SOLAR ENERGY CORPORATION OF INDIA LIMITED
NEW DELHI

Ref No. SECI/C&P/IPP/13/0003/23-24/Amendment-06   Date 03.06.2024

S. No.	Clause/ Article No.	Existing Clause/Article	Amended Clause/Article
		**Amendment-06 to RfS for Selection of RE Power Developers for Supply of 500 MW Firm and Dispatchable Power from ISTS-Connected Renewable Energy (RE) Power Projects in India under Tariff-Based Competitive Bidding (SECI-FDRE-I)**	

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Amendment-06 to RfS for Selection of RE Power Developers for Supply of 500 MW Firm and Dispatchable Power from ISTS-Connected Renewable Energy (RE) Power Projects in India under Tariff-Based Competitive Bidding (SECI-FDRE-I)

RfS No. SECI/C&P/IPP/13/0003/23-24 dated 07.07.2023

S. No.	Clause/ Article No.	Existing Clause/Article	Amended Clause/Article

Amendments in the RfS document

S. No.	Clause/ Article No.	Existing / Amended Clause/Article
1.	6.3	**Modified as follows:** The RPDs are free to change the Project location and/or Delivery Point up to the deadline for Financial Closure as per Clause 22. a. In this regard, any change in Delivery Point from the one mentioned in the Covering Letter at the time of bid submission shall be allowed till the deadline to apply for connectivity, without any condition. b. Subsequent to deadline to apply for connectivity, any change in Delivery Point shall be allowed by SECI only in case the scheduled commissioning date of the ISTS-substation of the proposed revised Delivery Point is on or before the scheduled commissioning date of the existing Delivery Point of the Project, at the time of seeking approval from SECI by the RPD. In this case, the RPD will be required to apply for connectivity at the proposed substation within 7 working days of intimation of approval for the same by SECI. In case the RPD fails to obtain connectivity on account of reasons attributable to it, including but not limited to failure to apply for connectivity within the above deadline, the RPD will not be eligible for corresponding extension in the timelines for meeting the Project milestones and for any relief under change in law provisions, and the same will be borne by the RPD.
2.	7.5.iv	**New Clause** Substations identified for RE capacity under para 3, 4, 5, and 9 of 'Transmission System for Integration of over 500 GW RE Capacity by 2030' published by CEA on its website, https://cea.nic.in/wp-content/uploads/psp___a_i/2022/12/CEA_Tx_Plan_for_500GW_Non_fossil_capacity_by_2030.pdf, including subsequent revision therein from time-to-time.
3.	7.5	… It is, however, clarified that selection of	… Scheduled Commissioning Date (SCD) of the

		Delivery Point by the Bidder at the time of bid submission will not be evaluated with respect to the SCSD of the Project as per the PPA.	substation being chosen by the Bidder in line with S. No. i, ii, iii, and iv above shall be on or before 30th June, 2028. The Bidder is required to provide the proof in this regard at the time of bid submission, as part of Format-7.1 of the RfS.
4.	7.10	The RPDs will be required to apply for connectivity at its identified substation(s), as mentioned in the Covering Letter (Format 7.1), within 30 days after the date of tariff adoption by the Appropriate Commission, …	The RPDs will be required to apply for connectivity at the identified substation, as mentioned in the Covering Letter (Format 7.1), within 30 days from the Effective Date of PPA, …
5.	8.1.a	… The demand profile has been provided for all the 96 time-blocks (each block comprising a 15 minutes' duration) for a representative day of each month of the year. …	… The demand profile has been provided for all the 24 time-blocks (each block comprising a 1 hours' duration) for a representative day of each month of the year. …
6.	8.1.b	The RPD shall schedule power on day-ahead basis, to match the demand profile in every 15 minutes' time-block. …	The RPD shall schedule power on day-ahead basis, to match the demand profile in every 1 hours' time-block. …
7.	8.1.c	… The RPD shall be required to maintain a Demand Fulfilment Ratio (DFR) of at least 90% on a monthly basis. …	… The RPD shall be required to maintain a Demand Fulfilment Ratio (DFR) of at least 75% on a monthly basis. …
8.	8.1.c	… The RPD's performance against this metric will be measured by adding up the shortfalls in meeting the 90% requirement in individual time-blocks during the month in a Contract Year in which power has been scheduled.	… The RPD's performance against this metric will be measured by calculating the average DFR of all hourly time-blocks during the month in a Contract Year in which power has been scheduled.
9.	8.2.a	In case the average DFR demonstrated by the RPD is less than 90% on a monthly basis, save and except in case of Force Majeure, …	In case the average DFR demonstrated by the RPD is less than 75% on a monthly basis, save and except in case of Force Majeure, …
10.	9	… The RPD shall be required to obtain NOC from SECI prior to sale of infirm power to any third party prior to declaration of COD. …	… The RPD shall be required to obtain No-Objection Certificate (NOC) from SECI prior to sale of infirm power to any third party prior to declaration of Commercial Operation Date (COD). However, in case the Buying Entity is ready to offtake that infirm power as per regulations prior to declaration of COD then such infirm power shall be scheduled to the Buying Entity in line with Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulations, 2023. In case the infirm power is off-taken by Buying Entity, then such

			power shall be purchased at the Applicable Tariff (as per Article 9.1 of PPA). In case Buying Entity does not consent to purchase such infirm power, the right of refusal shall then vest with SECI. …
11.	17.1	**A**= Annual Energy (kWh) to be supplied by the Bidder as per the demand profile under the RfS = **5945096 * C;**	**A**= Annual Energy (kWh) to be supplied by the Bidder as per the demand profile under the RfS = **5592382 * C;**
12.	18.1	**A**= Annual Energy (kWh) to be supplied by the Bidder as per the demand profile under the RfS = **5945096 * C;**	**A**= Annual Energy (kWh) to be supplied by the Bidder as per the demand profile under the RfS = **5592382 * C;**
13.	38.2.i	A minimum annual turnover of **INR 1,96,19,000/MW** (Indian Rupees One Crore Ninety-Six Lakhs and Nineteen Thousand/MW) …	A minimum annual turnover of **INR 3,12,64,000/MW** (Indian Rupees Three Crore Twelve Lakhs and Sixty-four thousand/MW) …
14.	38.2.ii	Internal resource generation capability, in the form of Profit Before Depreciation Interest and Taxes (PBDIT) excluding other and exceptional income for a minimum amount of **INR 39,23,800/MW** (Indian Rupees Thirty-Nine Lakhs Twenty-three Thousand and Eight Hundred/MW) of the quoted capacity, …	Internal resource generation capability, in the form of Profit Before Depreciation Interest and Taxes (PBDIT) excluding other and exceptional income for a minimum amount of **INR 62,52,800/MW** (Indian Rupees Sixty-two Lakhs Fifty-two thousand and Eight Hundred/MW) of the quoted capacity, …
15.	38.2.iii	In-principle sanction letter from the lending institutions/ banks of the Bidder, committing a Line of Credit for a minimum amount of **INR 49,04,700/MW** (Indian Rupees Forty-nine Lakhs Four Thousand and Seven Hundred/MW) of the quoted capacity, …	In-principle sanction letter from the lending institutions/ banks of the Bidder, committing a Line of Credit for a minimum amount of **INR 78,16,000/MW** (Indian Rupees Seventy-Eight Lakhs and Sixteen Thousand/MW) of the quoted capacity, …
16.	45.25	… Provided that a financial institution, scheduled bank, foreign institutional investor, Non-Banking Financial Company, …	… Provided that entities which have Government shareholding, financial institution, scheduled bank, foreign institutional investor, ...
17.	45.26	… where the power from the Project is injected into the identified ISTS Substation (including the transmission line …	… where the power from the Project is injected into the identified ISTS/InSTS Substation (including the transmission line …
18.	Annexure-B	**Revised Annexure is enclosed herewith.**	
19.	Annexure-C	**Revised Annexure is enclosed herewith.**	

		Amendments in the PPA document		
1.	2.1.4	Pursuant to Article 4.2.6, …	Pursuant to Article 4.6.2, …
2.	3.1.2	… The above change in Delivery Point shall be allowed by SECI only in case the scheduled commissioning date of the ISTS-substation of the proposed revised Delivery Point is on or before the scheduled commissioning date of the existing Delivery Point of the Project, at the time of seeking approval of such change in Delivery Points by the RPD from SECI.	… a. In this regard, any change in Delivery Point from the one mentioned in the Covering Letter at the time of bid submission shall be allowed till the deadline to apply for connectivity, without any condition. b. Subsequent to deadline to apply for connectivity, any change in Delivery Point shall be allowed by SECI only in case the scheduled commissioning date of the ISTS-substation of the proposed revised Delivery Point is on or before the scheduled commissioning date of the existing Delivery Point of the Project, at the time of seeking approval from SECI by the RPD. In this case, the RPD will be required to apply for connectivity at the proposed substation within 7 working days of intimation of approval for the same by SECI. In case the RPD fails to obtain connectivity on account of reasons attributable to it, including but not limited to failure to apply for connectivity within the above deadline, the RPD will not be eligible for corresponding extension in the timelines for meeting the Project milestones and for any relief under change in law provisions, and the same will be borne by the RPD.
3.	4.1.1.(o)	After signing of PPA, the RPD shall apply for drawl NOC(s) from the respective STU(s) of the State as per the power mapping provided by SECI.	**Deleted.**
4.	4.4.1	… The demand profile(s) has been provided for all the 96 time-blocks (each block comprising a 15 minutes' duration) for a representative day of each month of the year. …	… The demand profile(s) has been provided for all the 24 time-blocks (each block comprising a 1 hours' duration) for a representative day of each month of the year. …
5.	4.4.2	The RPD shall schedule power on day-ahead basis, to match the demand profile in	The RPD shall schedule power on day-ahead basis, to match the demand profile in every 1

		every 15 minutes' time-block. …	hours' time-block. …
6.	4.4.3	The RPD shall be required to maintain a Demand Fulfilment Ratio (DFR) of at least 90% on a monthly basis. …	The RPD shall be required to maintain a Demand Fulfilment Ratio (DFR) of at least 75% on a monthly basis. …
7.	4.4.10	… in case the monthly average DFR demonstrated by the RPD is less than 90% for a particular month, such shortfall in performance…	… in case the monthly average DFR demonstrated by the RPD is less than 75% for a particular month, such shortfall in performance…
8.	5.5	… However, in case the repeat trial run is to take place within 48 hours of the failed trial run, fresh notice shall not be required. …	… However, in case the repeat trial run is to take place within 48 hours of the failed trial run, fresh notice shall not be required. SECI/Buying Entity reserves first right of refusal on the infirm power generated by RPD and the same may be procured by Buying Entity at Applicable Tariff as per Article 9.1 of the Agreement plus SECI's trading margin. The RPD shall be required to obtain No Objection Certificate (NOC) from SECI prior to sale of infirm power to any third party prior to declaration of Commercial Operation Date (COD). However, in case, the Buying Entity is ready to offtake infirm power prior to declaration of COD then such infirm power shall be scheduled to the Buying Entity in line with Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulations, 2023. In case Buying Entity does not consent to purchase such infirm power, the right of refusal shall then vest with SECI. …
9.	12.1.1	In this Article 12, the term "Change in Law" shall refer to the occurrence of any of the following events pertaining to this Project only after _____ [Enter the date of e-Reverse Auction (e-RA) conducted under the referred RfS], …	In this Article 12, the term "Change in Law" shall refer to the occurrence of any of the following events pertaining to this Project only after _____ [Enter the date of e-Reverse Auction (e-RA) conducted under the referred RfS] and on or before SCSD/extended SCSD, …
10.	13.1.1.(i)	… or failure to maintain minimum DFR requirement as per Article 4.4.3 for a period of 6 consecutive months after commencement of power supply throughout the Term of this Agreement, or if …	… or failure to maintain minimum DFR requirement as per Article 4.4.3 for a period of 24 consecutive months after commencement of power supply throughout the Term of this Agreement, or if …
11.	Schedule 3	**Revised Schedule is enclosed herewith.**	

12.	Schedule 4	**Revised Schedule is enclosed herewith.**	
		Amendments in the PSA document	
1.	1.4	**New Article:** As per provisions of PPA & IEGC regulations, RPDs are permitted for scheduling of infirm power during the trial run up to commercial operation. Upon receipt of communication from SECI/RPD regarding start of trial run, Buying Entity shall provide its consent for procurement of infirm power, failing which RPD may be issued NOC prior to sale of infirm power to any third-party prior till declaration of COD.	
2.	2.1	… energy of the preceding month (except for first month which shall be computed based on the quantum of power as per demand profile with Demand Fulfilment Ratio (DFR) of 90%). …	… energy of the preceding month (except for first month which shall be computed based on the quantum of power as per demand profile with Demand Fulfilment Ratio (DFR) of 75%). …
3.	2.11.3	… The RPD shall be required to maintain a Demand Fulfilment Ratio (DFR) of at least 90% for each time-block, to be reconciled on a monthly basis. …	… The RPD shall be required to maintain a Demand Fulfilment Ratio (DFR) of at least 75% on a monthly basis. …
4.	2.11.3	… The RPD's performance against this metric will be measured by adding up the shortfalls in DFR against each time-block during the month in a Contract Year in which power has been scheduled.	… The RPD's performance against this metric will be measured by calculating the average DFR of all hourly time-blocks during the month in a Contract Year in which power has been scheduled.
5.	2.11.4	The RPD shall schedule power on day-ahead basis, to match the demand profile in every 15 minutes' time-block. …	The RPD shall schedule power on day-ahead basis, to match the demand profile in every 1 hours' time-block. …
6.	3.2.7	… of charges for its Contracted Capacity, calculated based on a Demand Fulfilment Ratio of 90%. …	… of charges for its Contracted Capacity, calculated based on a Demand Fulfilment Ratio of 75%. …

DEMAND PROFILE OF THE BUYING ENTITY

1. The profile for a representative day of a month as brought out in the table below is required to be met for all the days of the respective month.

2. The demand profile shall be followed by the individual RPD on pro-rata basis, i.e. for a Contracted Capacity of "A" MW, the respective demand for the hourly time-block 00:00-01:00 of January shall be calculated as [167/500 x "A"] MW.

Hour	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0	167	184	229	400	400	400	400	400	400	193	167	167
1	167	171	224	400	400	400	400	400	400	264	167	167
2	167	182	236	400	400	400	400	400	400	342	167	167
3	167	190	237	400	400	400	400	400	400	275	167	167
4	167	236	265	400	400	400	400	400	400	227	167	167
5	186	263	167	400	400	400	400	400	400	284	167	167
6	336	382	177	303	400	400	400	400	400	232	167	309
7	426	419	167	163	325	400	400	400	400	167	167	385
8	442	365	167	133	218	400	400	400	359	167	167	322
9	330	246	167	133	173	375	400	400	257	167	167	229
10	193	167	167	167	210	304	500	500	167	167	167	167
11	187	167	167	167	223	281	500	500	167	167	167	167
12	167	167	167	167	247	305	500	500	167	167	167	167
13	167	167	167	167	303	315	500	500	167	167	167	167
14	269	301	307	254	421	375	500	500	167	167	167	235
15	429	438	465	398	403	367	450	450	150	187	179	363
16	484	477	496	450	415	381	450	450	151	236	281	371
17	500	500	500	450	441	450	450	450	281	267	395	500
18	500	500	500	450	450	450	450	450	304	324	420	500
19	479	404	497	450	450	450	450	450	366	293	250	350
20	359	305	402	450	450	450	450	450	425	234	167	227
21	266	252	332	450	450	450	450	450	450	206	167	167
22	186	231	282	450	450	450	450	450	450	167	167	167
23	167	201	253	450	450	450	450	450	450	167	167	167

ILLUSTRATION FOR PENALTY APPLICABLE AGAINST SHORTFALL IN DEMAND FULFILMENT RATIO (DFR)

For any typical month				
Day	Hour	Power Scheduled by the RPD during a particular Day (A), MW	Specified Capacity (B), MW	DFR (C) = $\min(A/B, 1)^{\#}$
01-Mar	0	181	229	0.7903
01-Mar	1	177	224	0.7901
01-Mar	2	170	236	0.7203
01-Mar	3	170	237	0.7172
01-Mar	4	170	265	0.6415
01-Mar	5	155	167	0.9281
…	…	…	…	…
07-Mar	7	150	177	0.8474
07-Mar	8	160	167	0.9580
07-Mar	9	160	167	0.9580
07-Mar	10	160	167	0.9580
07-Mar	11	160	167	0.9580
07-Mar	12	160	167	0.9580
…	…	…	…	…
25-Mar	16	400	465	0.8602
25-Mar	17	450	496	0.9072
25-Mar	18	500	500	1
25-Mar	19	500	500	1
25-Mar	20	480	497	0.9657
…	…	…	…	…
31-Mar	21	400	402	0.9950
31-Mar	22	300	332	0.9036
31-Mar	23	280	282	0.9929
31-Mar	24	230	253	0.9090
	Mean DFR for all hourly time-blocks for this month, DFR_a (Mean of Column C)			0.7445

#*Values of DFRs will be considered up to 4 places of decimal for the purpose of calculation of penalties for shortfall in meeting the DFRs.*

Total Demand (MUs) for the month (as per Schedule-3 of the PPA) (**D**)	$= \sum B / 1000$ $= 208.878$
PPA Tariff (Rs./kWh)	**= P**
Min. DFR to be maintained as per the RfS (**DFR$_{min}$**)	$= 0.75$ (as per Clause 8.1.c)
Actual monthly DFR (**DFR$_a$**)	$= 0.7445$ (Considering power scheduled for the entire month to be the same)
Penalty for shortfall in the DFR (in Lakhs)	$= D \times (DFR_{min} - DFR_a) \times P \times 1.5 \times 10$ {if $DFR_a < DFR_{min}$}; OR $= 0$ {if $DFR_a > DFR_{min}$}
Illustration: Assuming PPA tariff (P) of Rs. 4.30 /kWh, Penalty for shortfall for this month $= 208.878 \times (0.75 - 0.7445) \times 4.30 \times 1.5 \times 10$ $=$ Rs. 74.0994705 Lakhs $=$ Rs. 74,09,947.05	

REVISED SCHEDULE 3 OF THE PPA: DEMAND PROFILE OF THE BUYING ENTITY

1. The profile for a representative day of a month as brought out in the table below is required to be met for all the days of the respective month.

2. The demand profile shall be followed by the individual RPD on pro-rata basis, i.e. for a Contracted Capacity of "A" MW, the respective demand for the hourly time-block 00:00-01:00 of January shall be calculated as [167/500 x "A"] MW.

Hour	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0	167	184	229	400	400	400	400	400	400	193	167	167
1	167	171	224	400	400	400	400	400	400	264	167	167
2	167	182	236	400	400	400	400	400	400	342	167	167
3	167	190	237	400	400	400	400	400	400	275	167	167
4	167	236	265	400	400	400	400	400	400	227	167	167
5	186	263	167	400	400	400	400	400	400	284	167	167
6	336	382	177	303	400	400	400	400	400	232	167	309
7	426	419	167	163	325	400	400	400	400	167	167	385
8	442	365	167	133	218	400	400	400	359	167	167	322
9	330	246	167	133	173	375	400	400	257	167	167	229
10	193	167	167	167	210	304	500	500	167	167	167	167
11	187	167	167	167	223	281	500	500	167	167	167	167
12	167	167	167	167	247	305	500	500	167	167	167	167
13	167	167	167	167	303	315	500	500	167	167	167	167
14	269	301	307	254	421	375	500	500	167	167	167	235
15	429	438	465	398	403	367	450	450	150	187	179	363
16	484	477	496	450	415	381	450	450	151	236	281	371
17	500	500	500	450	441	450	450	450	281	267	395	500
18	500	500	500	450	450	450	450	450	304	324	420	500
19	479	404	497	450	450	450	450	450	366	293	250	350
20	359	305	402	450	450	450	450	450	425	234	167	227
21	266	252	332	450	450	450	450	450	450	206	167	167
22	186	231	282	450	450	450	450	450	450	167	167	167
23	167	201	253	450	450	450	450	450	450	167	167	167

REVISED SCHEDULE 4 OF THE PPA: ILLUSTRATION FOR PENALTIES APPLICABLE AGAINST SHORTFALL IN DEMAND FULFILMENT RATIO (DFR)

For any typical month				
Day	**Hour**	**Power Scheduled by the RPD during a particular Day (A), MW**	**Specified Capacity (B), MW**	**DFR (C) = $\min(A/B, 1)^{\#}$**
01-Mar	0	181	229	0.7903
01-Mar	1	177	224	0.7901
01-Mar	2	170	236	0.7203
01-Mar	3	170	237	0.7172
01-Mar	4	170	265	0.6415
01-Mar	5	155	167	0.9281
…	…	…	…	…
07-Mar	7	150	177	0.8474
07-Mar	8	160	167	0.9580
07-Mar	9	160	167	0.9580
07-Mar	10	160	167	0.9580
07-Mar	11	160	167	0.9580
07-Mar	12	160	167	0.9580
…	…	…	…	…
25-Mar	16	400	465	0.8602
25-Mar	17	450	496	0.9072
25-Mar	18	500	500	1
25-Mar	19	500	500	1
25-Mar	20	480	497	0.9657
…	…	…	…	…
31-Mar	21	400	402	0.9950
31-Mar	22	300	332	0.9036
31-Mar	23	280	282	0.9929
31-Mar	24	230	253	0.9090
	Mean DFR for all hourly time-blocks for this month, DFR_a (Mean of Column C)			**0.7445**

[#]*Values of DFRs will be considered up to 4 places of decimal for the purpose of calculation of penalties for shortfall in meeting the DFRs.*

Total Demand (MUs) for the month (as per Schedule-3 of the PPA) (**D**)	$= \sum B / 1000$ $= 208.878$
PPA Tariff (Rs./kWh)	**= P**
Min. DFR to be maintained as per the RfS (**DFR$_{min}$**)	$= 0.75$ (as per Clause 8.1.c)
Actual monthly DFR (**DFR$_a$**)	$=0.7445$ (Considering power scheduled for the entire month to be the same)
Penalty for shortfall in the DFR (in Lakhs)	$= D \times (DFR_{min} - DFR_a) \times P \times 1.5 \times 10$ {if $DFR_a < DFR_{min}$}; OR $= 0$ {if $DFR_a > DFR_{min}$}
Illustration: Assuming PPA tariff (P) of Rs. 4.30 /kWh, Penalty for shortfall for this month $= 208.878 \times (0.75 - 0.7445) \times 4.30 \times 1.5 \times 10$ $\qquad\qquad\qquad\qquad\qquad = $ Rs. 74.0994705 Lakhs $\qquad\qquad\qquad\qquad\qquad = $ Rs. 74,09,947.05	