

SOLAR ENERGY CORPORATION OF INDIA LIMITED
NEW DELHI

Ref No. SECI/C&P/IPP/13/0006/23-24/Amendment-04

Date 14.05.2024

Amendment-04 to RfS for Selection of RE Power Developers for Supply of 1260 MW Firm and Dispatchable Power from ISTS-Connected Renewable Energy (RE) Power Projects in India under Tariff-Based Competitive Bidding (SECI-FDRE-IV)			
RfS No. SECI/C&P/IPP/13/0006/23-24 dated 15.09.2023			
S. No.	Clause/Article No.	Existing Clause/Article	Amended Clause/Article
Amendments in the RfS document			
1.	General	<p>1. Title of the RfS document shall hereafter be read as “Request for Selection (RfS) Document for Selection of RE Power Developers for Supply of 630 MW ISTS-Connected Renewable Energy (RE) Power Projects in India, under Tariff-based Competitive Bidding (SECI-FDRE-IV)”.</p> <p>2. The total capacity offered under this RfS shall hereafter stand modified to 630 MW, and the same shall be read accordingly in the RfS, PPA and PSA documents.</p>	
2.	Bid Information Sheet (A)	1. Selection of RE Power Developers for Supply of 1260 MW Firm and Dispatchable Power on demand-following basis from ISTS-connected RE Projects in India	1. Selection of RE Power Developers for Supply of 630 MW Firm and Dispatchable Power on demand-following basis from ISTS-connected RE Projects in India
3.	1.6	As part of the Guidelines, SECI hereby invites proposals for setting up of ISTS-connected RE Projects for supply of 1260 MW Firm and Dispatchable RE power, ...	As part of the Guidelines, SECI hereby invites proposals for setting up of ISTS-connected RE Projects for supply of 630 MW Firm and Dispatchable RE power, ...
4.	1.7	Out of the total tendered capacity of 1260 MW, 1250 MW capacity procured by SECI from the above Projects has been provisioned to be sold to BSES Rajdhani Power Limited (BRPL) and BSES Yamuna Power Limited (BYPL), Delhi, and remaining 10 MW has been provisioned to be sold to M/s GIFT Power Company Limited (GIFT PCL), Gujarat. ...	Out of the total tendered capacity of 630 MW, 625 MW capacity procured by SECI from the above Projects has been provisioned to be sold to BSES Rajdhani Power Limited (BRPL) and BSES Yamuna Power Limited (BYPL), Delhi, and remaining 5 MW has been provisioned to be sold to M/s GIFT Power Company Limited (GIFT PCL), Gujarat. ...
5.	4.1	Selection of RE Power Projects for a total Contracted Capacity of 1260 MW will be carried out through e-bidding followed by e-Reverse Auction process.	Selection of RE Power Projects for a total Contracted Capacity of 630 MW will be carried out through e-bidding followed by e-Reverse Auction process.
6.	5.1	A Bidder, including its Parent, Affiliate or Ultimate Parent or any Group Company shall submit a single bid offering a minimum quantum of cumulative Contracted Capacity of 50 MW and a	A Bidder, including its Parent, Affiliate or Ultimate Parent or any Group Company shall submit a single bid offering a minimum quantum of cumulative Contracted Capacity of 50 MW and a maximum quantum of 315 MW, in the

		maximum quantum of 630 MW, in the prescribed formats. ...	prescribed formats. ...
7.	5.2	The cumulative Contracted Capacity to be allocated to a Bidder including its Parent, Affiliate or Ultimate Parent or any Group Company shall be limited to 630 MW.	The cumulative Contracted Capacity to be allocated to a Bidder including its Parent, Affiliate or Ultimate Parent or any Group Company shall be limited to 315 MW.
8.	6.3	<p>Modified as follows:</p> <p>The RPDs are free to change the Project location and/or Delivery Point up to the deadline for Financial Closure as per Clause 22.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>In case the RPD fails to obtain connectivity in spite of applying for the same within the above deadline, due to reasons not attributable to RPD, the same shall entail corresponding extensions in the timelines for meeting the Project milestones and the RPD will be eligible for necessary relief under change in law provisions (if applicable) as per the PPA, however, the same will be dealt by SECI on case-to-case basis.</p> <p>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.</p>	
9.	7.5.iv	<p>New Clause</p> <p>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.</p>	
10	7.10	The RPDs will be required to apply for connectivity at its identified substation(s),	The RPDs will be required to apply for connectivity at the identified substation, as

		as mentioned in the Covering Letter (Format 7.1), within 30 days after the date of tariff adoption by the Appropriate Commission, ...	mentioned in the Covering Letter (Format 7.1), within 30 days from the Effective Date of PPA, ...
11	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. ...
12	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. ...
13	8.1.c	<p>... In each Contract Year, for the period from (and including) 1st November to 31st March of that year, the RPD shall be required to maintain a Demand Fulfilment Ratio (DFR) of at least 90% on a monthly basis.</p> <p>For the period from (and including) 1st April to 31st October, the RPD shall be required to maintain a monthly DFR of 80% during Peak Hours (Peak Hours defined as follows- 00:00 Hrs.- 01:00 Hrs.; 14:30 Hrs.-16:30 Hrs.; and 21:00 Hrs. to 24:00 Hrs.) and 80% during Off-Peak Hours (all other hours of the day not defined as Peak Hours), separately. In case of deviation in meeting 80% minimum DFR as mentioned above, penalty for the shortfall from 80% DFR shall be calculated separately for the Peak Hours and Off-Peak Hours as per Clause 8.2.b of the RfS and the cumulative penalty shall be levied.</p> <p>...</p>	<p>... The RPD shall be required to maintain a Demand Fulfilment Ratio (DFR) of at least 80% on a monthly basis.</p> <p>...</p>
14	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 adding up the shortfalls in meeting the 80% requirement in individual hourly time-blocks during the month in a Contract Year in which power has been scheduled.
15	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 80% on a monthly basis, save and except in case of Force Majeure, ...

16	38.2.i	A minimum annual turnover of INR 1,26,93,000/MW (Indian Rupees One Crore Twenty-Six Lakhs and Ninety-Three Thousand/MW) ...	A minimum annual turnover of INR 2,17,20,000/MW (Indian Rupees Two Crore Seventeen Lakhs and Twenty thousand/MW) ...		
17	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 25,39,000/MW (Indian Rupees Twenty-five Lakhs and Thirty-nine Thousand/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 43,44,000/MW (Indian Rupees Forty-three Lakhs and Forty-four thousand/MW) of the quoted capacity, ...		
18	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 31,73,000/MW (Indian Rupees Thirty-one Lakhs and Seventy-three Thousand/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 54,30,000/MW (Indian Rupees Fifty-four Lakhs and Thirty Thousand/MW) of the quoted capacity, ...		
19	42.2	<p>Modified as follows:</p> <p>The Total eligible bidders for the reverse auction shall be decided as mentioned below: Assuming T = Total Techno-Commercially Qualified Bidders, and S_k = Cumulative bid capacity till the ‘k’th serial number bidder (not the ‘k’th rank bidder) after ranking is done in ascending order from L1 onwards</p> <table border="1" style="width: 100%;"> <tr> <td style="width: 35%; padding: 5px;">S_E = (Eligible capacity for award)</td> <td style="padding: 5px;">(i) In case S_T ≤ 630 MW, S_E = 0.8 X S_T (ii) In case S_T > 630 MW, S_E = 0.8 X S_T subject to maximum eligible capacity being 630 MW.</td> </tr> </table> <p>Total eligible Bidders for e-Reverse Auction</p> <p>i. <u>In case (0.8 X S_T) ≤ 630 MW</u>: all the techno-commercially qualified bidders whose financial bids are in line with the RfS provisions, will be shortlisted for e-RA. Accordingly, the no. of bidders shortlisted for e-RA, i.e., “n” = “T”.</p> <p>ii. <u>In case (0.8 X S_T) > 630 MW</u>: The lowest ranked bidder, i.e., the bidder quoting the highest tariff (the “H1 bidder”) shall be eliminated at this stage, and the remaining techno-commercially qualified bidders whose financial bids are in line with the RfS provisions, will be shortlisted for e-RA. Accordingly, the no. of bidders shortlisted for e-RA, i.e., “n” = “T”-1</p> <p>Note:</p> <p>(a) In case more than one bidder is ranked as “H1” bidder, i.e., such bidders are at the same tariff, all such bidders will be eliminated at this stage.</p> <p>(b) The above elimination will take place subject to the condition that the total bid capacity after such elimination remains <u>more than 630 MW and the minimum number of shortlisted bidders for e-RA, after elimination at this stage, remains 3. In the contradictory scenario, no elimination will take place at this stage.</u></p>		S _E = (Eligible capacity for award)	(i) In case S _T ≤ 630 MW, S _E = 0.8 X S _T (ii) In case S _T > 630 MW, S _E = 0.8 X S _T subject to maximum eligible capacity being 630 MW.
S _E = (Eligible capacity for award)	(i) In case S _T ≤ 630 MW, S _E = 0.8 X S _T (ii) In case S _T > 630 MW, S _E = 0.8 X S _T subject to maximum eligible capacity being 630 MW.				

For e.g. (Shortlisting of Bidders for reverse auction):

Scenario-1: Total bid capacity of techno-commercially shortlisted bidders = $S_T=1550$ MW

S. No.	Techno commercially qualified Bidder	Rank	Capacity (MW)	T	(0.8x S_T)	S_E	n*	Shortlisted Bidders
1	B3	L1	50	10	1240 MW	630 MW	9	B3
2	B5	L2	100					B5
3	B1	L3	50					B1
4	B4	L3	50					B4
5	B2	L4	100					B2
6	B6	L5	150					B6
7	B7	L6	100					B7
8	B8	L7	250					B8
9	B9	L8	300					B9
10	B10	L9	400					

*n = 10-1 = 9 as per the above formula.

Scenario-2: Total bid capacity of techno-commercially shortlisted bidders = $S_T=630$ MW

S. No.	Techno commercially qualified Bidder	Rank	Capacity (MW)	T	(0.8x S_T)	S_E	n	Shortlisted Bidders
1	B3	L1	50	5	504 MW	630 MW	5	B2
2	B2	L2	150					B3
3	B1	L3	150					B1
4	B4	L4	180					B4
5	B5	L5	100					B5

*n = 5 as per the above formula

20	45.23	... 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, ...
21	45.24	... 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 ...
22	Format-7.3A	... In consideration of the	... In consideration of the

		_ [Insert name of the Bidder] (hereinafter referred to as 'Bidder') submitting the response to RfS inter alia for Selection of RE Power Developers for Supply of 1260 MW of Firm ...	[Insert name of the Bidder] (hereinafter referred to as 'Bidder') submitting the response to RfS inter alia for Selection of RE Power Developers for Supply of 630 MW of Firm ...
23	Format-7.3B Clause 3	In consideration of the _____ _ [Insert name of the Bidder] (hereinafter referred to as 'Bidder') submitting the response to RfS inter alia for Selection of RE Power Developers for Supply of 1260 MW of Firm ...	In consideration of the _____ [Insert name of the Bidder] (hereinafter referred to as 'Bidder') submitting the response to RfS inter alia for Selection of RE Power Developers for Supply of 630 MW of Firm ...
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.	<p>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.</p> <p>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.</p> <p>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.</p> <p>In case the RPD fails to obtain connectivity in spite of applying for the same within the above deadline, due to reasons not attributable to RPD, the same shall entail corresponding extensions in the timelines for meeting the Project milestones and the RPD will be eligible for necessary relief under change in law provisions (if applicable) as</p>

			<p>per the PPA, however, the same will be dealt by SECI on case-to-case basis.</p> <p>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.</p>
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 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.	4.4.3	<p>In each Contract Year, for the period from (and including) 1st November to 31st March of that year, the RPD shall be required to maintain a Demand Fulfilment Ratio (DFR) of at least 90% on a monthly basis.</p> <p>For the period from (and including) 1st April to 31st October, the RPD shall be required to maintain a monthly DFR of 80% during Peak Hours (Peak Hours defined as follows- 00:00 Hrs.- 01:00 Hrs.; 14:30 Hrs.-16:30 Hrs.; and 21:00 Hrs. to 24:00 Hrs.) and 80% during Off-Peak Hours (all other hours of the day not defined as Peak Hours), separately. In case of deviation in meeting 80% minimum DFR as mentioned above, penalty for the shortfall from 80% DFR shall be calculated separately for the Peak Hours and Off-Peak Hours as per Clause 4.4.10 of the RfS and the cumulative penalty shall be levied.</p>	<p>The RPD shall be required to maintain a Demand Fulfilment Ratio (DFR) of at least 80% on a monthly basis.</p> <p>...</p>

		...	
7.	4.4.3	... 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 adding up the shortfalls in meeting the 80% requirement in individual hourly time-blocks during the month in a Contract Year in which power has been scheduled.
8.	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 80% for a particular month, such shortfall in performance...
9.	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 ...
Amendments in the PSA document			
1.	Article D	SECI had initiated a Tariff Based Competitive Bid Process for procurement of 1260 MW Firm and Dispatchable Power ...	SECI had initiated a Tariff Based Competitive Bid Process for procurement of 630 MW Firm and Dispatchable Power ...
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 80%). ...
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 80% 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 adding up the shortfalls in meeting the 80% requirement in individual 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 80%. ...

DEMAND PROFILE OF THE BUYING ENTITIES

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 $[215/1260 \times \text{“A”}]$ MW.
3. In any hourly time-block, 10 MW capacity shall be mapped to the GIFT PCL and remaining capacity shall be mapped to BYPL and BRPL.

Hour	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0	215	215	215	1027	1185	1260	1243	1253	978	195	205	215
1	215	215	215	876	1153	1218	1185	1197	923	195	205	205
2	215	215	215	715	1100	1193	1128	1017	871	185	195	205
3	215	215	215	550	984	1155	1070	825	770	185	185	195
4	205	215	215	495	847	1115	1014	679	657	185	185	205
5	225	235	245	460	609	986	848	563	580	205	205	225
6	400	410	440	460	463	722	682	467	534	360	360	400
7	390	400	430	460	460	485	523	460	463	380	370	390
8	380	410	430	460	460	460	460	460	460	400	380	390
9	410	430	430	460	460	460	460	460	460	410	430	420
10	440	460	450	460	460	460	476	460	460	420	450	430
11	450	470	450	460	460	464	496	460	463	440	450	440
12	450	470	460	460	460	460	472	460	460	450	450	440
13	420	440	430	460	460	502	567	460	464	415	420	410
14	380	400	400	460	554	686	737	494	573	380	390	380
15	370	390	390	466	715	935	855	615	657	370	380	370
16	368	388	378	511	881	1000	943	734	697	368	378	388
17	380	390	400	613	889	1043	1003	843	811	390	410	480
18	420	420	430	595	763	944	1008	809	847	400	420	430
19	440	440	440	585	749	891	1006	957	899	390	440	440
20	440	440	440	460	666	845	997	1036	883	380	440	450
21	510	440	440	563	892	1037	1120	1116	965	380	430	480
22	400	410	410	763	1100	1168	1183	1230	1031	350	400	410
23	400	410	420	908	1140	1205	1200	1244	1025	360	380	410

**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	170	215	0.7906
01-Mar	1	170	215	0.7906
01-Mar	2	170	215	0.7906
01-Mar	3	170	215	0.7906
01-Mar	4	170	215	0.7906
01-Mar	5	190	245	0.7755
...
07-Mar	7	340	420	0.8095
07-Mar	8	340	420	0.8095
07-Mar	9	340	420	0.8095
07-Mar	10	340	440	0.7727
07-Mar	11	340	440	0.7727
07-Mar	12	340	450	0.7555
...
25-Mar	16	290	368	0.7880
25-Mar	17	290	390	0.7435
25-Mar	18	350	420	0.8333
25-Mar	19	350	430	0.8139
25-Mar	20	350	430	0.8139
...
31-Mar	21	330	430	0.7674
31-Mar	22	330	430	0.7674
31-Mar	23	330	400	0.8250
31-Mar	24	330	410	0.8048
Mean DFR for all hourly time-blocks for this month, DFR_a (Mean of Column C)				0.7945

#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)	= $\sum \mathbf{B} / 1000$ = 278.628
PPA Tariff (Rs./kWh)	= P
Min. DFR to be maintained as per the RfS (DFR_{min})	= 0.8 (as per Clause 8.1.c)
Actual monthly DFR (DFR_a)	=0.7945 (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 $DFR_a > DFR_{min}$ }
<p>Illustration: Assuming PPA tariff (P) of Rs. 4.30 /kWh, Penalty for shortfall for this month = $278.628 \times (0.8 - 0.7945) \times 4.30 \times 1.5 \times 10$ = Rs. 98.843283 Lakhs = Rs. 98,84,328.30</p>	

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

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 $[215/1260 \times \text{“A”}]$ MW.
3. In any hourly time-block, 10 MW capacity shall be mapped to the GIFT PCL and remaining capacity shall be mapped to BYPL and BRPL.

Hour	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0	215	215	215	1027	1185	1260	1243	1253	978	195	205	215
1	215	215	215	876	1153	1218	1185	1197	923	195	205	205
2	215	215	215	715	1100	1193	1128	1017	871	185	195	205
3	215	215	215	550	984	1155	1070	825	770	185	185	195
4	205	215	215	495	847	1115	1014	679	657	185	185	205
5	225	235	245	460	609	986	848	563	580	205	205	225
6	400	410	440	460	463	722	682	467	534	360	360	400
7	390	400	430	460	460	485	523	460	463	380	370	390
8	380	410	430	460	460	460	460	460	460	400	380	390
9	410	430	430	460	460	460	460	460	460	410	430	420
10	440	460	450	460	460	460	476	460	460	420	450	430
11	450	470	450	460	460	464	496	460	463	440	450	440
12	450	470	460	460	460	460	472	460	460	450	450	440
13	420	440	430	460	460	502	567	460	464	415	420	410
14	380	400	400	460	554	686	737	494	573	380	390	380
15	370	390	390	466	715	935	855	615	657	370	380	370
16	368	388	378	511	881	1000	943	734	697	368	378	388
17	380	390	400	613	889	1043	1003	843	811	390	410	480
18	420	420	430	595	763	944	1008	809	847	400	420	430
19	440	440	440	585	749	891	1006	957	899	390	440	440
20	440	440	440	460	666	845	997	1036	883	380	440	450
21	510	440	440	563	892	1037	1120	1116	965	380	430	480
22	400	410	410	763	1100	1168	1183	1230	1031	350	400	410
23	400	410	420	908	1140	1205	1200	1244	1025	360	380	410

**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	170	215	0.7906
01-Mar	1	170	215	0.7906
01-Mar	2	170	215	0.7906
01-Mar	3	170	215	0.7906
01-Mar	4	170	215	0.7906
01-Mar	5	190	245	0.7755
...
07-Mar	7	340	420	0.8095
07-Mar	8	340	420	0.8095
07-Mar	9	340	420	0.8095
07-Mar	10	340	440	0.7727
07-Mar	11	340	440	0.7727
07-Mar	12	340	450	0.7555
...
25-Mar	16	290	368	0.7880
25-Mar	17	290	390	0.7435
25-Mar	18	350	420	0.8333
25-Mar	19	350	430	0.8139
25-Mar	20	350	430	0.8139
...
31-Mar	21	330	430	0.7674
31-Mar	22	330	430	0.7674
31-Mar	23	330	400	0.8250
31-Mar	24	330	410	0.8048
Mean DFR for all hourly time-blocks for this month, DFR_a (Mean of Column C)				0.7945

#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)	= $\sum \mathbf{B} / 1000$ = 278.628
PPA Tariff (Rs./kWh)	= P
Min. DFR to be maintained as per the RfS (DFR_{min})	= 0.8 (as per Clause 8.1.c)
Actual monthly DFR (DFR_a)	=0.7945 (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 $DFR_a > DFR_{min}$ }
<p>Illustration: Assuming PPA tariff (P) of Rs. 4.30 /kWh, Penalty for shortfall for this month = $278.628 \times (0.8 - 0.7945) \times 4.30 \times 1.5 \times 10$ = Rs. 98.843283 Lakhs = Rs. 98,84,328.30</p>	