

**SOLAR ENERGY CORPORATION OF INDIA**  
**New Delhi-17**

SECI/Cont./SRT-IV-P1/74/2014

Date: 19-03-2015

**Subject:** Amendments No-1 to RFS No. SECI/Cont./SRT-IV-P1/74/2014 dated 27-02-2015 for Implementation of Grid Connected Roof Top Solar PV System scheme in selected cities/states in India (Phase-IV-Part 2)

Dear Sir,

Further to our RFS No. SECI/Cont./SRT-IV-P1/74/2014 dated 27-02-2015, please find attached an Amendment No-1 dated 19-03-2015 to our above mentioned RFS as **Table-A**. This amendment shall form an integral part of the RFS dated 27.02.2015 and shall constitute a part of the RFS document.

Also please find enclosed the Clarification as **Table-B** on some of the provisions in our RFS dated 27.02.2015 taken up by various prospective bidders during the Pre Bid Conference held at SECI office on 10.03.2015 at 11a.m. All other terms and conditions of RFS shall remain same.

Thanking you,

***Yours faithfully***

**Sd/-**  
**(Avnish Parashar)**

Table-A

Sr. No.	Reference to the Clause, Page No. and Section of the RFS No. SECI/Cont./SRT-IV-P1/74/2014 dated 27-02-2015	Amended Clause/Amendment of any term as referred in the reference Clauses of RFS	Remarks
1.	<p>a. Clause 2.1.2, Page No 13, The term "Rs 80/Wp", Section-I of the RFS</p> <p>b. Clause 3.16.2, Page No 28, Section I of the RFS, The term "Rs 80/Wp",</p> <p>c. Clause 6.2.1(b), Page No 41, Section I of the RFS, The term "Rs 80/Wp",</p> <p>d. Format-B of the RFS, Page No 66 of RFS, The term "Rs 80/Wp",</p>	<p>The term "Rs 80Wp" shall be read as "Rs 90/Wp".</p>	<p>In the existing clause as referred in the Colum 2 of this table the term "Rs 80/Wp" shall be replaced by the term Rs 90/Wp</p>
2.	<p>a. Clause 1.41, Page No 10, Section-I of the RFS, "Subsidy @ "15 % of the L1 project cost".</p> <p>b. Clause 1.8, Page No 13, Section-I of the RFS, "Subsidy @ 15 % of the L1 project cost".</p> <p>c. Clause 6.9.1, Clause 6.9.2, &amp; Clause 6.9.4, Page No 45 &amp;46, Section-I of the RFS, "Subsidy @ 15 % of the L1 project cost."</p> <p>d. Format-B of the RFS, Page No 66 of RFS, Subsidy @ "15 % of the L1</p>	<p><b>"Subsidy @ "15 % of the L1 project cost" quoted by the Successful Bidder shall be read as</b></p> <p>Subsidy @15% of L1 project cost or Rs 12 /Wp whichever is lower for the allocated capacity for all States except for Andaman &amp; Nicobar (A&amp;N).</p> <p>For A&amp;N subsidy @ 30% of "L1 project cost or Rs 26 /Wp, whichever is lower for the allocated capacity shall be disbursed to successful bidder as per RFS terms and conditions.</p>	<p>-</p>

	project cost.		
3.	<p>a. Page No 5, "Broad Scope of Work for Bidding", "5 years".</p> <p>b. Clause No 1.22, Page No 8, "5 years"</p> <p>c. Clause No 3.16.6, Page No 30, "5 years"</p> <p>d. Clause No 3.22.1, Page No 31, "5 years"</p> <p>e. Clause No 3.22.6, Page No 32, "5 years".</p> <p>f. Clause No 3.25.1, Page No 33, "5 years.</p> <p>g. Clause No 3.27.1, Page No 33 &amp;34, "5 years.</p> <p>h. Clause No 3.32, Page No 35, "5 years.</p> <p>i. Clause No 12.1.2.1, Page No 49, "5 years".</p> <p>j. Page No 88 &amp; Page No 89, Format 10, Para4, "5 years".</p>	5 years shall be read as 2 years. For Andaman & Nicobar (A&N) O&M shall be 5 years from the date of commissioning of project(s).	O&M of 5 years shall be read as 2 years except for A&N where O&M is 5 years only.
4.	Clause 3.23.1(a), Page No 32 of the RFS, "5% of 85% of L1 project cost"	"5% of 85% of L1 project cost" shall be read as "5% X (70% of L1 project cost)"	Successful Bidders shall pay 5% X (70% of the L1 project cost of the State) as SECI service charges.

5.	Clause 2.1.4, Page No 14 of the RFS	<p><b>Clause No 2.1.4 is added after Clause 2.1.3 as per below:</b></p> <p>Bidder can also submit bid for complete capacity of 1MWp capacity for Andaman &amp; Nicobar (A&amp;N) separately under CAPEX model. Some of the tentative locations in A&amp;N with indicative capacity is annexed herewith as <b>Annexure C</b>. This capacity is in addition to the maximum bid capacity mentioned in Clause 2.4.2 of RFS. Format for submission of price bid for above is as per <b>FORMAT-C annexed herewith</b>. Bids for Andaman &amp; Nicobar State shall be evaluated separately.</p>	<p style="text-align: center;"><b><u>Addendum</u></b></p> <p><b>Clause 2.1.4 is added.</b></p>
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Table-B

Clarifications dated 19-03-2015 to RFS No. SECI/Cont./SRT-IV-P1/74/2014 dated 27-02-2015		
Sr. No.	Queries raised/Suggestion provided by the Prospective Bidder	Clarification provided by SECI
<b>COMMERCIAL CLARIFICATIONS</b>		
1.	Bid Eligibility: Please clarify if cumulative capacity of 50kWp Grid Connected plants on different rooftops of a government client can be used for bid eligibility	Yes, it shall be considered, if it is cumulative capacity of 50kWp on rooftops.
2.	Maximum allowable project cost is Rs 80/- per Wp for both Part A and Part B. Part B being <10kW systems & distributed, the Maximum allowable project cost mentioned is not feasible. Please revise to at least Rs 90/- per Wp.	Revised to Rs 90/Wp. Please refer the Amendment issued as per Sr No 1 above.
3.	<b>Empanelment of Bidders</b> – If a bidder is not bidding for this tender, can empanelment happen separately in future or will he be debarred for all future tenders?	1. Applicant/Bidders qualified for the State will be empanelled by SECI for the State for an initial 1 year from the date of notification of empanelment on SECI website as per Clause 3.4 of RFS. 2. An Applicant, even if not submitting a bid can apply for empanelment.
4.	<b>Clause 6.3. SUCCESSFUL BIDDER(S) SELECTION</b> – If 3 to 4 bidders bid at 80/Wp (max value) for the same state in Part B, then who will be awarded the contract? What will be the methodology for rejection?	Maximum allowable project cost is revised and in case of tie capacity may be divided by such no of bidders and allocated equally.
5.	<b>Identification of roof within 3months</b> of allocation letter – For Part B, since the capacity <10kW, identification of such large number of distributed rooftops is not feasible. Please allocate more time for Part B identification.	Identification time for Part-A and/or Part-B can be relaxed on merit of the case. However, notwithstanding above total project(s) commissioning time in any case shall remain same i.e 9 months from the date of issue of allocation letter as per RFS terms and conditions.

6.	Subsidy Guarantee: Can SECI provide any guarantee on disbursement of subsidy within defined timelines.	Subsidy will be disbursed as per RFS terms and conditions.
7.	Part B bidding: Since Part B is distributed with <10kWp projects, minimum bidding clause of 50% should be revoked.	RFS terms and conditions shall prevail
8.	Clause 3.4.5.c: We request the preferential order to be based on techno-commercial rating (SP 2A for example) and not on alphabetical order.	RFS terms and conditions shall prevail
9.	Clause 3.22.4/ Since the site identification is post bid, concerns on Form C/CST and VAT billing shall remain. Hence cost inclusive of taxes/duties should be revised to exclusive of taxes/duties.	RFS terms and conditions shall prevail.
10.	Clause 3.24.1/Insurance during O&M: Insurance is limited till commissioning. Post commissioning insurance is under Client scope, as asset belongs to client under CAPEX.	RFS terms and conditions shall prevail.
11.	Clause 6.8.3.1/Please provide list of SECI identified rooftops as mentioned in clause	Tentative list of roofs of A&N with indicative capacity is mentioned herein the Annexure-C.
12.	With SECI allocation, can government clients issue PO/LOI without tendering procedure? Please clarify.	Yes. However, it is up to the individual organization to take their own decision.
13.	Reduction in RESCO pricing is the most surprising part of this RfS. While on the one hand, subsidy is being reduced from 30% to 15%, the RESCO price is being reduced from 6.75/kWh to 6.00/kWh. Instead, RESCO price must be increase to 7.5/kWh. There is proper regulatory explanation possible for RESCO pricing. The SECI numbers can be fed into the CERC pricing model and it can be ascertained that what shall be the levellized tariff if 10.75% subsidy is given on a capita	levellized Tariff for Energy sale shall be Rs 6/kWh for 25 years as per RFS terms and conditions.

	cost of Rs. 80/Wp.	
14.	<p>While on the other hand, MNRE has reduced the subsidy from 30% to 15%, SECI has increase its charge from 3.5% to 4.25%. The effective subsidy has come down from 26.5% to 10.75% (i.e. a decrease of 60%). Instead of increasing its charge, SECI should cap its charge to maximum 2.5% of the total project cost quoted by the bidder. If SECI truly wants to promote the deployment of solar, it must take steps to encourage developers by taking industry-friendly steps.</p>	SECI service charges shall be 5% X (70% of L1 project cost of the respective State).
15.	<p>SECI bid has been introduced in the later part of financial year and the last date is just 5 days ahead of closure of financial year. For new companies, it is important that the date be extended by 15-20 days so that they can get audited financials of 31<sup>st</sup> March 2015 to demonstrate financial eligibility.</p> <p><b>Alternatively</b>, the net worth should not be insisted on the basis of financial statements certified by Auditors/ Chartered Accountants statements, so that net worth can be brought before the bid closing date. This is similar to NVVN/ SECI bid for ground-mounted MW size projects.</p>	Please refer the Format 7 of RFS.
16.	Can the parent company paid up share capital be 51%?	Yes

17.	If SECI wants to promote competition in the market, the requirement for technical eligibility must be removed from the RfS. While on the one hand, SECI is disbursing crores of VGF to developer for MW size projects without asking for any technical eligibility, you are asking technical eligibility for small size projects. Even for MNRE subsidy, there is no requirement of technical capability.	RFS terms and conditions shall prevail.
18.	Are Bid bond and PBG cumulative or the Bid bond shall be released once PBG is submitted by selected bidder?	Bid bond shall be released once PBG is submitted by successful bidder as per RFS terms and conditions.
19.	<p>“Price bids are invited inclusive of Taxes and duties. However, Tax exemptions including certificates of any sort, if available may be dealt with the concerned Dep’t of Govt. of India by the bidder. SECI in no case will be responsible for providing any tax exemptions to the bidder”.</p> <p>Above Clause May kindly be amended to be exclusive of Taxes as per the points raised in the Pre-Bid meeting, wherein the difficulties faced in execution of projects at different institutions owing to the varying tax procedures followed by each, makes it difficult to predict the nature of risk involved in providing Price Bids inclusive of Taxes and Duties</p>	RFS terms and conditions shall prevail
20.	If the roof having the capacity more than the bidding capacity, in this case the SECI will provide the subsidy only on the capacity mention in the Clause 2.1.3 and project will not be rejected. Please confirm.	Subsidy to be limited to the allocated capacity of a project by SECI even if actual project size goes beyond the allocated capacity.

21.	Our Solar PV panel manufacturing company register in Delhi and but manufacturing plant in china as per MNRE guideline. So is it permissible and treated as made in India?	No, it will not be treated as made in India. Modules should be manufactured in India only.
22.	Please allow smaller projects(less than 10kWp) for commercial clients as it is difficult to find residential clients especially in states without net metering and most of residential consumption is during night time.	Scheme is not restricting for execution of capacity of less than 10kWp for residential consumers only i.e commercial clients can also be considered.
23.	Whether the bidder will be allowed to opt for bid only for Part A.	Bidder shall bid for Part-A and Part-B for a State.
24.	If any bidder submits a bid under a consortium for a particular state, will he be allowed to bid independently for other designated states.  For example, if A submits bid for delhi state in consortium with B then whether A will be allowed for submitting bid for Haryana independently.	The bidder can only bid/apply for empanelment either as a standalone bidder or as a part of consortium, but not for both.
25.	Processing fee for empanelment per State and for multiple State is how much.	Processing fee for empanelment on PAN India basis and/or for multiple states as per bidder choice is Rs 16,854 only.
26.	We wish to be selected for 3 or 4 states. The processing fees are to be paid now or later and how much?	Processing fee for bidding and empanelment shall be furnished separately. However, bidders who are techno-commercially qualified as per RFS terms and conditions shall be considered empanelled for the State in which bid is submitted by him. So, no fee will be charged from them.
27.	Kindly clarify if the subsidy for special category states is different from other states. From the bidding document, we understand that the subsidy allotted for special as well as other states is the same, @ 15%.	Please see the Amendment issued as per above.

28.	<p>(i) Kindly clarify whether overseas experience of installation &amp; commissioning grid interactive rooftop system is applicable.</p> <p>(ii) Does 2 x 25KW grid interactive rooftop Solar PV system under one contract, qualify under the eligibility criteria set by SECI ?</p>	<p>(i) Yes</p> <p>(ii) Yes, it shall be considered, if it is cumulative capacity of 50kWp on rooftops.</p>
<b>TECHNICAL CLARIFICATIONS</b>		
29.	Clause 21/ DG Synchronisation: DG Synchronisation is not feasible for SPV plants below 250kW. Hence this clause should be optional	RFS terms and conditions shall prevail
30.	Clause 22i/ Provisioning of Data acquisition system for Part B is not complying to MNRE specifications.	RFS terms and conditions shall prevail
31.	Temperature probes/Pyranometer required for Part-B systems. Keeping the cost below the Maximum allowable project cost of Rs.80/Wp will be challenging. Please review.	Maximum allowable project cost is revised as clarified in Sr. No 2 above.
32.	<p><b><u>As per clause no. 2.3.1</u></b>  The project below 10KWp may also be considered for residential sector. One project may however comprise of several rooftop units. Each roof top unit can separately connected with the grid and may have separate meters.</p> <p><b><u>Question:</u></b> The cost of the one 3kW inverter is around 70,000/-, 5KWp inverter around 90,000/-, 10KWp inverter cost around 130,000/- and 20KWp inverter cost around 170,000/-  If i installed 7 numbers of 3KWp inverter then the cost around = 7x70,000 = 490,000/-  If I installed 5 numbers of 5KWp inverter then the cost</p>	Accepted.

	<p>around = <math>5 \times 90,000 = 450,000/-</math>  If I installed 2 numbers of 10KWp inverter then the cost around = <math>2 \times 130,000 = 260,000/-</math>  So as per this calculation single unit cost low as compared to small units. So can we installed the solar PV module on different roof located near to each other and then installed the single inverter?  Kindly amend this in this clause.</p>	
33.	Insurance during O&M period may be removed from bidder scope and it may be kept in the scope of beneficiary.	RFS terms and conditions shall prevail
34.	The deployment of staff for continuous operations and qualified engineer for supervision of O&M work clause may be removed as at the upper price cap of Rs. 80/Wp the project becomes unviable for bidders.	<ul style="list-style-type: none"> <li>• The upper price cap has been revised as Rs. 90/Wp only.</li> <li>• The deployment of staff for continuous operations and qualified engineer for supervision of O&amp;M work Clause shall not be applicable for the projects less than 10kWp capacity.</li> </ul>
35.	The data acquisition system may be excluded for Part B to make the project viable.	RFS terms and conditions shall prevail
36.	Aluminium cable may be permitted for AC side connection with maximum drop mentioned in Clause 26(xii).	RFS terms and conditions shall prevail
37.	Clause 3.21.1/NOC from DISCOM: For captive projects in State with no net-metering policy, the NOC from DISCOM would be required? Please clarify.	The scheme is grid connected. Hence, NOC from DISCOM is required.
38.	The O&M period as per the RFS is for a period of 5 years. In a situation where we are selected and the	O&M of 2 years shall be considered instead of 5 years except for Andaman & Nicobar State (A&N)

	total numbers of identified rooftops (projects) are 30, this would mean undertaking O&M for all the 30 sites for a period of five years. This would increase the project overheads tremendously. We would request SECI to reduce the number of years of O&M from 5 years to 2 years (as was the criteria in the last batch of Phase IV).	where O&M shall be considered as 5 years only.
39.	Section I: Clause 7.6 -The clause highlights non-operation of the plant during the event of grid failure. What about non-operation of the system during weekends and other holidays. This is important from computation of CUF point of view?	Surplus generated power may be fed into the grid during weekends / holidays.
40.	Section III: Clause 34 - The Solar PV system on the rooftop of the selected buildings will be installed for meeting upto 90% of the annual energy requirements. Kindly clarify how is it possible for a commercial building without adequate shadow-free roof space to meet 90% annual energy requirements from Solar PV?	The clause refers upto 90% of annual energy requirement.
41.	GI fasteners of SS should not be made mandatory.	RFS terms and conditions shall prevail
42.	We propose to use string inverter with inbuilt DC disconnect switch instead of separate DCDB with MCB hence no separate JB will be supplied. Please confirm?	Accepted. In such case inverter must be inbuilt with DC disconnect switch.
43.	Clause 16 a, Page 55: The junction boxes shall have suitable arrangement monitoring. We propose to use string inverters has upto MPPT level monitoring. Please confirm acceptance.	Accepted. In such case inverter must be enabled with MPPT level monitoring feature.
44.	Clause 19, Page 56::Maximum energy drawn from the array DC: AC ratio of PCU will be upto 1.25:1;	RFS terms and conditions shall prevail

	Combined DC side rating of inverters will not be less than rated capacity of power plant under STC. Please confirm	
45.	Clause 20, Page 57::Please confirm supply of computer is in the client /owner scope?	RFS terms and conditions shall prevail
46.	Clause 22(ii), Page57: Plant monitoring is possible. However total control of plant is generally not available, limited option is available depending on PCU.	RFS terms and conditions shall prevail
47.	Clause 22(v),d,h,i, Page58 The following parameters are not available in some inverters/String Inverter via the operating interface display in real time separately for solar power plant: Power factor, Time disabled, Time Idle; The display parameters as per the standard available in various reputed make inverters are to be accepted	RFS terms and conditions shall prevail
48.	Clause 22(v),k, Page58 These values are available in the Inverter & can be viewed via Inverter display. However the PV Starting & Stopping are fixed and cannot be changed.	RFS terms and conditions shall prevail
49.	Clause 22(vi), Page58 Partially complied. The values can be read through the web portal - online.	RFS terms and conditions shall prevail
50.	Clause 26(x), Page 61 Please confirm the approx. cable length from inverter to LTDB as this will change the project cost, extra cable will charge separately as actual.	RFS terms and conditions shall prevail
51.	Clause 22. (xxviii), Page 59 Internet connection and availability at site is in client/ owner scope. Please confirm	RFS terms and conditions shall prevail

52.	Clause 22. (x), Page 58 Digital AC energy meter will be provided but monitoring is not possible in standard string inverter solution. Data however is available from the inverter monitoring. Please confirm	RFS terms and conditions shall prevail
53.	Clause 22. (ix), Page 58 AC power (Reactive and Apparent), Power Factor and AC energy (All 3 phases) values are not available. Please confirm	RFS terms and conditions shall prevail

**Bidder Offer Reference No** \_\_\_\_\_

**SECTION-IV**

**PRICE BID**

**(To be submitted in a separate envelope for State Andaman & Nicobar)**

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

**S.E.C.I RFS No: SECI/Cont./SRT-IV-P1/74/2014 dated 27-02-2015**

Sr.No	Description	Name of the State A	Total Bid Capacity in kWp B	Unit Rate (Rs/Wp) C	Total Project cost for 1MWp capacity= {1000 X BXC}=D
1.	Design, Engineering, Manufacturing, Storage, Civil Work, Supply, Erection, Testing & Commissioning including trail Operation, Operation & Maintenance and other requirements as per the RFS.	A&N	1000kWp		
<b>Rupees in Figures</b>					
<b>Rupees in words</b>					

**Note:**

1. Unit Rate (Rs/Wp) for the quoted capacity shall not exceed Rs 90/Wp.
2. Subsidy is available @ 30% of L1 project cost quoted by the Successful Bidder or Rs 26/Wp of allocated capacity, whichever is lower.
3. Arithmetical errors will be rectified on the following basis. If there is a discrepancy between the unit price and the total Amount that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total amount shall be corrected. If there is a discrepancy between words and figures, the amount written in words will prevail.

Yours faithfully

Date: ..... Signature:.....

Place: .....Printed Name.....

Business Address:                      Designation:.....

Country of Incorporation:                      (Common Seal).....

(State or Province to be indicated)

## Tentative Rooftop SPV System Sizes of Government Buildings in Andaman &amp; Nicobar.

Sl. No	Name of the Building	Location	Energy Demand in kW	Approximate Free Roof Area Available (Sqm)	Indicative SPV capacity (kW) <sup>1</sup>	Nearest Grid
<b>Group A</b>						
1.a	Municipal Building	Mohanpura	200	460 SQM	57.5	Phoenix Bay Substation  (Within 5 to 10 KM radius)
1.b	Auditorium			1020 SQM	127.5	
2.	Light house-Light ships	Phoenix Bay	30	585 SQM	73	
3.	Transport bus stand	Phoenix Bay	20	1000 SQM	125	
4	Transport Office (Old)	Phoenix Bay	50	500 SQM	62.5	
5	Marin Dockyard	Phoenix Bay	200	1100 SQM	137.5	
6	ALHW Store	Phoenix Bay	30	600 sqm	60	
7	ALHW Auditorium complex	Phoenix Bay		450 SQM	56	
8	RTO (New Building) <sup>2</sup>	Phoenix Bay	20	360 SQM	30	
9	HQ office	Mohanpura	20	200 SQM	20	
10	Marin Hall	Mohanpura	25	200 SQM	20	
<b>Total (A)</b>				<b>6475 SQM</b>	<b>~770</b>	
<b>Group B</b>						
11	Secretariat	V.I.P road	250	1100 SQM	125	Phoenix Bay (Within 500 m radius)
12	Nehru Stadium (Netaji)	A / Bazaar	20	1000 SQM	125	
13	Jungli Ghaat Passenger Hall	Junglighat	-	1000 SQM	125	
<b>Total (B)</b>				<b>3100 SQM</b>	<b>375</b>	
<b>Total (A+B)</b>				<b>9575 SQM</b>	<b>~1000 kW</b>	
<b>Group C</b>						
14	Circle Office/Electricity Department/ PWD Office/Executive Engg. PBNB / EESAD/Fisheries /Chief Engg. Office PWD/ Executive Engg. PWD/ Central Workshop			Area yet to be identified. Buildings are having asbestos roofs which are brittle in nature. Whereas, the typical life of SPV systems are 20-25 years. Therefore, for maintaining the SPV systems for longer life it is recommended that the systems should be installed on the sheets with longer life and better load-bearing capacity. Therefore, these buildings may be considered in case if the roofs are being replaced or are to be replaced in the near future.		Indicative PV potential could be around 300kW

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