.00
27	27	Birpura	Betul	1	101	102	10.20	1.12	2.24	3.75	23.00
28	28	kidding raiyat	Betul	0	53	53	5.30	0.68	2.24	3.75	15.00
29	29	Labada raiyat	Betul	15	70	85	8.50	0.83	2.24	3.75	20.00
30	30	Ghorpad Ryt	Betul	4	31	35	3.50	0.63	2.24	0.00	9.00
31	31	Rahani(Rohni)	Betul	33	60	93	9.30	0.86	2.24	3.75	21.00
32	32	Kharigayawani Ryt	Betul	148	65	213	21.30	2.24	2.24	3.75	40.00
33	33	Ghogal	Betul	66	40	106	10.60	0.90	2.24	3.75	24.00
34	34	Bondyakund	Betul	56	30	86	8.60	0.77	2.24	3.75	21.00
35	35	Harra	Betul	34	70	104	10.40	1.57	2.24	3.75	24.00
36	36	Behda	Betul	21	141	162	16.20	1.17	2.24	3.75	32.00
37	37	Matka	Betul	94	65	159	15.90	1.39	2.24	3.75	31.00
38	38	Tanki	Betul	84	60	144	14.40	1.28	2.24	3.75	29.00
39	39	Jamnagari	Betul	61	44	105	10.50	1.12	2.24	3.75	24.00
40	40	Dariyaganj	Betul	88	34	122	12.20	1.21	2.24	3.75	26.00
41	41	Bhatodi	Betul	14	64	78	7.80	1.03	2.24	3.75	20.00
42	42	Chilwal	Betul	40	92	132	13.20	1.27	2.24	3.75	27.00
43	43	Ghogri	Betul	28	31	59	5.90	0.83	2.24	3.75	18.00
44	44	Potla	Betul	14	108	122	12.20	0.76	2.24	3.75	25.00
45	45	Behda	Betul	20	140	160	16.00	1.39	2.24	3.75	31.00
46	46	Bijori	Betul	6	84	90	9.00	0.73	2.24	3.75	21.00
47	47	Dhengna	Betul	16	84	100	10.00	1.23	2.24	3.75	22.00
48	48	Duliya	Betul	38	99	137	13.70	1.51	2.24	3.75	28.00
49	49	Tingariya	Betul	12	138	150	15.00	1.67	2.24	3.75	30.00
50	50	Khaira	Betul	126	235	361	36.10	4.91	4.48	7.50	70.00
51	51	Desli	Betul	110	415	525	52.50	4.60	4.48	7.50	93.00
52	52	Hidli	Betul	97	221	318	31.80	2.09	4.48	7.50	62.00
53	53	Kalyanpur	Betul	117	222	339	33.90	2.41	4.48	7.50	65.00
54	54	Tekapar	Chhindwada	47	17	64	6.40	0.94	0.00	3.75	15.00
55	55	Amjhir	Damoh	19	2	21	2.10	0.11	2.24	0.00	6.00
56	56	Naipar	Damoh	19	0	19	1.90	0.09	2.24	0.00	6.00
57	57	Jharyar	Damoh	0	30	30	3.00	0.14	2.24	0.00	8.00
58	58	Sajpani	Damoh	18	14	32	3.20	0.14	0.00	3.75	10.00
59	59	Viroli	Guna	126	0	126	12.60	1.23	2.24	3.75	25.00
60	60	Narwada	Guna	114	0	114	11.40	1.18	2.24	3.75	25.00
61	61	Patan	Guna	190	0	190	19.00	1.52	2.24	3.75	34.00
62	62	Khohri	Guna	39	0	39	3.90	0.63	2.24	3.75	14.00
63	63	Sarkheda	Guna	60	0	60	6.00	0.94	2.24	3.75	17.00
64	64	Bishankheda	Guna	200	0	200	20.00	1.80	2.24	7.50	42.00
65	65	Rampuriya	Guna	68	0	68	6.80	0.75	2.24	3.75	18.00

Item No.	Project No.	Village	District	Households			Domestic load (kW)	Community load (kW)	Water Pumping load (kW)	Atta Chakki load (kW)	DDG Capacity (kW)
				BPL	APL	Total					
66	66	Sonda	Guna	50	0	50	5.00	0.68	2.24	3.75	15.00
67	67	Lakhna khedi	Guna	55	0	55	5.50	0.68	2.24	3.75	15.00
68	68	Kishangarh	Guna	90	0	90	9.00	0.84	2.24	3.75	21.00
69	69	Padru	Guna	40	0	40	4.00	0.57	0.00	3.75	11.00
70	70	Bhaisalaya	Guna	150	0	150	15.00	1.34	2.24	3.75	30.00
71	71	Bhaupura	Guna	78	0	78	7.80	1.01	2.24	3.75	20.00
72	72	Mirwada	Guna	71	0	71	7.10	0.75	2.24	3.75	18.00
73	73	Palasi	Hoshangabad	48	0	48	4.80	0.72	2.24	3.75	15.00
74	74	Amakatarra	Hoshangabad	42	0	42	4.20	0.63	0.00	3.75	12.00
75	75	Bent	Hoshangabad	27	0	27	2.70	0.37	2.24	0.00	7.00
76	76	Banspani	Hoshangabad	30	0	30	3.00	0.48	0.00	3.75	10.00
77	77	Jatamau	Hoshangabad	50	0	50	5.00	0.72	2.24	3.75	16.00
78	78	Podar	Hoshangabad	106	0	106	10.60	0.99	2.24	3.75	24.00
79	79	Ratibandar	Hoshangabad	68	0	68	6.80	0.72	2.24	3.75	19.00
80	80	Barasel	Hoshangabad	103	17	120	12.00	0.90	2.24	3.75	26.00
81	81	Geedkheda	Hoshangabad	56	0	56	5.60	0.52	0.00	3.75	13.00
82	82	Khamkheda	Jabalpur	34	2	36	3.60	0.52	2.24	0.00	9.00
83	83	Nakatiya	Jabalpur	54	26	80	8.00	1.14	2.24	3.75	20.00
84	84	Kharhata	Katni	15	15	30	3.00	0.61	2.24	0.00	8.00
85	85	Shahdar	Katni	30	10	40	4.00	0.66	0.00	3.75	12.00
86	86	Madanpur	Katni	23	11	34	3.40	0.85	2.24	0.00	9.00
87	87	Ghughari	Mandla	62	12	74	7.40	0.61	0.00	3.75	15.00
88	88	Umariya	Mandla	53	163	216	21.60	2.22	2.24	3.75	36.00
89	89	Manori	Mandla	92	22	114	11.40	1.44	2.24	3.75	25.00
90	90	Bhimori	Mandla	80	20	100	10.00	0.92	2.24	3.75	23.00
91	91	Cheetapakhana	Mandla	55	50	105	10.50	0.90	2.24	3.75	24.00
92	92	Bateshvra	Morena	290	60	350	35.00	3.34	4.48	7.50	68.00
93	93	Mahuakheda Baghedi	Raisen	324	0	324	32.40	2.11	4.48	7.50	62.00
94	94	Agariya Nayapura	Raisen	176	5	181	18.10	1.15	4.48	7.50	42.00
95	95	Sans	Umaria	100	32	132	13.20	1.97	2.24	7.50	34.00
96	96	Chirki	Umaria	57	102	159	15.90	2.06	2.24	7.50	38.00
97	97	Gadraulla	Umaria	37	60	97	9.70	1.57	2.24	3.75	23.00
98	98	Kathai	Umaria	116	74	190	19.00	2.60	4.48	7.50	45.00
99	99	Jamuhai	Umaria	60	77	137	13.70	2.42	2.24	7.50	35.00
100	100	Gajwahi	Umaria	60	2	62	6.20	1.39	2.24	3.75	18.00
101	101	Makra	Umaria	8	92	100	10.00	1.12	2.24	3.75	24.00
102	102	Patpariha	Umaria	14	43	57	5.70	0.72	2.24	3.75	17.00
103	103	Bhagannara	Umaria	129	2	131	13.10	1.88	2.24	3.75	28.00
104	104	Beli	Umaria	40	15	55	5.50	0.89	2.24	3.75	17.00

- 5.5. Designing, supply, installation & commissioning and operation, for 5 years, of appropriate Power Distribution Network to be carried out for the Project, as per norms of MP DISCOM/ MP State Grid Code, so that PDN is compatible with requirements of Grid connectivity.
- 5.6. Details of PDN, number of street lights and minimum expected power generation/year and minimum size of battery bank required for a particular project is described in Table-3. Minimum required battery bank is calculated at 240 Volts. However Bidders can use different size of battery bank, but total VA should remain same.
- 5.7. Supply of desired amount of electricity to Beneficiaries and collect charges, as prescribed by MPUVNL, for the same.

*Table 3: PDN, battery bank & generation requirement*

Item No.	Project No.	Village	Census code	District	DDG Capacity (kW)	No. of street lights	Power distribution Network in meters	Minimum Expected power generation/ year kWh	*Minimum Required Battery Bank Ah at 240V
1	1	Kusumba	295610	Alirajpur	14	18	3000	25712	700
2	2	Nanibar	2956300	Alirajpur	8	10	2000	14377	400
3	3	Motibar	2956400	Alirajpur	7	10	1600	12994	350
4	4	Panguda	2959900	Alirajpur	47	40	4500	86815	2400
5	5	Harod	505110	Alirajpur	18	18	2200	33730	950
6	6	Dokarbariya	2995400	Alirajpur	8	10	1600	13824	400
7	7	Bhadal	3373000	Barwani	21	30	3600	38707	1100
8	8	Kari	3373800	Barwani	12	20	3000	22395	600
9	9	Tuwarkheda	3373300	Barwani	8	20	2600	14653	400
10	10	Dhajara	3373200	Barwani	8	20	2700	14930	400
11	11	Kotbandhani	3373100	Barwani	26	38	4200	47831	1250
12	12	Niliyar Bawadi	478561	Barwani	23	25	2500	41749	1100
13	13	Jalyapani	478472	Barwani	90	100	4000	165889	4800
14	14	Gondikachli	478556	Barwani	26	30	2500	47831	1300
15	15	Dolijhar amba	478468	Barwani	24	30	3000	44237	1200
16	16	Bundala	468368	Betul	41	60	3000	75480	2000
17	17	Kasai	485347	Betul	24	25	2000	44237	1220
18	18	Nishana	485941	Betul	12	12	1000	22119	600
19	19	Brahmanwada	485843	Betul	12	10	1000	21289	600
20	20	Palanga	485160	Betul	9	12	1000	16589	500
21	21	Dharakhoh	485703	Betul	8	10	1000	14377	450
22	22	Sital Khedi	485936	Betul	10	8	1000	18248	500
23	23	Jamukheda	485353	Betul	6	5	500	11059	340
24	24	Utari	485167	Betul	57	66	12000	105063	3000
25	25	Doda jam	485168	Betul	55	62	8000	102299	3000
26	26	Kekadiya Kalan	485123	Betul	30	36	3000	55296	1500
27	27	Birpura	485140	Betul	23	25	2000	41472	1100
28	28	kidding raiyat	485183	Betul	15	13	1000	27648	740
29	29	Labada raiyat	485184	Betul	20	21	1000	35943	1000
30	30	Ghorpad Ryt	485198	Betul	9	10	1000	15759	450
31	31	Rahani(Rohni)	485122	Betul	21	23	1000	38708	1000
32	32	Khariyawani Ryt	486413	Betul	40	50	4000	73268	2000

Item No.	Project No.	Village	Census code	District	DDG Capacity (kW)	No. of street lights	Power distribution Network in meters	Minimum Expected power generation/year kWh	*Minimum Required Battery Bank Ah at 240V
33	33	Ghogal	485411	Betul	24	25	2000	43684	1300
34	34	Bondyakund	485410	Betul	21	24	2000	37602	1100
35	35	Harra	485394	Betul	24	25	2000	44237	1300
36	36	Behda	485390	Betul	32	40	3000	58061	1700
37	37	Matka	485510	Betul	31	40	2000	56955	1520
38	38	Tanki	485440	Betul	29	40	2000	53085	1400
39	39	Jamnagari	485711	Betul	24	25	2000	43408	1250
40	40	Dariyaganj	485789	Betul	26	30	3000	47555	1300
41	41	Bhatodi	485937	Betul	20	20	1000	36772	1000
42	42	Chilwal	485121	Betul	27	33	2000	49767	1260
43	43	Ghogri	485940	Betul	18	15	1000	31795	900
44	44	Potla	485161	Betul	25	30	2000	47002	1250
45	45	Behda	485144	Betul	31	40	2000	58061	1600
46	46	Bijori	485170	Betul	21	22	1000	38708	1100
47	47	Dhengna	485185	Betul	22	25	7000	41472	1100
48	48	Duliya	485155	Betul	28	34	2000	52532	1400
49	49	Tingariya	485172	Betul	30	37	2000	55296	1560
50	50	Khaira	485166	Betul	70	80	8000	129117	3400
51	51	Desli	485147	Betul	93	125	6000	171419	4600
52	52	Hidli	485214	Betul	62	79	4000	113358	3200
53	53	Kalyanpur	485120	Betul	65	84	4000	118887	3400
54	54	Tekapar	495478	Chhindwada	15	15	2000	26542	740
55	55	Amjhir	462679	Damoh	6	6	1000	11059	350
56	56	Naipar	461661	Damoh	6	5	1000	10506	340
57	57	Jharyar	461680	Damoh	8	8	1000	13548	440
58	58	Sajpani	462841	Damoh	10	8	1000	17695	500
59	59	Viroli	498955	Guna	25	31	4000	47002	1300
60	60	Narwada	498952	Guna	25	28	3000	44237	1200
61	61	Patan	499406	Guna	34	47	3000	63591	1800
62	62	Khohri	498948	Guna	14	10	2000	25713	700
63	63	Sarkheda	498962	Guna	17	15	2000	31519	900
64	64	Bishankheda	499807	Guna	42	50	5000	77415	2000
65	65	Rampuriya	499071	Guna	18	17	2000	33178	950
66	66	Sonda	499079	Guna	15	13	5000	27648	740
67	67	Lakhna khedi	499072	Guna	15	13	2000	27648	740
68	68	Kishangarh	499317	Guna	21	22	3000	38708	1060
69	69	Padru	499326	Guna	11	7	2000	20183	500
70	70	Bhaisalaya	499800	Guna	30	37	5000	55296	1500
71	71	Bhaupura	499088	Guna	20	19	3000	36496	1000
72	72	Mirwada	499070	Guna	18	17	2000	33178	950
73	73	Palasi	467263	Hoshangabad	15	15	2000	27648	720
74	74	Amakatara	487265	Hoshangabad	12	10	2000	21289	550
75	75	Bent	487271	Hoshangabad	7	8	1200	12718	350
76	76	Banspani	487268	Hoshangabad	10	8	1800	17695	500
77	77	Jatamau	487267	Hoshangabad	16	15	2000	28754	760
78	78	Podar	487764	Hoshangabad	24	30	2500	44237	1200
79	79	Ratibandar	487776	Hoshangabad	19	15	2000	34007	900
80	80	Barasel	487274	Hoshangabad	26	25	3000	47002	1260
81	81	Geedkheda	487264	Hoshangabad	13	10	2000	23777	630
82	82	Khamkheda	4693000	Jabalpur	9	10	2500	15483	440
83	83	Nakatiya	4658000	Jabalpur	20	20	3000	37048	1000
84	84	Kharhata	488891	Katni	8	9	1400	14653	440
85	85	Shahdar	488872	Katni	12	12	2000	21012	600
86	86	Madanpur	488822	Katni	9	10	1800	16035	440
87	87	Ghughari	4956800	Mandla	15	15	2500	27648	740
88	88	Umariya	5023800	Mandla	36	30	4800	66355	1850
89	89	Manori	5026500	Mandla	25	30	3000	46172	1250
90	90	Bhimori	5026400	Mandla	23	26	3000	42301	1200

Item No.	Project No.	Village	Census code	District	DDG Capacity (kW)	No. of street lights	Power distribution Network in meters	Minimum Expected power generation/ year kWh	*Minimum Required Battery Bank Ah at 240V
91	91	Cheetapakhana	4985200	Mandla	24	25	3000	44237	1260
92	92	Bateshvra	452673	Morena	68	80	6000	124417	3500
93	93	Mahuakheda baghedhi	483851	Raisen	62	80	7000	113911	3200
94	94	Agariya Nayapura	483706	Raisen	42	45	6000	77415	2100
95	95	Sans	468088	Umaria	34	35	8000	62485	1800
96	96	Chirki	468087	Umaria	38	40	8000	69397	2000
97	97	Gadraulla	468086	Umaria	23	25	3000	42302	1200
98	98	Kathai	468080	Umaria	45	45	4000	82945	2360
99	99	Jamuhai	468104	Umaria	35	35	3000	63591	1800
100	100	Gajwahi	468083	Umaria	18	15	3000	33178	960
101	101	Makra	468078	Umaria	24	25	3000	42855	1260
102	102	Patpariha	468079	Umaria	17	15	2000	30690	860
103	103	Bhagannara	468131	Umaria	28	30	3000	51149	1460
104	104	Beli	468101	Umaria	17	12	3000	30690	900

## 6. GENERAL CONDITIONS OF CONTRACT

6.1. **Manner of Execution:** Execution of Work shall be carried out in an approved manner as outlined in the technical specifications/ standards or where not outlined, in accordance with relevant Indian Standard/ specifications, to reasonable satisfaction of MPUVNL. The timelines for the execution of Work shall be as per Table 4 below:

*Table 4: Work execution timelines*

Sl. No	Activity	Timelines
1	Issue of Letter of Award (LoA) to Successful Bidder	45 days from the date of opening of financial bid
2	Signing of Agreement between MPUVNL & Successful Bidder	25 days from the date of LoA
3	Handover of land to Successful Bidder required for Project	On or before signing of Agreement
4	Work completion	8 months from the date of signing of Agreement

6.2. The Successful Bidder shall start Work within 15 days after the Agreement.

6.3. If, at any time, it appears that the actual progress of Work does not conform to the milestones as per Agreement, a revised time schedule shall be submitted by Successful Bidder to MPUVNL to ensure completion of the Work within the overall timeframe of the Project. The revised time schedule shall be submitted to DREO for his approval and should be approved by DREO. Milestones for completion of Work shall be:

*Table 5: Work completion milestones*

Sl. No	Activity	Timelines
1	Construction of control room and supply of material (solar panels, batteries and poles) at Project Site	5 months from signing of Agreement
2	Successful installation of complete Project	7 months from signing of Agreement
3	Joint commissioning certificate, signed by concerned DREO & Successful Bidder, after successful commissioning of Project and duly verified by third party	8 months from signing of Agreement

6.4. All the materials required for the installation of SPV power plant, as per Agreement signed, shall be kept at Site in the custody of the Successful Bidder.



- 6.5. **Inspection during erection:** Engineer shall be entitled to inspect and supervise and test during erection and commissioning at all reasonable times. Such inspection will not relieve the Successful Bidder of their obligations under the Agreement. All the equipment may be inspected by the authorized representatives of MPUVNL at the factory and/ or before dispatch of the material at Site.
- 6.6. **Completion of Work:** Time being the essence of contract, the erection of the SPV power plant shall be completed within the period specified in the Agreement i.e. 8 months from the date of Agreement. After completion of project, a joint commissioning certificate (JCC) (Annexure-11) duly signed shall be submitted by the authorized representative of the Successful Bidder. Every JCC should have two sets of photographs of following:
- a) Control room with modules installed on structure (Three views).
  - b) String Junction Box (SJBs), Array Junction Box (AJBs) & Main Junction Box (MJB) (three views)
  - c) PCU & control panels installed in the PCU room (Three views)
  - d) Battery bank installed in the battery room (Three views)
  - e) Lighting arrestor & Earthing kit installed (Three views)
  - f) Power Distribution Network (Ten views)
- 6.7. **Rejection of works:** In the event of any of the material supplied/ work done by the Successful Bidder being found defective in material or workmanship or otherwise not in conformity with the requirements of the Agreement, MPUVNL shall either reject the material/ work and/ or advise the Successful Bidder to rectify the same. The Successful Bidder on receipt of such notices shall rectify or replace the defective material and rectify the work free of cost. If the Successful Bidder fails to do so, MPUVNL may:
- a) At its option replace or rectify such defective materials and/ or work and recover the extra cost, so involved, from the Successful Bidder plus services charges @ 20% of the cost of such rectification, from the Successful Bidder and/ or terminate the Contract for balance work/ supplies with enforcement of penalty as per Contract.
  - b) Defective materials/ workmanship will not be accepted under any conditions and shall be rejected outright without compensation. The Successful Bidder

shall be liable for any loss/ damage sustained by MPUVNL due to defective work.

6.8. **Extension of construction time:** If the completion of Work is expected to get delayed due to any reason, the Successful Bidder shall without delay give notice to the MPUVNL in writing of events leading to/ causing delay and his claim, if any, for an extension of timelines. MPUVNL on receipt of such notice shall examine the merit of the request and shall provide extension, only in case of force majeure events, as may be reasonable. However, such extension shall be without prejudice to other terms and conditions of the contract.

6.9. **Liquidated damages for delay in completion of Work:** If the Successful Bidder fails to complete the Work within the period specified in the Agreement or any extension granted thereto under force majeure conditions, MPUVNL will recover from the Successful Bidder as penalty @ 0.5% at the contract price for each week of delay. The total penalty shall not exceed 5% (five percent) of the contract price. However maximum period of delay should not exceed 10 weeks. Beyond 10 weeks of delay, MPUVNL may:

- a) Allow Successful Bidder to continue Work; OR
- b) MPUVNL may terminate the Contract with Successful Bidder and get Work completed by other party at risk and cost of Successful Bidder.

In either of the cases above, MPUVNL would recover the loss of subsidy from the Central Govt. as per DDG guidelines from the Successful Bidder. This recovery shall be in addition to penalty for delay for 10 weeks.

6.10. **Operation & maintenance:** Successful Bidder shall execute the comprehensive operation & maintenance for five years from the date of commissioning of DDG-SPV along with PDN, to ensure regular power supply to end user at the rated generation capacity of DDG-SPV. The Successful Bidder shall be responsible for collecting the tariff, as defined in this RfP by MPUVNL, from the Beneficiaries.

6.11. **Eventuality in case Grid reached during O&M period:** If grid power reaches to the Project area before 5 years, then the power produced from the DDG project can be exported to the grid as per provisions framed by Madhya Pradesh State Electricity Regulatory Commission from time to

time in accordance with National Tariff Policy, 2016, issued by Ministry of Power, Govt. of India.

- 6.12. **Penalty for non-performance/ under performance:** The successful developer shall be responsible for supplying the required quantum of power for 6-8 hours of electricity per day at the identified timings, as decided by Gram Panchayat of Beneficiary area from time to time, as per the Contract for at least for 25 days in a month, failing which, the Successful Bidder shall pay penalty at the rate of the 10% of the charges<sup>2</sup> for the short supplied power as determined by MPUVNL annually. The amount may be recovered by revoking the Bank Guarantee (BG) of the Successful Bidder. The balance amount of thus revoked BG can be returned to Successful Bidder upon furnishing new BG of original amount.
- 6.13. **Responsibility to rectify the loss and damage:** If any loss or damage occurs to the Work or any part thereof or materials/ plant/ equipment for incorporation therein, during the period for which the Successful Bidder is responsible for the Work, the Successful Bidder shall at his own cost rectify/ recoup such loss or damage, so that the Work conforms in every respect with the provision of the Contract to the satisfaction of the site in charge/ MPUVNL. The Successful Bidder shall also be liable for any loss or damage to the Work/ equipment occasioned by him in course of any operation carried out to him during performing the Contract.
- 6.14. **Responsibility towards the workman or outsiders:** MPUVNL will, in no case be responsible for any accident fatal or non-fatal, caused to any workman or outsider in course of transport or execution of Work. All the expenditure, including treatment or compensation, will be entirely borne by the Successful Bidders. The Successful Bidder shall also be responsible for any claims of the workers, including PF, Gratuity, ESI & other legal obligations.
- 6.15. **Penalty due from the Successful Bidder:** All costs or damages for which the Successful Bidder is liable to MPUVNL will be deducted from any

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<sup>2</sup> Charges for the short supplied power would be determined considering the electrical energy at the load composition for the project as stated in Table-2, for the determined supply duration, at the Tariff specified in the table provided under the section named termed 'instruction of the bidder'.

money due to the Successful Bidder, including the CPG/ POG.

6.16. **Other responsibility of Successful Bidder:** Notwithstanding anything mentioned in the specifications or subsequent approval or acceptance of the DDG system by MPUVNL, if at all, the ultimate responsibility for satisfactory performance of the entrusted Work shall rest with the Successful Bidder.

6.17. **Force Majeure**

6.17.1. Implementing Agency (IA) and Successful Bidder shall ensure due compliance to terms and conditions of the Agreement. However, neither IA nor Successful Bidder shall be liable for any claim for any loss or damages whatsoever, arising out of failure to carry out the terms of the Agreement to the extent that such a failure is due to force majeure events, such as fire, rebellion, mutiny, civil commotion, riot, strike, lock-out, forces of nature, accident, act of god, and any other reason beyond the control of IA and Successful Bidder.

6.17.2. Any party to Agreement claiming benefits of clause 6.17 shall notify in writing the other party to Agreement, within 10 (ten) days from the beginning of such events, the causes and expected time when such events shall cease to exist.

6.17.3. In case force measure event is notified by Successful Bidder, MPUVNL shall verify the facts and may grant such extension in implementation timelines as the facts justify. In case MPUVNL notifies force majeure event, the Successful Bidder shall have to cooperate and wait till such event cease to exist.

6.18. **Makes of equipment to be used in the Project:** The Successful Bidder shall ensure that equipment used in the Project meet or exceed the technical specifications/ standards as specified in this document. All major equipment should be type tested at Govt./NABL accredited laboratories of the country and test certificates for all the required tests should be submitted to the DREO before installation of the same.

6.19. **Warranty period**

6.19.1. The Work done/ material supplied by the Successful Bidder specifications should be warranted for satisfactory operation and against any defect in material and workmanship at least for a period of five years, from the date on which the SPV power plant along with Power Distribution Network has been commissioned. Warrantee on the battery bank & PCU should be of

five years & of SPV modules used in solar power plants/ systems must be warranted for their output peak watt capacity, which should not be less than 90% at the end of 12 years and 80% at the end of 25 years. The above warrantee certificates shall be furnished to the MPUVNL.

- 6.19.2. Any defect noticed during this period should be rectified by the Successful Bidder free of cost upon written notice from Gram Panchayat of the Project Area, with a copy of the notice to MPUVNL for its information. Save for force majeure events, once the reporting of the fault/non-operational status is endorsed by Successful Bidder, action should necessarily be taken to make the DDG system operational within three days. If the DDG System is not made operational within three days, MPUVNL may rectify the same at the cost of Successful Bidder, along with 20% service charges. In case of force majeure events, the defects shall be rectified as soon as possible and the same shall be reported to MPUVNL.
- 6.19.3. The warrantee period shall be extended by the period during which the plant remains non-operative due to reasons, as ascertained by MPUVNL, within control of the Successful Bidders.
- 6.20. **Insurance:** The Successful Bidder shall arrange insurance coverage for the materials at his custody for the Work under execution. The Successful Bidder shall take up insurance or such other measures, for the manpower so as to cover the claim for damage arising under workmen's compensation Act and other applicable State/Central labour laws. MPUVNL shall not bear any responsibility on this account.
- 6.21. **Certificates not to affect rights of MPUVNL:** The issuance of any certificate by MPUVNL or any extension of time granted by MPUVNL shall not prejudice the rights of MPUVNL in terms of the Contract nor shall relieve the Successful Bidder of his obligations for due performance of the Contract.
- 6.22. **Payment terms**
- 6.22.1. The payment, against project, cost to the Successful Bidder shall be made as per given below:
- a) 90% of the project cost shall be released by MPUVNL progressively till commissioning of project. The phasing of this payment shall be as given below:

- a. 30% of Project cost shall be released after construction of control room and supply of material (solar panels, batteries and poles) at project site. This payment shall be released after receipt of inspection report issued by inspecting authority (not below than Sub Engineer) and concerned DREO accompanied by bill forwarding note of concerned DREO;
  - b. 30% of project cost shall be released after successful installation of complete Project. This payment shall be released after receipt of inspection report issued by inspecting authority (not below the Sub Engineer) and concerned DREO accompanied by bill forwarding note of concerned DREO and duly verified by third party;
  - c. 30% of project cost shall be released on presentation of joint commissioning certificate, signed by concerned DREO & Successful Bidder, after successful commissioning of Project and duly verified by third party.
- b) Balance 10% of the project cost shall be released after 1 year of commissioning of project
- 6.22.2. Presentation of appropriate bill in triplicate for each stage of payment.
- 6.22.3. All payments shall be made as per milestone based availability of funds from Central/ State Govt. or from lenders.
- 6.22.4. All payments shall be released only after milestones are achieved and certified for satisfactory completion as per three tier quality control mechanism under DDUGJY.
- 6.22.5. The following conditions shall also be applicable:
- a) It is informed that the M.P. VAT on Renewable Energy Devices or Equipment has been exempted from 1 August 2009. Please refer M.P. Gazette (Extra Ordinary) No. 380 Dated 1/8/2009;
  - b) Income tax will be deducted at source;
  - c) No payment will be payable in foreign currency;
  - d) The price shall remain constant during the currency of the contract
- 6.23. **Settlement of disputes:** All disputes concerning questions of fact arising under the contract shall be decided by the Managing Director, MPUVNL,

provided a written appeal by the Successful Bidder is made to MPUVNL. The decision of the Managing Director, MPUVNL shall be final and binding to all concerns.

- 6.24. Any dispute or difference, including those considered as such by only one of the parties arising out of or in connection with the Contract, shall, to the extent possible, be settled amicably between the parties. If amicable settlement cannot be reached, then all disputed issues shall be settled by arbitration as provided in the contract.
- 6.25. **Transfer of Project after efflux of time**
- 6.25.1. After 5 years, Implementing Agency (IA) shall decide on the option to take over the Project or handover the Project to the same agency or any other agency, as approved by the State Government, for further operating the Project. In case of transfer of the Project to IA/ State Government./ other agency, as approved by the State Government, Successful Bidder shall ensure that Project is transferred in good working condition as certified by the Engineer and the concerned DREO.
- 6.25.2. The decision to hand over the Project to any agency will be finalized 6 months prior to the expiry of 5 years BOMT period.
- 6.26. The Successful Bidder shall be responsible for providing training /capacity building to villagers for running the power plant.
- 6.27. **Termination due to delay in completion of Work:** MPUVNL may by written notice of default to the Successful Bidder, terminate the Contract in circumstances detailed here under:
- 6.27.1. If in the opinion of the MPUVNL, the Successful Bidder fails to complete the Work within the time specified in the Agreement or within the period for which extension has been granted under force majeure by MPUVNL to the Successful Bidder.
- 6.27.2. If in the opinion of MPUVNL, the Successful Bidder fails to comply with any of the provisions of the Contract.
- 6.28. In the event of MPUVNL terminating the Contract in whole or in part as provided in sub-clause 6.27.1 or 6.27.2 above, MPUVNL reserves the right to engage another party at the risk and cost of the Successful Bidder upon such terms and in such a manner as it may deem appropriate and the Successful Bidder shall be liable to MPUVNL for any additional costs or

any losses caused to MPUVNL, as may be required for the completion of Work or O&M for 5 years of the SPV Power Plant, and / or for penalty as defined under this RfP document until such reasonable time as may be required for the final completion of the Work/ O&M for 5 years.

- 6.29. In the event MPUVNL does not terminate the Contract as provided in sub-clause 6.27.1 the Successful Bidder shall continue performance of the Contract, in which case he shall be liable to MPUVNL for penalty for delay as set out in this RfP document until the Work is completed.
- 6.30. **Language and measures:** All documents pertaining to the Contract including specifications, schedules, notice correspondences, operating and maintenance instructions, drawings or any other writings shall be written in English / Hindi language.
- 6.31. **Correspondence**
- 6.31.1. Any notice to the Successful Bidder under the terms of the Contract shall be served by registered post to the SINGLE POINT contact address as specified by the Successful Bidder in the Bid documents or by hand to the authorized local representative of the Successful Bidder.
- 6.31.2. Bidders are suggested to mandatorily specify SINGLE POINT contact (office address and designated official along with e-mail id) on which MPUVNL shall direct all communications related to this RfP. MPUVNL shall not direct any communication to any other address/ official of the Bidder.
- 6.32. Any notice to MPUVNL shall be served to the Managing Director, MPUVNL, and Bhopal.
- 6.33. **Secrecy:** The Successful Bidder shall treat the details of the specifications and other documents as private and confidential and they shall not be reproduced without written authorization from MPUVNL.
- 6.34. Inspection and Tests:
- 6.34.1. M.P. Urja Vikas Nigam Ltd. shall have the right to inspect the systems / goods and/ or get it tested from authorized test centres to confirm its conformity to the technical specifications. The cost of testing will be borne by the Successful Bidder.
- 6.34.2. MPUVNL shall have access and right to inspect the Project or part thereof at any stage.



6.35. **Clarification on RfP documents**

- 6.35.1. For any clarification regarding RfP document and eligibility criteria, Bidder may attend pre-bid meeting or contact nodal officer in his office. MPUVNL shall not be responsible for any postal delay.
- 6.35.2. Verbal clarification and information's given by MPUVNL or its employees or representatives shall not be in any way entertained.

6.36. **Amendment of RfP documents**

- 6.36.1. At any time prior to the submission of the Bid(s) or prior to the opening of the financial bid, MPUVNL may for any reason, whether at its own initiative or in response to a clarification requested by a Bidder, modify the RfP documents by issuing amendments on <http://mpeprocurement.gov.in>. These amendments will be binding on Bidders;
- 6.36.2. MPUVNL will not bear any responsibility or liability arising out of non-receipt of the information regarding amendments in time or otherwise. Bidder must check the website for any such amendment before submitting their Bid.

6.37. **Assignment / Sub Letting:** The Successful Bidder shall not assign, sublet or transfer the contract or any part thereof to any party.

6.38. **Expenses of Agreement:** A formal Agreement shall be entered into with the Successful Bidder, as per format (Annexure-14), for the proper fulfilment of the Contract. The expenses of completing and stamping of the Agreement shall be paid by the Successful Bidder.

6.39. **Arbitration:** That, in the event of any dispute or difference whatsoever arising under the Contract awarded by the MPUVNL, the same shall be referred to arbitration, which shall be as per the provisions of the Indian Arbitration Act, 1996 and the rules made there under and amendments thereof. All the proceedings of arbitration will take place in Bhopal. The award in such arbitration shall be final and binding on all the concerned parties. In this case, the arbitrator shall be Secretary, New & Renewable Energy Department, Govt. of Madhya Pradesh.

6.40. **Jurisdiction:** That, any dispute between the manufacturer/Successful Bidder and M. P. Urja Vikas Nigam Ltd., Bhopal shall be subjected to Bhopal jurisdiction.

6.41. RfP documents are not transferable.

- 6.42. All pages of the RfP document and all other supporting documents must be signed and company seal affixed by the authorized person of the Bidder;
- 6.43. Bidder shall be responsible for submission of Bid complete in all respect accompanied by all relevant documents/ certificates/ enclosures as required by terms and conditions of this RfP. Incomplete Bid, in any respect, shall be liable to be rejected.
- 6.44. If at any time, during tendering process or after award of Work, any of the documents/information submitted by the Bidder is found to be incorrect, false or untruthful, the bid and/or the resultant order may be summarily rejected/cancelled at the risk of the Bidder;
- 6.45. In the event of any of the breach of the conditions of the contract at any time on the part of the Bidder, the Contract may be terminated by the competent authority of M.P. Urja Vikas Nigam Ltd., Bhopal without any compensation to the Bidder.
- 6.46. Octroi/ Entry tax, if applicable, will have to be borne by the Bidder.
- 6.47. If Successful Bidder is found unable to complete the Work within the specified time period, MPUVNL will be free to purchase the balance goods from elsewhere and get the Work completed at his (Successful Bidder's) cost and risk. However, before taking any such action, MPUVNL shall give appropriate opportunity to Successful Bidder to reply to notice regarding such failure. The Work or any part thereof which the Successful Bidder has failed to supply or if not available, the best and nearest available substitute thereof shall be purchased by MPUVNL and Work will be completed. Any such loss or damage which MPUVNL may sustain due to such failure on the part of the Successful Bidder, recovery of such loss or damage shall be made from any sum payable to the Successful Bidder. If recovery is not possible from the bills and the Successful Bidder fails to pay the losses or damages, the recovery shall be made under Madhya Pradesh Public Demand Recovery Act or any other law applicable under these circumstances.
- 6.48. Bidder will have full responsibility for packing, forwarding, transportation, insurance during supply and responsibility of any type of breakages/losses etc. The goods/systems should be delivered installed and commissioned at Site in the perfect conditions as ordered. The Successful Bidder shall ensure adequate insurance of valuable goods against any loss by theft or damage

- by fire/flood etc. The insurance charges will have to be borne by the Successful Bidders only. The Successful Bidder must arrange to adequately and properly pack goods so as to ensure the safe delivery of the same.
- 6.49. In case any defective material or any type of substandard material is supplied, the material will be rejected and it will be the responsibility of the Successful Bidder for taking back the rejected materials/ systems at his/ her own cost.
- 6.50. Any type of fittings, accessories, assemblies, essentially required components, which are not described or mentioned in the RfP documents, but are required for implementation of the Project, shall have to be supplied by the Successful Bidder at his own cost.
- 6.51. Notice inviting RfP, RfP documents, prescribed rate sheets and terms and conditions will form part of the Agreement, consequent upon the rates being offered for Agreement;
- 6.52. MPUVNL reserves the right to postpone the date of receipt and opening of Bid or cancel the RfP without bearing any liability, whatsoever, upon MPUVNL consequent upon such decision.
- 6.53. The acceptance of a Bid will rest with the competent authority of M.P. Urja Vikas Nigam Limited, Bhopal who does not bind him/herself to accept the lowest Bid and may reject any or all Bid(s) without assigning any reason thereof.
- 6.54. In case of changes in any of the Projects due to significant changes in the status of Households or villages, fresh approval for project cost shall be obtained by MPUVNL from Nodal Agency for DDG program. Though MPUVNL shall endeavour to release timely payments against such projects as per changed status, but such payments shall be subjected to fund made available by Central/ State Govt. MPUVNL shall not be accountable for delay, if any, in payments in such cases and shall not be liable for any payment delay.
- 6.55. If Successful Bidder requests MPUVNL to issue certificate to avail Excise Duty and Concessional Custom Duty (ED & CCD) benefits, MPUVNL may forward the same to MNRE after approval from competent authority of MPUVNL in accordance with existing policies of Central Government.
- 6.56. Any or all Bid(s) may be rejected or accepted partially or fully without

assigning any reason thereof by the competent authority (M.D.) of the M.P. Urja Vikas Nigam Limited, Bhopal.

- 6.57. If Successful Bidder, whose rates have been accepted, does not sign the Agreement within 25 (twenty five) days from the date of issue of the letter of award (LoA), EMD of the Successful Bidder shall be forfeited and his Bid shall be treated as cancelled.
- 6.58. The approved rates will be valid till the completion of the 5 years of O&M period of the Project. No price escalation/ variation will be allowed for any reason, whatsoever, including changes in statutory charges/ duties/ taxes.
- 6.59. Power of attorney to sign the agreement on behalf of Bidder and partnership deed, memorandum of articles of association, etc. should be enclosed along with Bid documents.
- 6.60. Non-Assignments: The Successful Bidder shall not assign or transfer the Work issued as per Agreement or any part thereof to any party.

(Sign & Seal of the Successful Bidder)

## 7. COMMERCIAL TERMS AND CONDITIONS

### 7.1. Earnest Money Deposit

- 7.1.1. The Bidder shall submit the Earnest Money Deposit (EMD) of requisite value in the form of crossed Demand Draft drawn in favour of '**M.P. Urja Vikas Nigam Ltd.**', payable at Bhopal; OR in the form of F.D.R. in favour of '**M.P. Urja Vikas Nigam Ltd. Bhopal**' - A/C of the Bidder, from any Nationalized /Scheduled Bank (duly discharged), of equivalent amount, valid up to 6 months. The Bid without the correct amount of EMD shall be rejected. Bidder(s) bidding for more than one Project, shall submit EMD of a value equivalent to all Projects bid for.
- 7.1.2. The request for adjustment of earlier dues in place of EMD will not be entertained.
- 7.1.3. EMD of Successful Bidder shall be returned after it furnishes CPG & POG of requisite value.
- 7.1.4. No interest will be paid on the earnest money.
- 7.1.5. In case if a Bidder is found ineligible at the time of opening the Bid, the EMD of the ineligible Bidder(s) shall be returned within 2 months after declaration of final results, after approval from competent authority of MPUVNL. No interest will be paid on the earnest money.
- 7.1.6. Forfeiture of EMD - It should be clearly understood that the EMD of Bidder will be forfeited if:
- a) A Successful Bidder fails to accept and execute the Agreement to the satisfaction of MPUVNL, if it is placed within the Bid validity / extended validity period;
  - b) Any Bidder withdraws its Bid during the Bid validity period.
- 7.1.7. Decision of Managing Director, MPUVNL will be final and binding on the Bidder.

### 7.2. Contract Performance Guarantee

- 7.2.1. Successful Bidder shall be required to submit, immediately after award of the contract, i.e. at the time of signing of Agreement, a Contract Performance Guarantee (CPG) (of value 10% of total project cost) in the form of Bank Guarantee valid up to successful commissioning and Performance Guarantee Testing (PGT) of the project, valid up to 6 months after scheduled completion

period of the project (For example, if schedule completion period of a DDG project is 9 months, CPG shall be valid up to 15 months).

7.2.2. CPG shall be forfeited by MPUVNL in case of non-performance of the Contract by Successful Bidder, including, inter alia:

- a) When Successful Bidder fails to commence the Work within timelines specified in RfP or withdraws immediately after signing of the Agreement;
- b) When Successful Bidder fails to complete the Work as per timelines or any extension in timelines provided by MPUVNL;
- c) When Successful Bidder commits any material breach of the Contract during/ before commissioning of the Project;
- d) When Successful Bidder fails to make timely payments of any penalty/ loss/ outstanding amount, payable by the Successful Bidder to MPUVNL, due on it during/ before commissioning of the Project;
- e) When CPG is revoked, liquidated damages shall not be imposed on the Successful Bidder.

7.2.3. If not revoked earlier for non-performance of the Contract by Successful Bidder, CPG shall be returned to Successful Bidder after successful completion of Performance Guarantee Testing of the Project subject to the unrecovered penalty/ charges, if any.

### 7.3. **Project Operation Guarantee**

7.3.1. Successful Bidder shall also be required to submit immediately at the time of award of contract, i.e., at the time of signing of Agreement, a Project Operation Guarantee (POG) (of value 20% of total project cost), in the form of Bank Guarantee valid up to 60 months from scheduled date of commissioning of project (For example, if schedule completion period of a DDG project is 9 months, CPG shall be valid up to 9+60 months). POG shall be returned to the Successful Bidder on successful completion of five (5) years O&M of the Project from the date of commissioning of the Project.

7.3.2. In case of non-performance of the Contract by Successful Bidder, POG shall be forfeited by MPUVNL:

- a) When Successful Bidder fails to perform O&M at any point of time within the prescribed period of 5 years;
- b) When any penalty/ recoverable amount before Project commissioning is not

recovered, even after revocation of CPG;

- c) When Successful Bidder commits any material breach of the Contract during O&M period of 5 years post commissioning of Project.

7.3.3. If not revoked earlier for non-performance of the Contract, POG shall be returned to Successful Bidder on completion of 5 years' O&M period.

## 8. SUBMISSION OF BID

### 8.1. Online submission:

- a) Folder A:
  - a. Scanned copies of RfP fees [of value equivalent to Project(s) Bid for] and EMD [of value equivalent to Project(s) Bid for]
  - b. Summary of Projects (Table 6: Summary of Projects for which Bids submitted)
  - c. Preference of Projects (Table 7: Preference among the Projects applied for)
- b) Folder B:
  - a. Experience certificates as per technical eligibility requirement
  - b. Certificates as per commercial eligibility requirement
- c) Folder C:
  - a. Financial Bid of the Bidder (duly encrypted)

8.2. **Physical Submission (Technical bid):** It shall consist of 2 envelopes as below:

8.2.1. **Envelope-A:** It should be super-scribed “EMD & RfP fees for Project/ Projects against RfP no. MPUVNL/DDG/Tender/2015-16/3171, Dated 24/03/2016” and should contain the following documents:

- a) Original EMD for value equivalent to Project(s) for which the Bidder is bidding
- b) Original demand draft towards RfP fees for value equivalent to Project(s) for which Bidder is bidding
- c) A table containing the details of Bid(s) submitted by Bidder, as shown below:

*Table 6: Summary of Projects for which Bids submitted*

Item No. as per RfP	Project no. as per RfP	Name of the Village	Block	District	Capacity in kW	EMD amount in INR	RfP Fees (INR)	MAAT requirement as per RfP qualification criteria (INR Lakh)
1								
2								
3								
4								





(in the lead partner's name in case of a JV) and attached test certificate must be kept valid up to the period of the contract.

- e) Copy of Registration Certificate with relevant Department of the State/Central Govt.
- f) Bidder will have to submit copy of the latest valid TIN, Service tax no. (ST-2) PAN, CST, Registration certificate from the concerned sales tax/commercial tax /Service tax /Income Tax Department along with its Bid.
- g) Certificates as per criteria prescribed under General Criteria section of this RfP should be provided by the Bidder along with current status of the same.
- h) RfP duly signed on all pages with seal affixed.

8.2.3. These two envelopes (Envelop-A & Envelop-B) should be placed in a third bigger envelope super scribed "RfP No. MPUVNL/DDG/Tender/2015-16/3171, Date 24/03/2016", and should also be properly sealed and addressed to the Executive Engineer (DDG), Urja Bhawan, near - 5 no. Bus stop, Shivaji Nagar, Bhopal – 462016

8.2.4. The Technical Bid (Hard copy) of Bidder should reach the abovementioned office on or before 20/04/2016, failing which the Bid shall not be considered for evaluation.

## 9. INSTRUCTIONS TO BIDDER

- 9.1. Successful Bidder shall implement the Project on Build, Operate, and Maintain & Transfer (BOMT) basis. The Bidder shall Operate & Maintain the plant for five (5) years and hand it over to the Implementation Agency or as decided by the State Government in good working condition at the end of this period. All the replaced parts will be handed over to the Implementation Agency or as decided by the State Government.
- 9.2. Successful Bidder shall be responsible for collecting tariff from villagers as decided by MPUVNL. Tariff to be collected by the Successful Bidder is as follows:

Household	BPL	INR 15 per month
	Non-BPL	INR 30 per month
Non-Household	Street lights	INR 20 per month
	Community building	INR 55 per month
	Atta Chakki	INR 1500 per month
	Water pumping	INR 800 per month

- 9.3. Bid is being called in two parts: one part covering Technical Bid and another covering Financial Bid. The Financial bid of a Project will be evaluated only after Bidder qualifies in the Technical Bid evaluation.
- 9.4. General instructions
- If grid power reaches the village(s) covered under this RfP at any point of time during five (5) years from the date of Agreement, then the power produced from the DDG Project can be exported to the grid as per framework evolved by Madhya Pradesh Electricity Regulatory Commission pursuant to provisions of National Tariff Policy 2016 and its modifications from time to time.
  - The Successful Bidders for this RfP will require ensuring full compliance of specifications and standards annexed herein; and generation of electricity as per DPR and design submitted by them.
  - Bidder are advised to visit all the Sites for which they desire to quote the Bid and do field survey before Bid submission.
  - Financial bid quoted must be firm and fixed for design, supply, installation, commissioning & operation for five (5) years on BOMT basis (as per

financial bid) including packing, forwarding, insurance, taxes & duties etc.  
No price variation will be allowed.

- e) Prices shall be mentioned in Indian Rupees.
- f) All pages of the RfP and all other supporting documents must be duly signed with office stamp/seal affixed in token of acceptance, failing which the Bid shall not be considered valid.
- g) Income Tax clearance certificate from the Income Tax Department and Commercial Tax/Tax clearance certificate issued by Commercial Tax Officer should be attached with the Bid, if applicable.
- h) The Bidder shall keep his financial bid valid initially for a period of one hundred & twenty (120) days from the date of opening of the financial bid.
- i) Upon selection, the Successful Bidder shall submit a finalized list of equipment containing terms and conditions, specifications, design and make of material, inspection clause etc. within fifteen (15) days of signing the Agreement. No deviation shall be allowed after submission of this finalized list within the stipulated period of time.
- j) The Bidders are required to carefully study all the conditions of the RfP, the enclosed specifications and the relevant provisions of REC norms, before submission of their Bid. The technical particulars of the materials offered must comply with the latest standards and specifications of MNRE.
- k) No new partner/ partners shall be accepted in the firm/ company or the Bid in respect of the Work without prior approval of MPUVNL. New partner/ partners would have to fulfil the technical and commercial criteria and agree to abide by all terms and conditions of the Agreement and submit to MPUVNL a written mutual agreement to this effect.
- l) Direct or indirect canvassing on the part of the Bidder or his/ her representatives will lead to disqualification.
- m) Bidders must mention their financial bids, separately for each Project, online only. The financial bid should be firm and fixed, for five (5) years, for design, supply, installation, commissioning and operation of DDG-SPV on BOMT basis including:
  - i. Packing, forwarding, loading, unloading, transportation and insurance charges etc.;
  - ii. Storage and maintenance of requisite inventory of spare parts to

rectify and make DDG system operational within specified timeframe;

iii. Taxes and duties as applicable in the state of supplier;

iv. Taxes and duties applicable in M.P.

n) No Bidder applying individually or as a member of JV, as the case may be, can be member of another JV.

9.5. For quality control of plant and equipment supplied by the Successful Bidder, a three-tier quality control mechanism will be followed as per REC guidelines:

9.6. First Tier

a) Third party inspection by SGS/ RITES/ MITCON of all the components such as solar module, battery, power conditioning unit, cables etc. shall be mandatory for each lot at the time of dispatch / installation in accordance with the requirement of terms of reference of REC/MNRE/BIS guidelines and specifications at the Contractor's cost. This inspection will cover all the villages of each Project.

9.7. Second Tier

a) Rural Electrification Corporation will get the inspection done of the works/materials from its non-field staff and by outsourcing it. REC may outsource it to retired employees of State Electricity Boards/State Utilities/CPSUs. All such reports should be organized and analyzed by REC through the project implementation. These individuals would be designated as REC Quality Monitors (RQM). The inspection will cover quality checks at pre-shipment stage at the vendors' outlet of major materials and 10% villages on random sample basis.

b) In addition to above, complete system after installation at various places in MP as specified in the RfP shall be tested after commissioning in accordance with NIT conditions and required specifications duly amended as on date of opening of financial Bid by BEE certified auditors of MPUVNL.

9.8. Third Tier

a) Independent Evaluators (Individuals/Agency) will be engaged by the Ministry of Power for evaluation, at random, of supply and erection of the project under the programme. These persons would be designated as

National Quality Monitors (NQM). Evaluation will cover 1% villages. They shall also report on the general functioning of the Quality Control mechanism in the District.

- b) The Monitors shall submit their report to the Ministry. The reports of the NQMs will be sent by REC to the RQM for appropriate action within a period to be specified. In case quality check by RQM or NQM reveals 'unsatisfactory' Work, the Contractor will replace the material or rectifies the workmanship (as the case may be) within the time period stipulated. In respect of NQM Reports, the REC Quality Coordinator shall, each month, report on the action taken on each of the pending Reports. All works rated 'unsatisfactory' shall be re-inspected by RQM or NQM after a rectification report has been received from the Contractor to implementing agency and REC Quality Coordinator. REC will designate an Executive Director as in charge of the Monitoring system.
- c) Recurrent adverse reports about quality of Work in a given District / State might entail suspension of the program in that area till the underlying causes of defective Work have been addressed.
- d) The REC Quality Coordinator / Third party inspection unit shall be the authority to receive and inquire into complaints / representations in respect of quality of Works and they would be responsible for sending a reply after proper investigation to the complainant within 30 days. The REC for this purpose, shall ensure the following:-
  - i. The name, address and other details of the REC Quality Coordinator / third party inspection unit will be given adequate publicity in the State (including RfP notices, websites, etc. as the authority empowered to receive complaints.
  - ii. All complaints shall be acknowledged on receipt (giving registration no.) and likely date of reply shall be indicated. On receipt of the report, the complainant shall be informed of the outcome and the action taken / proposed.
  - iii. Complaints received through the Ministry of Power, REC will normally be sent to the REC Quality Coordinator for enquiry and necessary action. In case report from an RQM is desired, this shall be furnished within the time specified. In case an

adequate response is not received within the stated time schedule, the REC may depute an NQM and further processing will be done only on the basis of NQM report.

- iv. The RQC shall make a monthly report to the REC (in a prescribed format) and the status of action on complaints shall be discussed in the District Committees.

## 10. TECHNICAL SPECIFICATIONS

- 10.1. SPV modules and BOS including power conditioners/inverter, charge controller/ MPPT units, storage batteries, cables used in SPV power generation plant should strictly have minimal technical requirement/ standards as per latest MNRE guidelines. Technical specifications defined in this section notwithstanding, the most recent technical specifications of MNRE/ REC, till the time of submission of Bid, shall supersede the specifications defined in this Bid document and Bidders shall have to abide by the same. The Bidders are advised to keep themselves updated regarding the same.
- 10.2. If specifications of any component are not provided/mentioned in RfP documents, the same shall be as per BIS/ IS/ IEC specifications applicable at the time of submission of Bid.
- 10.3. **Technical specification for solar photo voltaic modules & cells**
  - 10.3.1. Mono/multi-crystalline Silicon solar photo-voltaic modules:
    - a) The SPV modules must conform to the latest edition of any of the following IEC/equivalent BIS standards for SPV module design qualification and type approval:
      - i. Crystalline silicon terrestrial SPV modules - IEC 61215/IS14286
      - ii. Thin film terrestrial SPV modules - IEC 61646/Equivalent IS (Under Dev.)
      - iii. Concentrator SPV modules & assemblies - IEC 62108
      - iv. For the SPV modules to be used in a highly corrosive atmosphere throughout their lifetime, they must qualify to IEC 61701/IS 61701
  - 10.3.2. In addition, the modules must conform to IEC 61730 Part 1-requirements for construction & Part 2- requirements for testing. For safety qualification or equivalent IS shall be applicable.
- 10.4. **Other details of technical specification solar photo voltaic modules**
  - 10.4.1. SPV modules used in solar power plants / systems must be warranted for their output peak watt capacity, which should not be less than 90% at the end of 12 years and 80% at the end of 25 years. All specifications refer to the Standard Test



Conditions (STC). Above modules should be as per latest MNRE / IEC norms & tested at test centres accredited by MNRE/ NABL.

- 10.4.2. The panel should be supplied with a plastic coated thermal sticker to be affixed at the back side of SPV Module which contains the matter in Hindi about warning against illegal use of SPV module, & MPUVNL mono with the remark “Manufactured for MPUVNL”.
- 10.4.3. Protective devices against surges at the SPV module shall be provided. Low voltage drop bypass diodes shall be provided.
- 10.4.4. PV modules must be tested and approved by one of the IEC authorized test centres.
- 10.4.5. The module frame shall be made of corrosion resistant materials, preferably having anodized aluminium.
- 10.4.6. The Bidder shall carefully design and accommodate requisite numbers of the modules to achieve the rated power in his Bid.
- 10.4.7. Other general requirement for the PV modules and subsystems shall be the following:
  - a) The rated output power of any supplied module shall have tolerance of +/- 3%.
  - b) The peak-power point voltage and the peak-power point current of any supplied module and/or any module string (series connected modules) shall not vary by more than 2 (two) percent from the respective arithmetic means for all modules and/or for all module strings, as the case may be.
  - c) The module shall be provided with a junction box with either provision of external screw terminal connection or sealed type and with arrangement for provision of by-pass diode. The box shall have hinged, weather proof lid with captive screws and cable gland entry points or may be of sealed type and IP-65 rated.
  - d) IV curves at STC should be provided by Bidder.
- 10.4.8. Identification and traceability
  - a) Each SPV module must use a RF identification tag (RFID). RFID shall be mandatorily placed inside the module laminate. RFID must contain the following information:
    - i. Name of the manufacturer of SPV Module
    - ii. Name of the manufacturer of solar cells

- iii. Month and year of manufacture (separately for solar cells and module)
- iv. Country of origin (separately for solar cells and module)
- v. I-V curve for the module
- vi. Peak Wattage,  $I_m$ ,  $V_m$  and PF for the module.
- vii. Unique Serial No and Model No of the module.
- viii. Date and year of obtaining IEC SPV module qualification certificate.
- ix. Name of the test lab issuing IEC certificate.
- x. Other relevant information on traceability of solar cells and module as per ISO 9000 series.

## 10.5. **Warranties**

### 10.5.1. Material Warranty:

- a) Material Warranty is defined as: The manufacturer should warrant the Solar Module(s) to be free from the defects and/or failures specified below for a period not less than five (5) years from the date of sale to the Bidder
- b) Defects and/or failures due to manufacturing
- c) Defects and/or failures due to quality of materials
- d) Non conformity to specifications due to faulty manufacturing and/or inspection processes. If the solar Module(s) fails to conform to this warranty, the manufacturer will repair or replace the solar module(s).

## 10.6. **PCU/ Inverter:**

- 10.6.1. As SPV array produces direct current electricity, it is necessary to convert this direct current into alternating current and adjust the voltage levels to match the grid voltage. Conversion shall be achieved using an electronic Inverter and the associated control and protection devices. All these components of the system are termed the "Power Conditioning Unit (PCU)". In addition, the PCU shall also house MPPT (Maximum Power Point Tracker), an interface between Solar PV array & the Inverter, to the power conditioning unit/inverter should also be DG set interactive. The power conditioning unit should also have provision of charge controller in case of systems with battery backup. If necessary. Inverter output should be compatible with the grid frequency. Typical technical features of the

inverter shall be as follows:

Switching devices	IGBT/MOSFET
Control	Microprocessor /DSP
Nominal AC output voltage and frequency (In case single phase inverters are offered, suitable arrangement for balancing the phases must be made)	415V, 3 Phase, 50 Hz
Grid Frequency Synchronization range	+ 3 Hz or more
Ambient temperature considered	-20o C to 50o C
Humidity	95 % Non-condensing
Protection of Enclosure	IP-20(Minimum) for indoor. IP-65(Minimum) for outdoor.
Grid Frequency Tolerance range	+ 3 or more
Grid Voltage tolerance	20% & + 15 %
No-load losses	Less than 1% of rated power
Inverter efficiency(minimum)	>93% ( In case of 10kW or above )
Inverter efficiency (minimum )	> 90% (In case of less than 10 kW)
THD	< 3%
PF	> 0.9

- 10.6.2. Three phase PCU/ inverter shall be used with each power plant system (10kW and/or above) but In case of less than 10kW single phase inverter can be used.
- 10.6.3. PCU/inverter shall be capable of complete automatic operation including wake-up, synchronization & shutdown.
- 10.6.4. The output of power factor of PCU inverter is suitable for all voltage ranges or sink of reactive power, inverter should have internal protection arrangement against any sustainable fault in feeder line and against the lightning on feeder.
- 10.6.5. Built-in meter and data logger to monitor plant performance through external computer shall be provided.
- 10.6.6. The power conditioning units / inverters should comply with applicable IEC/ equivalent BIS standard for efficiency measurements and environmental tests as per standard codes IEC 61683/IS 61683 and IEC 60068-2(1,2,14,30) /Equivalent BIS Std.
- 10.6.7. The charge controller (if any) / MPPT units environmental testing should qualify IEC 60068-2(1, 2, 14, 30)/Equivalent BIS STD. The junction boxes/ enclosures should be IP 65(for outdoor)/ IP 54 (indoor) and as per IEC 529 specifications.

10.6.8. The PCU/ inverters should be tested from the MNRE approved test centres / NABL /BIS /IEC accredited testing- calibration laboratories. In case of imported power conditioning units, these should be approved by international test houses.

10.7. **Data acquisition system/ plant monitoring**

10.7.1. Successful Bidder shall install appropriate time-of-day (ToD) meter at Site to keep record of 15- minute time block-wise generation and supply of electricity. For this purpose, the standard and specifications of the meter shall be at par with those recommended by electricity distribution companies of Madhya Pradesh suitable for generation and supply from plants of the size of Project.

10.7.2. The meter should have capacity to store 15-minute time block-wise data on generation and supply for 40-45 days and day-wise data on generation and supply for 6 months in such a form as to help Engineer download it using MRI.

10.8. There should be an easily accessible emergency stop switch.

10.9. **Protection and safety**

10.9.1. Specifically the inverter should be three phase static solid state type power conditioning unit. Both AC & DC lines shall have suitable MCB/MCCB and Contractors to allow safe start up and shut down of the system. PCU should have protections for overload, surge current, high Temperature, over / under voltage and over / under frequency & reverse polarity. The complete operation process & safety instructions should printed on the sticker & suitably pasted on the PCU. The inverter shall have provision for input & output isolation (automatic & manual).

10.9.2. Each solid state electronic device shall have to be protected to ensure long life of the inverter as well as smooth functioning of the inverter. Inverter should have safety measures to protect inverter from reverse short circuit current due to lightening or line faults of distribution network.

10.9.3. PCU should be suitably placed in control room on a suitable wooden or concrete platform with complete safety measure as per norms.

10.10. **Battery Bank**

10.10.1. The tubular lead acid batteries must be conforming to the programme of Ministry of New and Renewable Energy. The battery bank capacity shall be of different capacities as specified in the price schedule, of tubular lead acid (Flooded electrolyte type) Battery (2 volt cells). The general specifications shall be as

under:

- a) The battery bank shall consist of required number of deep-discharge electrochemical storage cells, suitably interconnected as required. Parallel connections of storage cells will be discouraged.
- b) The cells shall be capable of deep discharge and frequent cycling with long maintenance intervals and high columbic efficiency. Automotive or car batteries shall not be accepted.
- c) The nominal voltage and capacity of the storage bank shall be selected and specified by the supplier in the Bid.
- d) The self-discharge rate of the battery bank or individual cell shall not exceed four (4) percent per month.
- e) The permitted maximum depth of discharge (DOD), shall not be more than 80%.
- f) The cells shall include explosion proof safety vents.
- g) The cells shall include the required number or corrosion resistant inter-cell required chemicals electrolyte packed in separate containers. Full instructions and technical details shall be provided for electrolyte filling and battery recharging at site for the first time.
- h) In case of flooded electrolyte Cells, the cells shall preferably be supplied in dry charged condition, complete with all required chemicals electrolyte packed in separate containers. Full instructions and technical details shall be provided for electrolyte filling and battery recharging at site for the first time.
- i) If the cells are supplied in uncharged conditions, then the supplier shall provide full instructions for first time charging including, but not limited to, the following:
- j) Suitable number of corrosion resistant and acid-proof storage racks shall be supplied to accommodate the cells tester and other accessories. The rack design shall be such that minimum space is required, without any way obstructing the maintenance requirements. For metallic racks, standards specified for control panel enclosures and other metallic shall govern.
- k) All the connectors should be insulated except for the end portions.

#### 10.11. **Battery Rack**

10.11.1. Battery rack should be of matured treated Salwood (In case of flooded electrolyte Cells) duly painted single tier or two tier (if required) or epoxy coated MS structure (for VRLA GEL Cells) with rubberized coating on battery runners. Placement of battery should be such that maintenance of the battery could be carried out easily. The non-reactive acid proof mat should be provided to cover the entire floor space covering the battery rack. Battery rack should compulsorily be placed on the appropriate rubbers pads to avoid the contact of racks with the floor, and to protect wooden rack particularly from termite.

**10.12. Integration of SPV power plant with grid:**

10.12.1. The output power from SPV would be fed to the inverters which converts DC produced by SPV 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

10.12.2. System shall be out of synchronization and shall be disconnected from the grid. The supply would be resumed from battery bank or once the DG set comes into service PV system shall again be synchronized with DG supply and load requirement would be met to the extent of availability of power. 4 pole isolation of inverter output with respect to the grid/ DG power connection need to be provided.

**10.13. Array structure**

10.13.1. Hot dip galvanized MS mounting structures may be used for mounting the modules/ panels/arrays. Each structure should have angle of inclination as per the site conditions to take maximum insolation. However to accommodate more capacity the angle inclination may be reduced until the plant meets the specified performance ratio requirements.

10.13.2. The Mounting structure shall be so designed to withstand the speed for the wind zone of the location where a PV system is proposed to be installed (for minimum wind speed of 150 km/ hour). Suitable fastening arrangement that do not require drilling in roof tops should be adopted to secure the installation against the specific wind speed.

10.13.3. The mounting structure steel shall be as per latest IS 2062: 1992 and galvanization of the mounting structure shall be in compliance of latest IS 4759.

10.13.4. Structural material shall be corrosion resistant and electrolytically compatible with the materials used in the module frame, its fasteners, and nuts and bolts.

Aluminium structures also can be used, that can withstand the wind speed of respective wind zone. Necessary protection towards rusting need to be provided, either by coating or anodization.

10.13.5. The fasteners used should be made up of stainless steel. The structures shall be designed to allow easy replacement of any module. The array structure shall be so designed that it will occupy minimum space without sacrificing the output from the SPV panels

10.13.6. Regarding civil structures the Bidder need to take care of the load bearing capacity of the roof and need to arrange suitable structures based on the quality of roof.

10.13.7. The total load of the structure (when installed with PV modules) on the terrace should be less than 60 kg/m<sup>2</sup>.

10.13.8. The minimum clearance of the structure from the roof level should be 300 mm

#### 10.14. **Lightning and over voltage protection**

10.14.1. The SPV power plants shall be provided with lightning & overvoltage protection. The main aim in this protection shall be to reduce the over voltage to a tolerable value before it reaches the PV or other sub system components. The source of over voltage can be lightning, atmosphere disturbances etc. The entire space occupying the SPV array shall be suitably protected against Lightning by deploying required number of Lightning Arrestors. Lightning protection should be provided as per IEC 62305 standard. The protection against induced high-voltages shall be provided by the use of metal oxide varistors (MOVs) and suitable earthing such that induced transients find an alternate route to earth.

#### 10.15. **Surge Protection**

10.15.1. Internal surge protection shall consist of three MOV type surge-arrestors connected from +ve and –ve terminals to earth (via Y arrangement)

#### 10.16. **Earthing protection**

10.16.1. Each array structure of the PV yard should be grounded/ earthed properly as per IS: 3043-1987. In addition the lightning arrester/masts should also be earthed inside the array field. Earth Resistance shall be tested in presence of the representative of Department as and when required after earthing by calibrated earth tester. PCU, CAD and DC DB should also be earthed properly.

10.16.2. Earth resistance shall not be more than 5 ohms. It shall be ensured that all the earthing points are bonded together to make them at the same potential.

**10.17. Array Junction Box (JAB)**

10.17.1. This shall consist of suitable polycarbonate / powder coated metal casting. Array junction box allows several photovoltaic strings (from 8 to 32) to be connected in parallel. The total DC power is then distributed to the photovoltaic inverter. It includes photovoltaic string protection, overvoltage protection and a DC output switch disconnecter. In this box/boxes, a separate arrangement, consisting of SPDs and DC connector of suitable specifications for array, shall be made to help it with stand respective flow of current.

**10.18. DCDB**

10.18.1. DCDB shall be provided with the purpose of providing the option for isolating the battery bank. There shall be copper bus bars of suitable rating and can either be independent or integrated in PCU.

**10.19. AC Distribution Board(ACDB)**

10.19.1. This shall consist of box of suitable powder coated metal casting. One feeder per phase shall be provided in ACDB with MCB of suitable capacity installed at each feeder in the ACDB. One electronic energy meter, ISI make, single / three phase (as per requirement) of good quality shall also be installed in ACDB suitable placed to measure the consumption of power from SPV Power Plant. Proper rating MCB shall be installed at every feeder (in case of single phase output also, there shall be three feeders) to protect feeders from the short circuit current as per the requirement of the site & instructions of MPUVNL. A separate dedicated feeder from conventional line to PCU as well as ACDB should also be installed, as per MPUVNL's instruction.

10.19.2. A separate changeover switch of proper rating should also be suitably installed in the ACDB to isolate the existing connected load from solar system and cater the power to the existing load from convention power (Mains) in case of emergency. ACDB should be connected between PCU and Load.

**10.20. Battery protection panel (BPP)**

10.20.1. This shall consist of box of suitable powder coated metal casting. BPP should be installed to make provision to isolate the battery bank. Proper rating HRC fuse



and MCCB/isolator for DC application should be suitably installed. BPP should be connected between battery bank and DCDB. This can be integrated in the PCU.

#### 10.21. **Danger Boards**

10.21.1. Danger boards should be provided as and where necessary as per IE Act/IE Rules as amended up to date, as per the instructions of MPUVNL and affixed at various appropriate locations.

#### 10.22. **Cables/ wires**

10.22.1. Cables of appropriate size to be used in the system shall have the following characteristics:

- a) Shall meet IEC 60227/IS 694, IEC 60502/IS1554 standards
- b) Temp. Range:  $-10^{\circ}\text{C}$  to  $+80^{\circ}\text{C}$ .
- c) Voltage rating 660/1000V
- d) Excellent resistance to heat, cold, water, oil, abrasion, UV radiation
- e) Flexible
- f) Sizes of cables between array interconnections, array to junction boxes, junction boxes to Inverter etc. shall be so selected to keep the voltage drop (power loss) of the entire solar system to the minimum. The cables (as per IS) should be insulated with a special grade PVC compound formulated for outdoor use.
- g) Cable Routing/ Marking: All cable/wires are to be routed in a GI cable tray and suitably tagged and marked with proper manner by good quality ferule or by other means so that the cable easily identified.
- h) The Cable should be so selected that it should be compatible up to the life of the solar PV panels i.e. 25 years.
- i) The ratings given are approximate. Bidder to indicate size and length as per system design requirement. All the cables required for the plant provided by the Bidder. Any change in cabling sizes if desired by the Bidder/approved after citing appropriate reasons. All cable schedules/layout drawings approved prior to installation.
- j) 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 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

- k) 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.
- l) The size of each type of DC cable selected shall be based on minimum voltage drop however; the maximum drop shall be limited to 1%.
- m) The size of each type of AC cable selected shall be based on minimum voltage drop however; the maximum drop shall be limited to 2 %.

**10.23. Junction Boxes (JBs):**

10.23.1. All the JB's/ enclosures for inverters/ charge controllers/ luminaries should be IP 54(for outdoor)/ IP 21(for indoor) shall be as per IEC 529 Junction Boxes for Cables from Solar Array. The junction boxes shall be made up of FRP (Hensel make or equivalent make)/PP/ABS (with prior approval of MPUVNL) with dust, water and vermin proof. It should be provided with proper locking arrangements.

**10.24. Power distribution network**

10.24.1. Supply, installation and commissioning of Power Distribution Network (PDN) at the site, which shall operate on the electrical power produced by the SPV Power plant, shall fulfil the below mentioned requirement as per standards/ specifications mentioned therein:

- a) Installation of minimum two domestic light points - using high power factor integrated CFL of 11 W (B22BC/E27ES) or equivalent LED lamp & one socket point (60W) with proper switching arrangement, in every selected house hold of the village with complete fittings of wiring in proper manner within conduit installed on saddle / casing capping with prior approval of MPUVNL. In house wiring should be done with Heavy duty wire/cable. PVC insulated twisted bright annealed copper wire of 1.5 sq. mm (3core) or 2.5 sq. mm (2core) size.
- b) Every light point & socket point should be provided with individual switch of 6A rating and should be of reputed make.
- c) Installation of domestic connection to every household shall be through

service pipe as per the standard electrical fittings. It shall use cable of aluminium wire PVC insulated sheathed and single core cable (IS694/1990 of 6 sq.mm) of reputed make.

- d) Installation of appropriate load limiting switch / fuse for controlling domestic / street lighting connections, as per requirement of the site.
- e) Supply, installation & grouting of MS Poles as per MP DISCOM norms (or if the Bidder has better drawing he may attach the same with additional offer) for overhead / underground distribution network of cables at village/site. All poles/street lights should be numbered by oil paint in the specified format of MPUVNL. Two numbers of MS sign boards (each of 2' x 2.5' size) has to be supplied, painted (in the same manner as pole painting instructions) & clamped on the poles of the PDN as per MPUVNL's instructions.
- f) Supply, installation & commissioning of overhead cabling from pole to pole & pole to house. Cabling between pole to pole should be done as per standard norms of MP Discom.
- g) Supply, installation & commissioning of cabling from pole to pole & pole to house. Cabling between pole to pole/ pole to house can also be done as per Bidder's design with prior approval of MPUVNL.
- h) Supply, installation & commissioning of required numbers of poles without Street light luminary. The Bidder however will be required to mount the light fixture provided by the beneficiary or the state at no additional cost.
- i) Supply & installation of earthing kits, stay wire sets with complete set for poles etc. as per norms where ever required.

Note - All cables should be of copper, tested for general test and measuring method and PVC insulated cables as per IEC 60227 / IS 694 and IEC 60502 / IS 1554. All the materials to be consumed in the power distribution network should be of best quality confirming to specification and should be with prior approval of MPUVNL

#### 10.25. **Operation & Maintenance:**

Operation & maintenance of SPV Power Plant along with PDN system installed at site has to be done for a period of five (5) years from the date of commissioning of the Project.

## 11.ANNEXURES

### ANNEXURE 1

#### COVERING LETTER

(On the letterhead of the Company)

From:  
(Full Name & Address of the Bidder)  
M/s

The Executive Engineer (DDG),  
M.P. Urja Vikas Nigam Limited,  
Urja Bhawan, Near 5 No. Bus Stop,  
Main Road No.2,  
Bhopal – 462 016.

Sub: Offer in the response to RfP No MPUVNL/DDG/ Tender/2015-16/..... Dated  
24/03/2016

for design, supply ,installation, commissioning and operation for 5 year of decentralized solar  
PV power generating plant in the .....village (as mentioned in the RfP) of  
.....district on BOMT basis.

Sir,  
We hereby submit our Bid in full compliance with terms and conditions of the attached RfP.  
The Bid is submitted in sealed envelope super scribed as Bid for design, supply ,installation,  
commissioning and O&M for 5 year of solar photovoltaic decentralized distributed  
generating system (DDG System) in the .....village (as mentioned in the tender)  
of .....District , on BOMT basis

Yours faithfully,

---

(SIGNATURE OF AUTHORIZED SIGNATORY)

Name:

Designation:

Company Seal

**ANNEXURE 2**  
**UNDERTAKING**

(On the letterhead of the Bidder)

I \_\_\_\_\_, S/o Shri \_\_\_\_\_  
resident of \_\_\_\_\_ being Director/ proprietor / partner / of M/s.

\_\_\_\_\_

CST registration No. is \_\_\_\_\_,  
Income Tax PAN No. is \_\_\_\_\_,  
Service Tax No. is (ST-2) \_\_\_\_\_,  
And TIN No. is \_\_\_\_\_

Hereby give consent to the Madhya Pradesh UrjaVikas Nigam Ltd. Bhopal to deduct from our bills whatever amount payable by us on account of the CT / VAT and IT dues etc., if any, demanded by the concerned departments.

For and on behalf of the Bidder

Place:

Dated:

Signature: \_\_\_\_\_

Name: \_\_\_\_\_

Post: Director/ Proprietor/Partner

Seal

### ANNEXURE 3

#### EXPERIENCE SUMMARY

(For all relevant project(s) completed. Please enclose work completion certificate for all projects being shown in experience)

Sl. No	Particulars	Project 1	Project 2	Project 3
1.	Name of organization which has awarded the works.			
2.	Name of the location of the work.			
3.	Total contract amount.			
4.	Year of award.			
5.	Detail of involvement in work as an Individual or as a company.			
6.	Was the work satisfactorily completed within stipulated period?			

Note:

All the above mentioned information must be supported by relevant documents and certificates.

---

(SIGNATURE OF AUTHORIZED SIGNATORY)

Name:

Designation:

Company Seal:

## ANNEXURE 4

### DECLARATION BY THE BIDDER

Regarding RfP No. : MPUVNL/DDG/ Tender/2015-16/....., Date **24/03/2016**

#### DECLARATION

I/We \_\_\_\_\_  
\_\_\_\_\_ (hereinafter referred to as the Bidder) being desirous of bidding for the Work under the above mentioned RfP have carefully read and understood the enclosed terms and conditions of the RfP and agreed to abide by them. I / we have carefully noted that any counter condition or additional condition/ deviation put forth by me / us **is liable for summarily rejecting our Bid(s) which shall only be considered with MPUVNL's terms and conditions.**

I / we do hereby declare that

1. The Bidder is fully aware of local conditions and all the requirements of the RfP documents and agrees with all provisions of the RfP documents. Bidder has quoted for Project(s) after conducting due diligence/ survey of the indicated Project Site(s).
2. The Bidder is capable of executing and completing the Project as required by the RfP;
3. The Bidder accepts all risks and responsibilities directly or indirectly connected with the performance of the Agreement/ Work;
4. The Bidder has no collusion with other Contractor/any employee of MPUVNL or any other person or firm in the preparation of the Bid;
5. The Bidder has not been influenced by any statement or promises of MPUVNL or any of its employees but only by the RfP documents;
6. The Bidder is financially solvent and sound to execute the Project;
7. The Bidder is sufficiently experienced and competent to perform the contract to the satisfaction of MPUVNL;
8. Bidder is familiar with all general and special laws, acts, ordinances, rules and regulations of the Municipal, District, State & Central Government that may affect the Work, its performance or personnel employed therein.
9. The Bidder fully meets all the eligibility requirements as specified in the RfP document.
10. I/we declare that our Firm/Company or any of our associate firms / companies has

not been black listed or otherwise debarred for any supply of goods/services or work by the Central Government, any of the State Governments or any public sector undertakings or any Govt. Company.

11. If this declaration is found to be incorrect or if any RfP condition is found violated by us, then without prejudice to any other action that may be taken, my/our EMD/ security money may be forfeited in full and the Bid, to the extent accepted, may be cancelled. The decision of MPUVNL shall be final and binding on all parties in this regard. The signature of our authorized representative is attested below.

\_\_\_\_\_  
Authorized Signatory

Name in Block Letters:

\_\_\_\_\_  
Signature  
Designation:

\_\_\_\_\_  
Signature of Authorized Representative

Attested

\_\_\_\_\_  
Signature of Authorized Signatory  
Designation:

\_\_\_\_\_  
Company Seal



## ANNEXURE 5

### FORMAT FOR BANK GUARANTEE FOR PERFORMANCE SECURITY

(Format for BG be submitted on Non-judicial Stamp Paper of appropriate value)

BANK GUARANTEE No. \_\_\_\_\_, amount of Bank Guarantee INR (in figure) (Rupees in words) covers from (DD/MM/YYYY) to (DD/MM/YYYY).

This Bank Guarantee made on \_\_\_\_\_ (Day) of \_\_\_\_\_ (Month) of \_\_\_\_\_ (Year) between \_\_\_\_\_ (hereinafter called the Guarantor) and M/s \_\_\_\_\_ (hereinafter called the Successful Bidder) in favour of M P Urja Vikas Nigam Ltd., Bhopal (hereinafter called the Implementing Agency) on the following Terms and Conditions:

Whereas, the Successful Bidder having entered into Agreement on \_\_\_\_\_ (Date) with the Implementing Agency (a copy of said Agreement has been received by Guarantor) and Successful Bidder having agreed to deposit performance Bank Guarantee of INR (in figure) (Rupees in words) in favour of the Implementing Agency in the form of Bank Guarantee, in token towards Design, Supply, Installation, Commissioning & operation of solar power plant on BOMT basis for 5 years from the date of Commissioning against Notice Inviting Tender (“NIT”) \_\_\_\_\_, dated \_\_\_\_\_, to the satisfaction of the Managing Director of the Implementing Agency for \_\_\_\_\_ years/months against the said Agreement.

Whereas the Guarantor further agree that the Managing Director of the Implementing Agency is competent to decide whether the execution of Design, Supply, Installation, Commissioning & operation of solar power plant on BOMT basis for 5 years from the date of Commissioning is as per terms & conditions of said NIT. Managing Director of Implementing Agency’s decision shall be binding on Guarantor.

Whereas the Guarantor further agree to pay immediately the amount Guaranteed within a period of one week of the same being demanded by the Implementing Agency with intimation to the Successful Bidder.

This Guarantee shall remain enforced and shall continue to be enforceable till \_\_\_\_\_, and shall be extended on receiving instructions from the Successful Bidder, with intimation to the Implementing Agency. However, the Bank Guarantee shall stand automatically enforceable for a period of further 90 days unless discharged by the Implementing Agency.

Whereas the Guarantor further agree that their liability under this Guarantee shall not be affected by any change in the Agreement or the terms and conditions between the Successful Bidder and the Implementing Agency without the consent or knowledge of the Guarantor or whatsoever.

Whereas the Guarantor further agree that Managing Director’s decision whether Successful Bidder has committed any breach or non-observance of the terms and conditions of the said Agreement shall be final and enough for Guarantors to make payment to the Implementing Agency.

Whereas the Guarantor further agree that the amount due or amounts of damage or loss caused to or suffered by Implementing Agency are binding on us and undertaking to pay the amount Guaranteed hereby or part thereof as required, immediately/within one week of the demand made by the Implementing Agency.

Whereas the Guarantor hereby undertakes not to revoke this Guarantee during its currency period except with the prior consent of the Implementing Agency in writing. However, unless a demand or claim is made in writing on or before the expiry of this Guarantee as mentioned above, the Guarantor shall be released and discharged from all liabilities there under.

Notwithstanding anything contained in foregoing our liability under this Guarantee is restricted to INR in figure (Rupees in words only). Bank Guarantee shall remain in force up to 90 days from the date of expiry of currency/extended period of the Bank Guarantee.

For, \_\_\_\_\_ Bank,

(Signature / Name of Bank Officer / Seal of Authorized Signatory)

## **ANNEXURE 6**

### **FINANCIAL ELIGIBILITY PARAMETERS OF BIDDER**

(Separate sheet should be filled for each company in case of JV)

### **DETAILS OF FINANCIAL ELIGIBILITY PARAMETERS OF THE BIDDERS FOR SOLAR PROJECT UNDER DDG PROGRAMME. THE BALANCE SHEETS OF FINANCIAL YEAR 2010-11, 2011-12, 2012-13, 2013-14 and 2014-15**

1. Name of the Company
2. Name of the Lead Company in case of JV
3. Name of the other Companies in case of JV

<b>S. No.</b>	<b>Financial Parameters</b>	<b>Year</b>				
		<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>
1	Turn over					

**Signatures and stamp of  
and Chartered Accountant  
With seal,**

**Membership No. & FR No.**

**Authorized Signatory  
seal of Bidder**

**Membership No.**

**ANNEXURE 7**

(Separate sheet should be filled for each company in case of JV)

**DETAILS OF FINANCIAL ELIGIBILITY PARAMETERS OF THE BIDDERS FOR SOLAR PROJECT UNDER DDG PROGRAMME. THE BALANCE SHEETS OF FINANCIAL YEAR 2010-11, 2011-12, 2012-13, 2013-14 and 2014-15**

1. Name of the Company
2. Name of the Lead Company in case of JV
3. Name of the other Companies in case of JV

S.No.	Financial Parameters	Year				
		2010-11	2011-12	2012-13	2013-14	2014-15
1	Turn over					

**Signatures and stamp of  
and Chartered Accountant**

**With seal,**

**Membership No. & FR No.**

**Authorized Signatory  
seal of Bidder**

**Membership No.**

**ANNEXURE 7 (A)**

**EXPERIENCE: TECHNICAL ELIGIBILITY CRITERIA FOR INDIVIDUAL FIRM**

	Generation		Transmission		Sub-transmission/ Distribution	
	No. of projects	Name of projects/ clients	No. of projects	Name of projects/ clients	No. of projects	Name of projects/ clients
Completed projects in last 7 years whose capacity was more than or equal to 80% of Project capacity for which bid is being placed						
Completed projects in last 7 years whose capacity was more than or equal to 50% of Project capacity for which bid is being placed						
Completed projects in last 7 years whose capacity was more than or equal to 40% of Project capacity for which bid is being placed						
Completed DDG projects in last 7 years whose capacity was more than or equal to the Project capacity for which bid is being placed						

1. Number of Projects for which Bid is submitted by Bidder \_\_\_\_\_ (in No.)
2. Total Project cost for which Bidder is placing Bid: \_\_\_\_\_ INR Lakh
3. Total Project capacity for which Bidder is placing Bid: \_\_\_\_\_ kWp
4. Maximum size of a Project for which Bidder is bidding \_\_\_\_\_ kWp
5. Minimum size of a Project for which Bidder is bidding \_\_\_\_\_ kWp

Total project capacity and total project cost means the sum of all the project capacities and all the project costs for which the Bidder is submitting Bid(s).

Bidder shall enclose proper supporting documents in favour of work experience as shown in the table above. If a Bidder is placing Bid(s) for more than one Project, only one set of supporting documents in favour of above declared work experience should be enclosed.

**ANNEXURE 7 (B)**

**EXPERIENCE: COMMERCIAL ELIGIBILITY CRITERIA FOR INDIVIDUAL FIRM**

	Generation		Transmission		Sub-transmission/ Distribution	
	No. of projects	Name of projects/ clients	No. of projects	Name of projects/ clients	No. of projects	Name of projects/ clients
Completed projects in last 7 years whose estimated cost was more than or equal to 80% of Project cost for which bid is being placed						
Completed projects in last 7 years whose estimated cost was more than or equal to 50% of Project cost for which bid is being placed						
Completed projects in last 7 years whose estimated cost was more than or equal to 40% of Project cost for which bid is being placed						

1. Number of Projects for which Bid is submitted by Bidder \_\_\_\_\_ (in No.)
2. Total Project cost for which Bidder is placing Bid: \_\_\_\_\_ INR Lakh
3. Total Project capacity for which Bidder is placing Bid: \_\_\_\_\_ kWp
4. Maximum size of a Project for which Bidder is bidding \_\_\_\_\_ kWp
5. Minimum size of a Project for which Bidder is bidding \_\_\_\_\_ kWp

Total project capacity and total project cost means the sum of all the project capacities and all the project costs for which the Bidder is submitting Bids.

Bidder shall enclose proper supporting documents in favour of work experience as shown in the table above. If a Bidder is placing Bid(s) for more than one Project, only one set of supporting documents in favour of above declared work experience should be enclosed.

## **ANNEXURE 8**

### **JOINT VENTURE AGREEMENT**

Joint Venture Agreement must be on Rs.250/- stamp paper and same must be duly notarized. Bidder must submit original copy of Joint Venture Agreement. Joint Venture Agreement must specify the under-mentioned conditions:

1. Lead member of Joint Venture.
2. Specified share of all the parties entering in the Joint Venture Agreement.
3. Joint Venture Agreement must continue till the completion of projects and same cannot discontinue till the completion of projects according to the terms and conditions of projects.
4. All the parties of Joint Venture Agreement shall be responsible to Implementing Agency in proportion to their equity commitment.
5. Lead member of Joint Venture must comply with all the statutory requirements i.e. Lead member of Joint Venture must have PAN, TIN, CST, ST, etc. registration and copy of same must be submitted as required and mentioned at other places of NIT.

**ANNEXURE 8 (A)**

**TECHNICAL ELIGIBILITY CRITERIA FOR JOINT VENTURE FIRM**

<b>Technical eligibility criteria (JV Firms)</b>	<b>Generation</b>		<b>Transmission</b>		<b>Sub-transmission/ Distribution</b>	
	No. of projects	Name of projects/ clients	No. of projects	Name of projects/ clients	No. of projects	Name of projects/ clients
Completed projects by any of JV partners in last 7 years whose capacity was more than or equal to 80% of Project capacity for which bid is being placed						
Completed projects by any of JV partners in last 7 years whose capacity was more than or equal to 50% of Project capacity for which bid is being placed						
Completed projects by any of JV partners in last 7 years whose capacity was more than or equal to 40% of Project capacity for which bid is being placed						
Completed DDG projects on turnkey basis by the lead partner in last 7 years whose capacity was at least 50% of the Project capacity for which bid is being placed						
Completed DDG projects on turnkey						



basis by second partner in last 7 years whose capacity was at least 30% of the Project capacity for which bid is being placed						
Completed DDG projects on turnkey basis by third partner in last 7 years whose capacity was at least 30% of the Project capacity for which bid is being placed						

1. Number of Projects for which Bid is submitted by Bidder \_\_\_\_\_
2. Total Project cost for which Bidder is placing Bid: \_\_\_\_\_ INR Lakh
3. Total Project capacity for which Bidder is placing Bid: \_\_\_\_\_ kWp
4. Maximum size of a project \_\_\_\_\_ kWp
5. Minimum size of a project \_\_\_\_\_ kWp

Total project capacity and total project cost means the sum of all the project capacities and all the project costs for which the Bidder is submitting Bids.

Bidder shall enclose proper supporting documents in favour of work experience as shown in the table above. If a Bidder is placing Bid(s) for more than one Project, only one set of supporting documents in favour of above declared work experience should be enclosed.

**Note:**

In case one or more than one of the partners of JV meet any of the above criteria, total number of projects and name of all such projects against each criterion shall be mentioned.

**ANNEXURE 8 (B)**

**EXPERIENCE: COMMERCIAL ELIGIBILITY CRITERIA FOR JOINT VENTURE FIRM**

Commercial eligibility criteria (JV Firms)	Generation		Transmission		Sub-transmission/ Distribution	
	No. of projects	Name of projects/ clients	No. of projects	Name of projects/ clients	No. of projects	Name of projects/ clients
Completed projects by any of the partners in last 7 years whose estimated cost was more than or equal to 80% of Project cost for which bid is being placed						
Completed projects by any of the partners in last 7 years whose estimated cost was more than or equal to 50% of Project cost for which bid is being placed						
Completed projects by any of the partners in last 7 years whose estimated cost was more than or equal to 40% of Project cost for which bid is being placed						

1. Number of Projects for which Bid is submitted by Bidder \_\_\_\_\_
2. Total Project cost for which Bidder is placing Bid: \_\_\_\_\_ INR Lakh
3. Total Project capacity for which Bidder is placing Bid: \_\_\_\_\_ kWp
4. Maximum size of a project \_\_\_\_\_ kWp
5. Minimum size of a project \_\_\_\_\_ kWp

Total project capacity and total project cost means the sum of all the project capacities and all the project costs for which the Bidder is submitting Bids.

Bidder shall enclose proper supporting documents in favour of work experience as shown in the table above. If a Bidder is placing Bid(s) for more than one Project, only one set of supporting documents in favour of above declared work experience should be enclosed.

**Note:** In case one or more than one of the partners of JV meet any of the above criteria, total number of projects and name of all such projects against each criterion shall be mentioned.

## ANNEXURE 9

### EXPERIENCE: MAAT CRITERIA

1. Total Project capacity for which Bidder is placing Bid: \_\_\_\_\_ kWp
2. Total Project cost for which Bidder is placing Bid: \_\_\_\_\_ INR Lakh
3. Qualifying MAAT requirement for Project(s) for Bidder is bidding: \_\_\_\_\_ INR Lakh

<b>If Bidder is an Individual Firm</b>					
<b>Years</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>
Years selected for MAAT					
Turnover of years selected for MAAT					
MAAT of Bidder					

<b>If Bidder is JV Firm (MAAT of Lead Member as well as others should be given separately)</b>					
<b>Years</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>
Years selected for MAAT					
Turnover for Years selected for MAAT					
MAAT of Bidder					

#### **Note:**

In case Bidder is a Firm

1. Minimum Average Annual Turnover (MAAT) for best three years out of last five financial years of the Bidder should not be less than 30% of the estimated cost of the project.
2. For Bidder to qualify for more than one project, the MAAT requirement shall be the sum of MAAT requirement of the projects, they proposed to qualify.

In case of JV Firms

1. The figures for each of the member of the joint venture shall be added together to determine the Bidder compliance with the minimum qualifying criteria set out; however in order for a joint venture to qualify, the member(s) of joint venture must meet the following minimum criteria:
  - iii. The lead member shall meet not less than 40% of the minimum criteria given in MAAT;

- iv. Each of the other member(s) shall meet not less than 25% of the criteria given in MAAT.
- 2. For Bidder to qualify for more than one project, the sum of requirements of individual projects shall be considered for determination of Qualifying Requirement of the Bidder.

(Name & signature of authorized signatory of Bidder)

Name of Bidder

Date

## ANNEXURE 10

### INSPECTION REPORT

MADHYA PRADESH URJA VIKAS NIGAM LTD.

Division Renewable Energy Officer \_\_\_\_\_

### INSPECTION REPORT

For SUPPLY, INSTALLATION & COMMISSIONING of DDG SPV power plant at  
\_\_\_\_\_ Village, \_\_\_\_\_ Block, \_\_\_\_\_ District

Inspection report No. \_\_\_\_\_

Date \_\_\_\_\_

1. Name of Successful Bidder \_\_\_\_\_
2. Order No. \_\_\_\_\_ Dated \_\_\_\_\_
3. Challan MTR No. \_\_\_\_\_ Dated \_\_\_\_\_
4. Invoice No. \_\_\_\_\_ Dated \_\_\_\_\_
5. Receipt of Material \_\_\_\_\_ Dated \_\_\_\_\_
6. Project Head \_\_\_\_\_
7. Transportation/Freight \_\_\_\_\_
8. Date of Installation and Commissioning \_\_\_\_\_

S. No.	Name of System	Quantity Received			Sr. No. from _____ to _____ (attach separate list)	Quantity Done	Quantity Accepted	Quantity Rejected	Remark
		No	w/VAh / kVA	Total Kw / VAh /kVA					
1	SPV Modules								
2.	Battery								
3.	PCU								

9. Number of households benefited: \_\_\_\_\_ (list enclosed)

10. Approximate length of PDN: \_\_\_\_\_ km
11. Number of street lights provided: \_\_\_\_\_
12. Community load provided to: \_\_\_\_\_ (list enclosed )
13. Civil work: properly ventilated control room size \_\_\_\_\_ m<sup>3</sup>
14. For providing information, if required, additional sheet can be attached.
15. Certified that the above-accepted work has been verified on \_\_\_\_\_ and found to be as per specifications of MNRE, Detailed Project Report and Agreement. Entries have been made in the relevant register.
16. Original list with signature of beneficiary is kept in DREO office.

Signature of Inspecting Authority

Signature of Controlling

(Not below the rank of Sub-Engineer)

(DREO)

With name and seal

with name and seal

## **ANNEXURE 11**

### **JOINT COMMISSIONING CERTIFICATE, TRAINING CERTIFICATE AND COMPLETION CERTIFICATE**

DDG based Solar Power Plant and Power Distribution Network has been successfully installed and commissioned in

Name of Village/place \_\_\_\_\_ Block \_\_\_\_\_ Distribution \_\_\_\_\_

As per Agreement \_\_\_\_\_ dated \_\_\_\_\_

This is also to certify that:-

1. The system is working satisfactorily and
2. The general training to all the beneficiaries has been provided.

Two sets of photographs of following Systems have been taken as per terms & conditions of RfP are enclosed & copy of the same is also kept in DREO Office Records:-

1. Control room with modules installed on structure (Three views)
2. Junction boxes (Three views)
3. PCU & control panels installed in the PCU room (Three views)
4. Battery bank installed in the battery room (Three views)
5. Lighting arrestor & Earthing kit installed (Three views)
6. Photos of Power Distribution Network (Ten views)
7. Connections to BPL households has been provided free of cost.

---

(Signature with full name and seal)

Village Sarpanch /

Secretary of Panchayat /organization

---

(Signature with full name and seal)

Authorized Signatory of Project developer

---

(Signature with full name and seal)

DREO, MPUVNL



**ANNEXURE 12**

**PERFORMANCE GUARANTEE TESTING REPORT POST COMMISSIONING OF THE PROJECT**

(for releasing of balance 10% of Project Cost)

This is to certify that the Solar Power Plant installed in village \_\_\_\_\_ Block \_\_\_\_\_, District \_\_\_\_\_ is working satisfactory for the following parameters:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

Further, the following installations/ structures were found in satisfactory working order

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

It is also certified that the Successful Bidder provided power \_\_\_\_\_ hours per day for \_\_\_\_\_ days every month from the date of commissioning of the plant.

\_\_\_\_\_

(Signature with full name and seal)

Village Sarpanch /

Secretary of Panchayat /organization

---

(Signature with full name and seal)

Authorized Signatory of Project developer

---

(Signature with full name and seal)

DREO, MPUVNL

**ANNEXURE 13**  
**FINANCIAL BID**

Item no. as per RfP	Project no. as per RfP	Village Name	Block	District	Project Cost (INR)

**Important note**

1. Project cost is all inclusive cost of/ for design, supply, installation, commissioning and O&M, for 5 years, of SPV based DDG system along with PDN and all associated civil works etc. on Build, Operate, Maintain and Transfer (“BOMT”) basis for each Project individually.
2. Bidder must note that only Project Cost will be considered to determine Successful Bidder (Lowest Project Cost). No payment shall be made to Successful Bidder in excess of quoted Project Cost.
3. Financial bid of a Bidder of only those Projects shall declared for evaluation which qualify on technical criteria.

\_\_\_\_\_

*(Signature, Name & Designation of the person authorized by Firm/JVs of Firm)*

*Name & seal of Firm/ JV Firm* \_\_\_\_\_

**Place:** \_\_\_\_\_

**Date:** \_\_\_\_\_

## **ANNEXURE 14**

### **FORMAT FOR AGREEMENT**

(Format for Agreement to be executed on INR100/- Non-judicial Stamp Paper)

This agreement is signed on this ---- (day)----- of ----(month)---- of ----(year)----- at Bhopal between M/s-----  
(hereinafter called as “Successful Bidder”), and Madhya Pradesh Urja Vikas Nigam Ltd., Bhopal (hereinafter called as “MPUVNL”), on the following terms and conditions:

That, the Successful Bidder has agreed to implement Project as per scope of work / specifications mentioned in RFP No. .... Dated ..... issued by MPUVNL;

That, Successful Bidder agrees to start Work within 15 days after this Agreement;

That, the Successful Bidder agrees to design, supply, installation, commissioning and operation, for 5 years, of decentralised distributed SPV based power plants along with PDN (DDG system), all associated civil works etc. on Build, Operate, Maintain & Transfer (“BOMT”) basis in various villages of Madhya Pradesh, as per Projects mentioned in Table 1 of RfP, on turnkey basis as per details given therein;

That, Successful Bidder agrees to carry out operation & maintenance of DDG system for five years, as per guidelines of DDG, as amended/ replaced/ sub-assumed, under Deen Dayal Upadhyay Gram Jyoti Yojana;

That, Successful Bidder agrees to carry out design and construction of suitable control rooms of DDG-SPV for installation of battery bank, Power Conditioning Unit (PCU) & control panels required for defined capacity of DDG system of the Project;

That, Successful Bidder agrees to carry out designing, supply, installation & commissioning and operation, for 5 years, of appropriate Power Distribution Network (PDN) for the Project, as per norms of MP DISCOM/ MP State Grid Code, so that PDN is compatible with requirements of Grid connectivity;

That, MPUVNL and Successful Bidder agree to abide, as applicable, by all other provisions of RfP, including but not limited to technical specifications, commercial terms and conditions, general conditions of contract;

That, Successful Bidder agrees to supply of desired amount of electricity to Beneficiaries and collect charges, as prescribed by MPUVNL, for the same;

That, after successfully completing 5 years of O&M, if the Project is to be transferred to IA/ State Government./ other agency, as approved by the State Government, Successful Bidder shall ensure that Project is transferred in good working condition as certified by the Engineer and the concerned DREO;

That, the financial bid of the Successful Bidder shall remain firm and valid till successful completion of 5 years of O&M period;

That, the Agreement will be valid up to .....

IN WITNESS WHEREOF Successful Bidder and MPUVNL, through their authorized signatories who affix their signatures and seal at Bhopal, sign the Agreement:

Witnesses;

Successful Bidder

1.

MPUVNL

2.