



**Clarifications/Amendments to the Pre-Bid Queries Ref: CO/ITD/1387/R1/2020-21 dated 28.10.2020 - Request for Proposal for Supply, Installation, Commissioning and Maintenance of 6 Nos. of 100 KVA UPS for Corporate Office, Chennai and Head Office, Chennai.**

**TECHNICAL QUERIES**

S.No	RFP Clause	Query Raised	Clarification/Amendment
1.	<p><b>Page No. 25 &amp; 27- Part-I, Functional and Technical Requirements, Point No.2.1 &amp; 4.19</b></p> <p><b>Type of UPS:</b> Double Conversion Online UPS with inbuilt Isolation Transformer at input side of the UPS</p> <p><b>Isolation Transformer:</b> Inbuilt input isolation transformer</p>	<ol style="list-style-type: none"> <li>UPS with inbuilt Isolation transformer at Input side of the UPS – may be amended to either at Input or output side of the UPS along with Technical Bid.</li> <li>Our UPSs designed to operate Without Isolation Transformer without any implication to Customer load and request you to confirm if we can quote Transformer -less design UPS for this requirement or External transformer.</li> <li>Inbuilt Output inverter isolation transformer gives us the benefit of <ul style="list-style-type: none"> <li>Galvanic Isolation of DC-AC circuit avoiding the flow of DC to loads,</li> <li>Better short circuit with stand Capability High Reliable than transformerless UPS.</li> </ul> </li> </ol>	Please Adhere to Tender Terms.

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		<ul style="list-style-type: none"> <li>Flexibility to connect to two independent sources to rectifier and static bypass.</li> </ul> <p>So proposing for inbuilt output isolation transformer.</p>	
2.	<p><b>Page No. 32- Part-I, Functional and Technical Requirements, Point No.17.1</b></p> <p><b>Certificates and Standards for UPS:</b> ISO9001, ISO14001, ISO45001, Type Test Report for IEC 62040-3 and CE.</p>	<p>ISO 45001 - It will be mandatory after March 2021- till then equivalent ISO 18001 is applicable , also Type test report should be as per IEC 62040 -3 not For</p>	<p>Please Adhere to Tender Terms.</p>
3.	<p><b>Page No. 32- Part-I, Functional and Technical Requirements, Point No.15.5 &amp; 15.6</b></p> <p><b>Cable from Battery Bank to Battery Circuit Breaker:</b> Minimum 1Cx1Rx70 Sq mm (+ve/-ve), 5m and anything extra required also shall be in the scope of vendor.</p> <p><b>Cable from Battery Bank to Battery Circuit Breaker:</b> Minimum 1Cx2Rx35 Sq mm (+ve/-ve), 6m and anything extra required also shall be in the scope of vendor.</p>	<ol style="list-style-type: none"> <li>Point No 15.5 &amp; 15.6 are contradictory should be same</li> <li>Cable size will be different for each vendor due to internal DC voltage.</li> </ol>	<p><b><u>Amendments</u></b></p> <p>Bidders have to provide suitable cable from Battery Bank to Battery Circuit Breaker. If required, extra cable have to be provided by bidders at no cost to Bank including cables from UPS to power panel.</p>
4.	<p><b>Page No. 27- Point No. 6- Overall efficiency (AC to AC) with Isolation Transformer</b></p>	<p>We want to appraise you that now a days most of the UPS manufacturer offers UPS Efficiency in Double Conversion around 95% to 96 % in market and 93.5% to 95% from</p>	<p><b><u>Amendments</u></b></p> <p>6.1. at 25% load capacity: 92% or above 6.2. at 50% load capacity: 93% or above</p>

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	6.1. at 25% load capacity: 92% 6.2. at 50% load capacity: 93% 6.3. at 75% load capacity: 93.5% 6.4. at 100% load capacity: 92.5%	25% to 100% loading condition including External Isolation Transformer in Double Conversion mode. We suggest Indian bank should buy High Efficient UPS available in market for Double Conversion mode.	6.3. at 75% load capacity: 93.5% or above 6.4. at 100% load capacity: 92.5% or above
5.	-	Please clarify the Configuration of 6 nos- 100 kva UPS (Parallel Redundant / Standalone etc ) or else please share the Single Line diagram.	<b>Clarification</b> All the UPS should be connected in Parallel.  There are two different locations where UPS needs to be installed.  3 Nos. of 100 KVA UPS should be installed at our Corporate Office, Chennai in Parallel Mode and remaining 3 Nos. of 100 KVA UPS should be installed at our Head Office, Chennai in Parallel Mode
6.	-	Please clarify UPS to Battery cable distance to be considered or else share us the UPS & battery Room Layout. Also please confirm other cables length also which need to be considered.	<b>Clarification</b> The successful bidder has to provide the required cables.
7.	-	We want to understand if UPS , Isolation Transformer ,Accessories & Battery (as a package) should be considered as a package under the Make in India Policy guidelines.	Yes, UPS, Isolation Transformer ,Accessories & Battery (as a package) will be considered as a package under the Make in India Policy guidelines.





8.	<b>Page No. 25- Part-I, Functional and Technical Requirements, Point No.1.2</b>  <b>UPS Configuration:</b> Parallel up to 8 units	Generally UPS in these ranges can be parallel up to 6 nos. Also for this requirement 3 nos UPS only connecting Parllal. Considering the fulfill of your requirement	<b>Amendment</b>  This clause is deleted.
9.	<b>Page No. 26- Part-I, Functional and Technical Requirements, Point No.3.2</b>  <b>Input Voltage Range:</b> +\ -15% at 100% Load and upto -45% @ 65% Load	+\ -15% at 100% Load	<b>Amendment</b>  <b>Input Voltage Range:</b> +\ -15% at 100% Load
10	<b>Page No. 31- Part-I, Functional and Technical Requirements, Point No.12.4, Metering &amp; Display</b>  <b>Power factor:</b> Required	UPS output power in KVA and KW available. Kindly consider this.	<b>Clarification</b>  The UPS should display the power in KVA and KW.
11	<b>Page No. 32- Part-I, Functional and Technical Requirements, Point No.15.2, Additional features</b> <b>999 Event data logger with date &amp; time:</b> Required	500 Event data logger with date & time available in First in first out method. Kindly consider this	<b>Amendment</b>  <b>500 Event data logger with date &amp; time:</b> Required
12	<b>Page No. 32- Part-I, Functional and Technical Requirements, Point No.15.3, Additional features</b>  <b>Life Cycle Monitoring of Critical</b>	UPS always with AMC -so OEM can address this well in advance.	<b>Amendment</b>  This clause is deleted.

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	<b>Components:</b> The alarms must be before the UPS can fail.		
13	<b>Page No. 32- Part-I, Functional and Technical Requirements, Point No.15.4, Additional features</b>  <b>Compatibility with Regenerative Loads:</b> Inbuilt advanced 4 quadrant operation.	Since this UPS requirement is for IT equipments, regenerative load compatibility is not applicable	<b>Amendment</b>  This clause is deleted.
14	<b>Page No. 26- Part-I, Functional and Technical Requirements, Point No.3.3, Additional features</b>  <b>Rectifier Configuration:</b> 3 Phase, 4 Wire	Since inbuilt IT System, proposing for 3 phase 3 wire	Please Adhere to Tender Terms.
15	<b>Page No. 26- Part-I, Functional and Technical Requirements, Point No.4.1</b>  <b>Output Power:</b> 100 KW	Since 3Phase higher capacity inbuilt IT system, practically unity power factor is not possible and because of this need to consider next rating. Hence proposing for the industry standard power deliverable of 90KW	Please Adhere to Tender Terms.
16	<b>Page No. 26- Part-I, Functional and Technical Requirements, Point No.4.2</b>  <b>Output Power Factor:</b> Unity Power	Since 3Phase higher capacity inbuilt IT system, practically unity power factor is not possible and mandatorily losses will occur and Active and Apparent power can't be same. Hence proposing for the industry	Please Adhere to Tender Terms

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	Factor	standard 0.9pf	
17	<p><b>Page No. 29- Part-I, Functional and Technical Requirements, Point No.8.15</b></p> <p><b>Minimum VAH:</b> 107500VAH or above for each UPS</p>	As per the attached wattage table method of battery sizing, a minimum of 96000VAH will also be enough and proposing for the change with minimum VAH as 96000VAH	<p><b><u>Amendment</u></b></p> <p><b>Minimum VAH: 96000VAH</b> or above for each UPS.</p> <p>The bidders have to ensure that each UPS will provide 30 Minutes Backup.</p>
18	<p><b>Page No. 26,27- Part-I, Functional and Technical Requirements, Point No.4.15</b></p> <p>Max. output current loading @ 0.9 PF: Vendor to specify(in Amp.)</p>	-	<p><b><u>Amendment</u></b></p> <p>Max. output current loading @ <b>unity</b> PF: Vendor to specify(in Amp.)</p>

