

# Ministry of New & Renewable Energy

## Draft - Guidelines for Tariff Based Competitive Bidding Process for Procurement of Power from Grid Connected Wind Solar Hybrid Projects

Sl. No.	Description	Summary
1.	<b>About Scheme</b>	<ul style="list-style-type: none"> <li>It has been established that combining different sources of renewable energy reduces their individual variability and gives better output. It also results in more efficient utilization of transmission infrastructure and land resource.</li> <li>A scheme for setting-up of 2500 MW wind-solar hybrid power projects was sanctioned on 25.05.2018 for procurement of hybrid power at a tariff discovered through transparent process of bidding by Solar Energy Corporation of India (SECI).</li> <li>These Guidelines will provide framework for transparent bidding process, as required under Electricity Act, 2003.</li> </ul>
2.	<b>Objectives</b>	<ul style="list-style-type: none"> <li>To provide a framework for procurement of electricity from wind solar hybrid power project through a transparent process of bidding including standardization of the process and defining of roles and responsibilities of various stakeholders.</li> <li>To enable the Distribution Licensees to procure electricity from wind solar hybrid power project at competitive rates in a cost effective manner.</li> </ul>
3.	<b>Applicability</b>	<ol style="list-style-type: none"> <li>Individual size of 5 MW and above at one site with minimum bid capacity of 25 MW for intra-state projects; and</li> <li>Individual size of 50 MW and above at one site with minimum bid capacity of 50 MW for inter-state projects, subject to the condition that the rated power capacity of one resource is at least 25% of the rated power capacity of other resource. Thus, for a 100 MW project to be treated as hybrid project, the minimum resource (wind or solar) should not be less than 20 MW.</li> </ol>
4.	<b>Storage</b>	<ul style="list-style-type: none"> <li>Storage may be added to the hybrid project: <ol style="list-style-type: none"> <li>to reduce the variability of output power from wind solar hybrid project;</li> <li>providing higher energy output for a given capacity (bid/ sanctioned capacity) at delivery point, by installing additional capacity of wind and solar power in a wind solar hybrid project required for charging of storage facility; and</li> <li>ensuring availability of firm power for a particular period.</li> </ol> </li> </ul> <p>In case of clause (b) above, the additional capacity of wind and solar power in the project shall be declared by HPG at the time of bid submission.</p>
5.	<b>Appropriate Commission</b>	<ul style="list-style-type: none"> <li>In case the hybrid power projects supplying power to Distribution licensee(s) of one State, the Appropriate Commission, for the purpose of these bidding Guidelines, shall be the State Electricity Regulatory Commission of the concerned State where the distribution licensee(s) is located.</li> <li>In case the hybrid power projects supplying power to Distribution licensee(s) of more than one State, the Appropriate Commission, for the purpose of these bidding Guidelines, shall be the Central Electricity Regulatory Commission.</li> <li>For cases involving sale of hybrid power from generating companies owned or controlled by Central Government, the Appropriate Commission shall be the Central Electricity Regulatory Commission.</li> </ul>
6.	<b>Preparation for Inviting Bid and Project Preparedness</b>	<ol style="list-style-type: none"> <li><b>Bid Documentation:</b> <ul style="list-style-type: none"> <li>Inform the Appropriate Commission about the initiation of the bidding process.</li> <li>Seek approval of the Appropriate Commission for deviations, if any, in the draft RfS, draft PPA, draft PSA (if applicable) from these Guidelines and/ or SBDs, in accordance with the process described in these Guidelines.</li> </ul> </li> </ol>

		<ul style="list-style-type: none"> <li>The Procurer may disclose in the RfS, the prevailing incentives available to the HPGs.</li> </ul> <p><b>2. Site-related project preparatory activities including clearances:</b> In order to ensure timely commencement of supply of electricity, the bidder would be required to submit documents in respect of matters as mentioned below, as per the time schedule specified in the bidding documents:</p> <ul style="list-style-type: none"> <li><b>Land acquisition:</b> Identification of the 100% (hundred per cent) land at the time of bid submission and submission of documents / Lease Agreement to establish possession and right to use 100 % (hundred per cent) of the required land in the name of the HPG for a period not less than the complete term of PPA, on or before the Scheduled Commissioning Date (SCD). Wherever leasing of private land is involved, the lease should allow transfer of land to the lenders or Procurer, in case of default of the HPG.</li> <li>No Objection Certificate (NOC)/ Environmental clearance (if applicable)</li> <li>Forest Clearance (if applicable);</li> <li>No objection certificate (NOC) from Ministry of Defence (if applicable);</li> <li>letter from State Transmission Utility (STU)/ Central Transmission Utility (CTU), as applicable, confirming technical feasibility of connectivity of the plant to STU/ CTU substation.</li> <li>Any other clearances (if any), as may be legally required.</li> </ul>
7.	<b>Bid Size</b>	For intra- state projects a bidder shall be allowed to bid for a minimum 25 MW wind solar hybrid power projects with at least 5 MW project at one site and for inter-state projects a bidder shall be allowed to bid for a minimum 50 MW wind solar hybrid power project at one site.
8.	<b>Bidding Parameters</b>	<ol style="list-style-type: none"> <li>To enhance the quality of power and to reduce variability of renewable power, procurer may define additional parameters like minimum firm power output throughout the day or for defined hours during the day, minimum electricity to be supplied per day, extent of variability allowed in output power, etc.</li> <li>The Procurer may select either of the following kinds of tariff based bidding: <ul style="list-style-type: none"> <li>fixed tariff in Rs./kWh for 25 years or more or</li> <li>escalating tariff in Rs./kWh with pre-defined quantum of annual escalations fixed in Rs./kWh and number of years from which such fixed escalation will be provided.</li> </ul> </li> </ol>
9.	<b>Power Purchase Agreement</b>	The PPA period should not be less than 25 years from the date of commissioning of the first part capacity of the Projects. The PPA may be further extended on such term and conditions as mutually agreed between the parties signing the PPA and approved by Appropriate Commission, provided the arrangements with the land and infrastructure owning agencies, the relevant transmission utilities and system operators permits operation of the Wind Power Project beyond the initial PPA period of 25 years.
10.	<b>Capacity Utilization Factor (CUF)</b>	<ul style="list-style-type: none"> <li>The HPG will declare the annual CUF of its Project at the time of signing of PPA and will be allowed to revise the same once within first three years of COD.</li> <li>The declared annual CUF shall in no case be less than 30 per cent.</li> <li>For the first year of operation of the project, the annual CUF shall be calculated for the complete year after COD of the Project. Subsequently, the annual CUF will be calculated every year from 1st April of the year to 31st March next year.</li> <li>In case the project supplies energy less than the energy corresponding to the minimum CUF, the HPG will be liable to pay to the Procurer, penalty for the shortfall in availability of energy.</li> <li>The amount of such penalty will be calculated @ 50% (fifty percent) of the PPA tariff for the shortfall in energy terms, in accordance with the terms of the PPA.</li> <li>In case of availability of power more than the declared annual CUF specified, HPG will be free to sell it to any other entity provided first right of refusal will vest with the Procurer(s).</li> </ul>

11.	<b>Repowering</b>	The HPG will be free to re-power their wind capacity only during the PPA duration.
12.	<b>Payment Security</b>	<ol style="list-style-type: none"> <li>1. Scenario 1: Direct procurement by Distribution licensee from HPG <ol style="list-style-type: none"> <li>a. Revolving Letter of Credit (LC) of an amount not less than 1 (one) months' average billing from the Project under consideration; AND</li> <li>b. Payment Security Fund, which shall be suitable to support payment for at least 3 (three) months' billing of all the Projects tied up with such fund;</li> <li>c. the Procurer may also choose to provide State Government Guarantee, in a legally enforceable form, ensuring that there is adequate security to the HPG, both in terms of payment of energy charges and termination compensation, if any.</li> </ol> </li> <li>2. Scenario 2: Intermediary-Procurer procures from the HPG and sells to the Distribution licensee <ol style="list-style-type: none"> <li>a. Payment Security by Intermediary Procurer to the HPG <ul style="list-style-type: none"> <li>• Revolving Letter of Credit (LC) of an amount not less than 1 (one) months' average billing from the Project under consideration; AND</li> <li>• Payment Security Fund, which shall be suitable to support payment of at least 3 (three) months' billing of all the Projects tied up with such fund.</li> </ul> </li> <li>b. Payment Security by Distribution licensee to Intermediary Procurer <ul style="list-style-type: none"> <li>• Revolving Letter of Credit (LC) of an amount not less than 1 (one) months' average billing from the Project(s) under consideration; AND</li> <li>• State Government Guarantee, in a legally enforceable form, such that there is adequate security, both in terms of payment of energy charges and termination compensation, if any.</li> <li>• the Distribution licensee may also choose to provide Payment Security Fund, which shall be suitable to support payment of at least 3 (three) months' billing of all the Projects tied up with such fund.</li> </ul> </li> </ol> </li> </ol>
13.	<b>Change in Law / Regulations</b>	<ul style="list-style-type: none"> <li>• In case change in Law / Regulations results in delay in commissioning, where cause and effect between these two can be clearly established, the procurer may provide suitable extension to commissioning of the project.</li> <li>• In these Guidelines, the term 'Change in Law/ Regulation' shall refer to the occurrence of the following events, after the last date of the bid submission, including <ol style="list-style-type: none"> <li>1. the enactment of any new law/ regulation; or</li> <li>2. an amendment, modification or repeal of an existing law/ regulation; or</li> <li>3. the requirement to obtain a new consent, permit or license; or</li> <li>4. any modification to the prevailing conditions prescribed for obtaining a consent, permit or license, not owing to any default of the HPG; or</li> <li>5. any change in the rates of any taxes which have a direct effect on the Project.</li> </ol> </li> </ul>
14.	<b>Force Majeure</b>	<ol style="list-style-type: none"> <li>1. The HPG shall intimate the Procurer about the occurrence of force majeure within 15 (fifteen) days of the start of the force majeure and the Procurer shall take a decision on his claim within 15 days of the receipt of the intimation.</li> <li>2. Government of India from time to time issues order for waiver of inter-state transmission system (ISTS) charges and losses on transmission of wind power till a certain date.</li> <li>3. In case the SCD of wind project is before the date till above ISTS waiver is applicable, and if the commissioning of the project gets delayed beyond the applicable date of ISTS waiver due to force majeure event, the liability of transmission charges and losses would be shared between the HPG and procurer(s) in ratio of 50:50.</li> </ol>

15.	<b>Generation Compensation for Off-take Constraints</b>	<p><b>1. Generation Compensation in off take constraints due to Grid Unavailability:</b></p> <ul style="list-style-type: none"> <li>• During the operation of the plant, there can be some periods where the plant can generate power but due to temporary transmission unavailability the power is not evacuated, for reasons not attributable to the HPG. In such cases the generation compensation shall be addressed by the Procurer.</li> </ul> <p><b>2. Off take constraints due to Back down:</b></p> <ul style="list-style-type: none"> <li>• No back-down / curtailment to be ordered without giving formal/written instruction for the same.</li> <li>• In the event of any Backing down, the HPG shall be eligible for a Generation Compensation, from the Procurer.</li> </ul>
16.	<b>Event of Default and the Consequences thereof</b>	<p>While detailed provisions with regard to the event of default of the concerned parties and its resulting consequences shall be detailed in the SBDs, this clause lays down the broad principles of contractually dealing with the default of the HPG and the Procurers.</p> <p><b>1. Generator Event of Default and the consequences thereof:</b></p> <ul style="list-style-type: none"> <li>• Upon being in default, the HPG shall be liable to pay to the Procurer, damages, as provided in these Guidelines for failure to commission within stipulated time and for failure to supply power in terms of the PPA.</li> <li>• For other cases, pay to the Procurer, damages, equivalent to 6 (six) months, or balance PPA period whichever is less, of charges for its contracted capacity.</li> <li>• The Procurer shall have the right to recover the said damages by way of forfeiture of bank guarantee, if any, without prejudice to resorting to any other legal course or remedy.</li> </ul> <p><b>2. Procurer Event of Default and the consequences thereof:</b></p> <p>In the event the aforesaid novation is not acceptable to the HPG, or if no offer of novation is made by the defaulting Procurer within the stipulated period, then the HPG may terminate the PPA and at its discretion require the defaulting Procurer to either:</p> <ul style="list-style-type: none"> <li>• takeover the Project assets by making a payment of the termination</li> <li>• compensation equivalent to the amount of the debt due and the 110% (one hundred and ten per cent) of the adjusted equity as defined below, less Insurance Cover if any or,</li> <li>• pay to the HPG, damages, equivalent to 6 (six) months, or balance PPA period whichever is less, of charges for its contracted capacity, with the Project assets being retained by the HPG.</li> </ul>
17.	<b>Adjusted Equity</b>	<ul style="list-style-type: none"> <li>• An amount equal to the Adjusted Equity as on COD shall be deemed to be the base (the "Base Adjusted Equity").</li> <li>• After COD, the Adjusted Equity hereunder shall be a sum equal to the Base Adjusted Equity, reduced by 0.333% (zero point three three three percent) thereof at the commencement of each month following the COD [reduction of 1% (one percent) per quarter of an year] and the amount so arrived at shall be revised to the extent of variation in WPI occurring between the COD and the Reference Date.</li> </ul>
18.	<b>Debt Due</b>	Debt Due, on or after COD, shall in no case exceed 80% (eighty percent) of the Total Project Cost.
19.	<b>Bidding Process</b>	<ul style="list-style-type: none"> <li>• The Procurer shall call for the bids adopting a single stage two envelop bidding process to be conducted through Electronic mode (e-bidding).</li> <li>• The Procurer shall invite the bidders to participate in the RfS for installation of HPP(s) in terms of these Guidelines.</li> </ul>
20.	<b>RFS Document</b>	<p>The standard provisions to be provided by the Procurer in the RfS shall include the following:</p> <ol style="list-style-type: none"> <li>1. Bid Responsiveness</li> <li>2. Qualification requirements to be met by the bidders</li> <li>3. Technical Criteria</li> <li>4. Financial Criteria <ul style="list-style-type: none"> <li>• Net-worth</li> </ul> </li> </ol>

		<ul style="list-style-type: none"> <li>Liquidity</li> </ul> <p>5. Quantum of the Earnest Money Deposit (EMD) 6. Compliance of FDI Laws by foreign bidders</p>												
21.	<b>Indicative Time Table for Bid Process</b>	<p>In the bidding process, a minimum period of 30 (thirty) days shall be allowed between the issuance of RfS documents and the last date of bid submission. The indicative timetable for the bidding process is as below:</p> <table border="1"> <thead> <tr> <th>Event</th> <th>Time from Zero date</th> </tr> </thead> <tbody> <tr> <td>Date of issue of RfS and draft PPA and PSA (if applicable)</td> <td>Zero date</td> </tr> <tr> <td>Bid clarification, conferences, revision of RfS, etc.</td> <td>**</td> </tr> <tr> <td>RfS bid submission</td> <td>30 - 45 days</td> </tr> <tr> <td>Evaluation of bids and issue of Letter of Award</td> <td>75 days</td> </tr> <tr> <td>Signing of PPA</td> <td>105 days</td> </tr> </tbody> </table> <ul style="list-style-type: none"> <li>** In case of any change in RfS document, the Procurer shall provide Bidders additional time in accordance with these Guidelines.</li> <li>In normal circumstances, the bidding process is likely to be completed in a period of 120 (one hundred and twenty) days.</li> </ul>	Event	Time from Zero date	Date of issue of RfS and draft PPA and PSA (if applicable)	Zero date	Bid clarification, conferences, revision of RfS, etc.	**	RfS bid submission	30 - 45 days	Evaluation of bids and issue of Letter of Award	75 days	Signing of PPA	105 days
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22.	<b>Financial Closure</b>	<p>The HPG shall attain the financial closure in terms of the PPA, within 7 (seven) months from the date of execution of the Power Purchase Agreement.</p> <p>Failing the aforesaid, the Procurer shall encash the PBG unless the delay is on account of force majeure.</p>												
23.	<b>Minimum Paid Up Share Capital to be Held by the Promoter</b>	<ul style="list-style-type: none"> <li>The successful bidder, if being a single company, shall ensure that its shareholding in the SPV/project company executing the PPA shall not fall below 51% at any time prior to 1 (one) year from the COD. However, in case the successful bidder shall be itself executing the PPA, then it shall ensure that its promoters shall not cede control till 1 (one) year from the COD.</li> <li>In the event the HPG is in default to the lender(s), lenders shall be entitled to undertake 'Substitution of Promoter' in concurrence with the Procurers.</li> </ul>												
24.	<b>Commissioning</b>	<ul style="list-style-type: none"> <li><b>Part Commissioning:</b> Part commissioning of the Project shall be accepted by Procurer subject to the condition that the minimum capacity for acceptance of first part commissioning shall be 50% of Project Capacity or 50 MW, whichever is lower, without prejudice to the imposition of penalty, in terms of the PPA on the part which is not commissioned. However, in case of inter-state project, minimum capacity for acceptance of first part commissioning shall be at least 50 MW. A project of capacity 100 MW or less can be commissioned in maximum two parts.</li> <li><b>Early Commissioning:</b> The HPG shall be permitted for full commissioning as well as part commissioning of the Project even prior to the SCD subject to availability of transmission connectivity and Long-Term Access (LTA).</li> <li><b>Commissioning Schedule:</b> The Projects shall be commissioned by the Scheduled Commissioning Date (SCD), which will be the date as on 18 (eighteen) months from the date of execution of the PPA or PSA, whichever is later.</li> </ul>												
25.	<b>Transmission Connectivity</b>	<ul style="list-style-type: none"> <li>The responsibility of getting Transmission Connectivity and LTA to the transmission system owned by the STU / CTU will lie entirely with the HPG and shall be at the cost of HPG.</li> <li>The HPGs shall comply CERC/SERC regulations on Forecasting, Scheduling and Deviation Settlement, as applicable and are responsible for all liabilities related to LTA and Connectivity.</li> </ul>												