

**Date: 25.1.2021**

**Amendment No. 5**  
**to**  
**Request for Proposal (RfP)**  
**for**  
**Selection of Smart Grid Implementation Agency (SGIA)**  
**for**  
**Implementation of Smart Grid**  
**in**  
**Rourkela Smart City, Odisha**

**Volume – I**

Reference Clause	Existing Provision after Issuance of Clarification dated 4.12.2020 and Amendment No.4 to RfP dated 11.1.2021	Amended Provision
Document Checklist	<b>Refer Annexure-1 of this Document</b>	
Volume-I Important Dates and Amounts	<p>Last Date of downloading of RFP – 29.1.2021 upto 12:00 hrs  Last date and time for online bidding &amp; receipt of RFP – 29.1.2021 upto 15:00 hrs  Technical Bid Opening – 29.1.2021 at 16:00 hrs</p>	<p>Last Date of downloading of RFP – <del>5.2.2021</del> <del>29.1.2021</del> upto 12:00 hrs  Last date and time for online bidding &amp; receipt of RFP – <del>5.2.2021</del> <del>29.1.2021</del> upto 15:00 hrs  Technical Bid Opening – <del>5.2.2021</del> <del>29.1.2021</del> at 16:00 hrs</p> <p><b><u>Interested Bidders are requested to prepare their bids well in advance as no further extension would be given after the above date</u></b></p>
	Bid Security as Demand Draft or Bank Guarantee, valid for a period of 120 days beyond the end of validity period of the bid (Refundable)	<p><del>Bid Security as Demand Draft or Bank Guarantee, valid for a period of 120 days beyond the end of validity period of the bid (Refundable)</del></p> <p><b>The Bidder shall submit the Declaration of Bid Security as per Annexure-1 of the RfP.</b></p>
Volume-I Clause 4.3.1 (Qualifying Requirement)	<b>Refer Annexure-2 of this Document for Revised Qualifying Requirement</b>	
Volume-I Clause 4.3.1 (Qualifying Requirement)	.....In case Bidder does not manufacture or produce any major equipment or component of the overall Solution to be provided as the Scope of Work, then the Bidder is required to submit the Manufacturer's /OEM's Authorization stating the required support from the Manufacturer/OEM with respect to supply, support, etc for a period of eight (8) years from the date of Operational Acceptance of the entire project by WESCO.....	.....In case Bidder does not manufacture or produce any major equipment or component of the overall Solution to be provided as the Scope of Work, then the Bidder is required to submit the Manufacturer's /OEM's Authorization stating the required support from the Manufacturer/OEM with respect to supply, support, etc. <b>from the date of award of contract to SGIA till 96 months for a period of eight (8) years</b> from the date of Operational Acceptance of the entire project by <b>WESCO TPWODL.....</b>
Volume-I Clause 4.3.2.10 (Consortium Bids)	The Lead Consortium Member shall submit the Bid after legitimately paying the purchase fees for the RFP, and submission of the Tender Fees and Bid Security as per the various terms, schedules and formats prescribed in this RFP	The Lead Consortium Member shall submit the Bid after legitimately paying the purchase fees for the RFP, and submission of the Tender Fees and <b>Declaration of</b> Bid Security as per the various terms, schedules and formats prescribed in this RFP
Volume-I Clause 4.5.3 (Payment of Fees by Bidders)	Any Bid not accompanied by a substantially responsive Bid Security in accordance with Annexure 1 shall be rejected by PFCCCL as non-responsive	Any Bid not accompanied by a substantially responsive <b>Declaration of</b> Bid Security in accordance with Annexure 1 shall be rejected by PFCCCL as non-responsive

Volume-I Clause 4.5.4 (Payment of Fees by Bidders)	Bid Security of unsuccessful Bidders shall be returned as promptly as possible upon signing of the contract by WESCO with the Project Implementing Consortium	<b>Deleted</b>
Volume-I Clause 4.5.5 (Payment of Fees by Bidders)	The Bid Security of the Project Implementing Consortium shall be returned as promptly as possible once the Project Implementing Consortium has furnished the required Performance Security for Project Implementation in the name of WESCO as per clause 6.21.1.1 and signed the contract with WESCO	<b>Deleted</b>
Volume-I Clause 4.12.5 (Method of Submission of Bid)	The sealed envelope shall contain hard copies of all original and/ or attested documents submitted in physical submission of Technical Bid. The separate sealed envelope shall also contain requisite hard copies of the Tender Fee and Bid Security	The sealed envelope shall contain hard copies of all original and/ or attested documents submitted in physical submission of Technical Bid. The separate sealed envelope shall also contain requisite hard copies of the Tender Fee and <b>Declaration of</b> Bid Security
Volume-I Clause 4.14.9 (Technical Bid)	Tender Fees & Bid Security as prescribed in Section 2 as per format prescribed in Annexure 1	Tender Fees & <b>Declaration of</b> Bid Security as prescribed in Section 2 as per format prescribed in Annexure 1
Volume-I Clause 4.17.1 (Bid Validity)	The offer submitted in the Bid by the Bidding Consortium shall be valid for a period of 6 Months from the submission of the Bid. The bid security shall be valid for 120 days beyond the end of validity period of the bid. This shall also apply if the period of the bid validity is extended	The offer submitted in the Bid by the Bidding Consortium shall be valid for a period of 6 Months from the submission of the Bid. <b>The bid security shall be valid for 120 days beyond the end of validity period of the bid. This shall also apply if the period of the bid validity is extended</b>
Volume-I Clause 4.17.3 (Bid Validity)	In exceptional circumstance, PFCCL may solicit Bidder's consent to an extension of bid validity period. The request and responses thereto shall be made in writing or by email. If a Bidder accepts to prolong the period of validity, Bid Security shall also be suitably extended. A Bidder may refuse the request without forfeiting its Bid Security. A Bidder granting the request will not be required or permitted to modify its Bid.	In exceptional circumstance, PFCCL may solicit Bidder's consent to an extension of bid validity period. The request and responses thereto shall be made in writing or by email. <b>If a Bidder accepts to prolong the period of validity, Bid Security shall also be suitably extended. A Bidder may refuse the request without forfeiting its Bid Security.</b> A Bidder granting the request will not be required or permitted to modify its Bid.
Volume-I Clause 5.2.2 (Opening of Technical Bids)	The physical submission of the Technical Bids in the sealed envelope shall be opened simultaneously to check for the tender fees and the Bid Security	The physical submission of the Technical Bids in the sealed envelope shall be opened simultaneously to check for the tender fees and the <b>Declaration of</b> Bid Security
Volume-I Clause 5.2.3 (Opening of Technical Bids)	The Bids shall be deemed to be under consideration immediately after they are opened and confirmation or receipt of the Tender Fee and Bid Security, and until an official intimation of award or rejection is made to the Bidders.	The Bids shall be deemed to be under consideration immediately after they are opened and confirmation or receipt of the Tender Fee and <b>Declaration of</b> Bid Security, and until an official intimation of award or rejection is made to the Bidders.
Volume-I	If the Bidder that submitted the Lowest	If the Bidder that submitted the Lowest Evaluated Bid does not

Clause 5.6.4 (Non-Conformities, Errors and Omissions)	Evaluated Bid does not accept the correction of errors, its Bid shall be disqualified and its Bid Security shall be forfeited	accept the correction of errors, its Bid shall be disqualified and <del>its Bid Security shall be forfeited</del> it shall be suspended from participation in the bidding process for future tenders of PFCCL for a period of two (02) years from the bid submission date.
Volume-I Clause 5.9.9 (Award of Contract)	Failure of the successful Bidder to submit the above-mentioned Performance Security or sign the Contract shall constitute sufficient grounds for the annulment of the award and forfeiture of the Bid Security. In that event WESCO may award the Contract to the next successful Bidder whose offer is responsive	Failure of the successful Bidder to submit the above-mentioned Performance Security or sign the Contract shall constitute sufficient grounds for the annulment of the award and <del>forfeiture of the Bid Security</del> suspension from participation in the bidding process for future tenders of PFCCL for a period of two (02) years from the bid submission date. In that event <del>WESCO</del> TPWODL may award the Contract to the next successful Bidder whose offer is responsive
Volume-I Clause 6.21.1 (Performance Security)	Within fourteen (14) days of the notification of Contract award, provide a Performance Security to WESCO in the form of an irrevocable Bank Guarantee valid up to a period of 6 months from date of completion of eight (8) year FMS period from the date of operational acceptance of the project or extended thereafter to the tune of 10% x Total Meter Rent Per Consumer Per Month x Total number of consumers for which the Bidder has quoted Meter Rent x 96 months for the due performance of the Contract in the amounts and currencies specified in the RFP based on the format prescribed in Annexure 14. If Contract Performance Security has not been submitted within 15 days from receipt of Letter of Award by the Contractor, then penalty @0.35% per week or part thereof of the value of Performance Security amount will be recovered from firm which will be calculated from due date of submission of Performance Security till the actual date of submission of Performance Security	Within fourteen (14) days of the notification of Contract award, provide a Performance Security to <del>WESCO</del> TPWODL in the form of an irrevocable Bank Guarantee <b>with initial validity up to thirty six (36) months which need to be extended by the SGIA well in advance before expiry (Discom may invoke the Performance Bank Guarantee without giving any information if validity of such Performance Security expires) valid up to a period of for twelve (12) months at a time</b> till 6 months from date of completion of eight (8) year FMS period from the date of operational acceptance of the project or extended thereafter to the tune of 10% x Total Meter Rent Per Consumer Per Month x Total number of consumers for which the Bidder has quoted Meter Rent x 96 months for the due performance of the Contract in the amounts and currencies specified in the RFP based on the format prescribed in Annexure 14. If Contract Performance Security has not been submitted within 15 days from receipt of Letter of Award by the Contractor, then penalty @0.35% per week or part thereof of the value of Performance Security amount will be recovered from firm which will be calculated from due date of submission of Performance Security till the actual date of submission of Performance Security
Volume-I Annexure A (Tender Evaluation Methodology)	<b>Refer Annexure-3 of this Document for Revised Tender Evaluation Methodology</b>	
Volume-I Annexure 1	<b>Refer Annexure-4 of this Document for Revised Annexure-1 of RfP</b>	
Volume-I  Annexure 3 (S.No. 3) (Format Bill of Covering	<b>Bid Security</b>  We have enclosed a Bid Security of [Amount] in the form of a Bank	<b>Declaration of Bid Security</b>  We have enclosed a <b>Declaration</b> of Bid Security <b>of [Amount] in the form of a Bank Guarantee No. .... [Insert Bank Guarantee Number] (OR</b>

Letter by Lead Consortium Member for Submission of Bid)	Guarantee No. .... [Insert Bank Guarantee Number] (OR Demand Draft) dated ..... [Insert date of the Bank Guarantee] as per Annexure 1 of the RFP from ..... [Insert name of Bank providing Bid Bond] and valid up to [Date].	<del>Demand Draft) dated .....[Insert date of the Bank Guarantee]</del> as per Annexure 1 of the RFP <del>from .....[Insert name of Bank providing Bid Bond] and valid up to [Date].</del>
Volume-I  Annexure 4 (S.No. 7) (Format of Consortium Agreement to be entered amongst all Members of a bidding Consortium)	It is hereby agreed that the Lead Consortium Member shall furnish the Bid Security, as stipulated in the RFP, on behalf of the Bidding Consortium	It is hereby agreed that the Lead Consortium Member shall furnish the <b>Declaration of</b> Bid Security, as stipulated in the RFP, on behalf of the Bidding Consortium
Volume-I Annexure 10 (Format Bill of Quantities)	<b>Refer Annexure-5 of this Document for Revised Format Bill of Quantities</b>	
Volume-I Annexure 17 (Price Bid Schedule)	<b>Refer Revised Price Bid Schedule which has been uploaded separately</b>	

#### Volume – II

Reference Clause	Existing Provision after Issuance of Clarification and Amendment No.2 to RfP dated 4.12.2020	Amended Provision
Volume-II Clause 3.6.11.3 (Meter Data Management System (MDMS) - Reporting)	.....Further, the report function shall generate reports on the following project KPIs for a user configurable time period. This will enable tracking the progress of project benefit parameters. Below is a list of suggestive KPIs to be monitored. These KPIs need to be defined and agreed between employer and utility.....	...Further, the report function shall generate reports on the following project KPIs for a user configurable time period. This will enable tracking the progress of project benefit parameters. Below is a list of suggestive KPIs to be monitored. These KPIs need to be defined and agreed between <b>employer SGIA</b> and utility....

## Volume-I, Document Checklist

S. No	Document	Attached? (Yes/ No)	For Official Use
1.	Tender Fee in the form of Demand Draft.		
2.	Bid Security in the form of Demand Draft or Bank Guarantee as per format prescribed in Annexure 1.		
3.	Covering Letter for Submission of Bid by Lead Consortium Member as per format prescribed in Annexure 3.		
4.	Attested copy of Certificate of Registration/ Incorporation issued by the Registrar of Companies for each Consortium Member		
5.	Attested Copy of the Goods and Services Tax (GST) Registration Certificate of the Lead Consortium Member.		
6.	Attested copy of Provident Fund Code of Lead Consortium Member.		
7.	Attested copy of PAN Card for Lead Consortium Member.		
8.	Certificate of Commencement of Business issued by the Registrar of Companies for Lead Consortium Member.		
9.	<p>In case the Bidder being Indian Company is having collaboration with the Company incorporated outside India (Foreign Company), the Bidder shall in respect of such collaboration submit duly certified/ authenticated copies of the following documents:</p> <ul style="list-style-type: none"> <li>• Certificate of Incorporation / Registration Certificate issued by the competent authority under the law in force in the country of its incorporation;</li> <li>• Memorandum and Articles of Association or document constituting the company and regulating its affairs;</li> <li>• List of board of directors or regulating/controlling body;</li> <li>• Address of its place of business in India, if any;</li> <li>• Audited annual financial statements and financial Net-worth for the last five years only of foreign entity;</li> <li>• Complete copy of agreement entered into by Indian company with foreign company together with gist of major terms, validity period, demarcation of scope of work, role and responsibilities of each party to the agreement, technical, financial &amp; management aspects of agreement;</li> <li>• Commitment of the foreign company to continue partnering with agreement and to discharge its role / functions under the agreement till the completion of the Project including the FMS period, if assigned by <b>WESCO TPWODL</b>.</li> <li>• Any other papers or documents required by PFCCL at a later stage or in future</li> </ul>		
10.	Consortium Agreement Format entered amongst all Members of the Bidding Consortium as per format prescribed in Annexure 4		
11.	Power of Attorney by each Consortium Member in favor of Lead Consortium Member as per format prescribed in Annexure 5		
12.	Power of Attorney by Lead Consortium Member authorizing an Individual Designated Representative for the Consortium as per the format prescribed in Annexure 6 .		
13.	Letter of Consent by each Consortium Member reviewing each element of the Bid as per format prescribed in Annexure 7.		
14.	Company Profile document with evidence of fields of competence and office location for each Consortium Member.		
15.	<p><b>For Meter Manufacturing Technical Experience (Refer Clause 4.3.1.A.4):</b></p> <ul style="list-style-type: none"> <li>• <b>All documents mentioned in Clause 4.3.1.A</b></li> <li>• <del>Contract/ Purchase Order (PO)/ Work Order (WO) indicating client name, scope of work, period of supply etc.</del></li> <li>• <del>A valid registration certificate of manufacturing unit and details of the facility.</del></li> <li>• <del>Valid NABL Accreditation Certificate as mentioned in Qualification Requirement.</del></li> <li>• <b>A valid ISO and OHSAS certificate on or before the date of publication of the tender</b></li> </ul>		

S. No	Document	Attached? (Yes/ No)	For Official Use
16.	<b>For Communications Network Experience (Refer Clause 4.3.1.B.4):</b> <ul style="list-style-type: none"> <li>All documents mentioned in Clause 4.3.1.B</li> <li><del>Certificate of Incorporation and Registration certificate along with Memorandum &amp; Articles of Association.</del></li> <li><del>Copy of valid Licenses (In case of RF, Valid certificate issued by Wireless Planning &amp; Coordination (WPC) Wing of the Ministry of Communications, GOI)</del></li> <li><del>Contract/ Purchase Order (PO)/ Work Order (WO) indicating client name, scope of work, period of work etc.</del></li> <li><del>Certificate from client on successful implementation of project</del></li> <li><del>Signed agreements/ MoUs for integration of NIC module or Certificate of successful integration</del></li> <li><del>A valid ISO/CMMi certificate as mentioned in Qualification Requirement.</del></li> </ul>		
17.	<b>For System Integration Experience (Clause 4.3.1.C.1)</b> <ul style="list-style-type: none"> <li>All documents mentioned in Clause 4.3.1.C.1</li> <li><del>a. Integration with MDM (Refer Clause 4.3.1.C.1):</del> <ul style="list-style-type: none"> <li><del>Contract/ Purchase Order (PO)/ Work Order (WO) indicating client name, scope of work, period of work etc.</del></li> <li><del>Certificate from the client on successful implementation and operation of the project.</del></li> </ul> </li> </ul> <b>For Cloud Service Provider (Refer Clause 4.3.1.C.2):</b> <ul style="list-style-type: none"> <li>All documents mentioned in Clause 4.3.1.C.2</li> <li><del>Valid Empanelment certificates by MEITY (Ministry of Electronics and Information Technology) for Public cloud, Virtual Private Cloud and Community Government Cloud</del></li> <li><del>Self experience certificate duly signed by the Authorized Signatory who is authorized to sign the Bid document for meeting Qualification Requirement as per clause 4.3.1.C.2 (b) to (e)</del></li> <li><del>Contract/ Purchase Order (PO)/ Work Order (WO) indicating client name, scope of work, period of work etc. as per clause 4.3.1.C.2 (f)</del></li> <li><del>A valid certificate as per clause 4.3.1.C.2 (g)</del></li> </ul>		
18.	<b>For Meter Data Management Experience (Clause 4.3.1.D)</b> <ul style="list-style-type: none"> <li>All documents mentioned in Clause 4.3.1.D</li> <li><del>Contract/ Purchase Order (PO)/ Work Order (WO) indicating client name, scope of work, period of work etc</del></li> <li><del>Certificate from the client on successful implementation and operation of the project</del></li> <li><del>A valid ISO/ CMMi certificate on or before date of issuance of RfP</del></li> </ul>		
19.	<b>For Financial Strength (Refer Clause 4.3.1.E):</b> Audited Annual financial statements, Balance Sheet and P&L Account of all Consortium Members for respective financial years.		
19.	Record of similar work done by each Consortium Member along with copy of Letter of Award or Work Orders showing activities carried out with necessary quantities along with contract value & Certificate of Satisfactory Completion from each client as per formats prescribed in Annexure 9		
20.	Curriculum Vitae of all personnel		
22.	Project Plan as mentioned in Clause 4.14.11.		
23.	Copy of Volume-I and Volume-II of this RFP with sign and official seal on every page.		
24.	Approach & Methodology for Project Execution		
25.	Undertaking to comply with the Public Procurement (Preference to Make in India) order issued by Department for Industrial Promotion & Internal Trade, Ministry of Commerce & Industry, Govt. of India dated 4.6.2020 as well as the Order issued by Ministry of Power (MoP), Govt. of India dated 2.7.2020 to protect the security, integrity and reliability of the strategically important and critical Power Supply System & Network in the Country.		
26.	Undertaking that Meter Manufacturer/ Supplier who is participating as a Bidder/ Consortium Member in this RfP does not have 5 (five) or more AMI projects / 20 Lakhs AMI meters in India which are outstanding to be installed on the bid due date for submission.		



## Volume-I, Clause 4.3.1 – Revised Qualification Requirement

A. QR for Meter Manufacturing (Meter Manufacturer/ Supplier has to be a Bidder or part of a Consortium (not necessarily as a Lead Bidder) and cannot participate as a Sub-Contractor of any other Bidder. In case of a Consortium, this requirement has to be met individually by one of the Consortium Members in its entirety. However, the Meter Manufacturer/ Supplier can participate as a Consortium Member only in one (1) Consortium)			
S.No	Description	Qualifying Criteria	Evaluation Documents Required
1	Technical Experience	a) The Bidder or any Consortium Member must have 1. Manufactured and supplied minimum 25,000 nos. (cumulative) AMI Meters and successfully integrated with its own or Third Party software and with the existing system of Indian/ Global Power Distribution Utility(ies) <b>or Indian Power Distribution Franchisees</b> in the last 7 years (i.e. FY 2013-14 onwards) till the date of submission of bid Or Manufactured and supplied minimum 25,000 nos. (cumulative) AMR Meters along with required hardware, software & other associated accessories etc. and successfully integrated with its own or Third Party software and manufactured and supplied minimum 25,000 nos. (cumulative) Pre-payment Meters as per IS 15884 to Indian/ Global Power Distribution Utility(ies) <b>or Indian Power Distribution Franchisee</b> in the last 7 years (i.e. FY 2013-14 onwards ) till the date of submission of bid The Bidder/ Consortium Member claiming Global experience must bid through a company incorporated under Companies Act in India	i. <b>Certificate of Incorporation and Registration certificate along with Memorandum &amp; Articles of Association</b> ii. Copies of Contract/ Purchase Order (PO)/ Work Order (WO) indicating client name, scope of work, period of supply etc. iii. The Bidder to submit a Certificate from the client on successful integration with its own or Third Party software and with the existing systems of Indian/ Global Power Distribution Utility(ies) <b>or Indian Power Distribution Franchisees</b>
		b) The Bidder/ Consortium Member must have manufacturing facility in India on the date of submission of bid and an in-house NABL accredited lab a) on or before the date of submission of bid or (b) before completion of Evaluation of Technical bids and Opening of Financial Bids. The Bidder/ Consortium Member claiming Global experience must supply the meters against this RfP from the manufacturing facility in India	i. Valid Registration Certificate of Manufacturing Unit and details of facility ii. Valid NABL Accreditation Certificate as mentioned in this clause.
2	Quality Certification	a) The Bidder/ Consortium Member should be ISO 9001:2015 certified OR Bidder should have CMMI Level 3 (minimum) certification. b) Bidder/ Consortium Member should have ISO 14001 and OHSAS18001/ OHSAS45000 series certifications.	i. For S.No. 2(a) - A valid ISO 9001:2015 / CMMI Level 3 (minimum) certificate on or before the date of submission of bid ii. For S.No. 2(b) - A valid ISO 14001 and OHSAS18001/ OHSAS45000 series certificates on or before the date of submission of bid
B. QR for Communications Network Provider (CNP) (Any Bidder can use credentials of same CNP as a Sub-Contractor for meeting Qualifying Requirement. However, the CNP, if desires, can participate as a Consortium Member only in one (1) Consortium and in such a case, the CNP cannot be a Sub-Contractor of any other Bidder)			
S.No.	Description	Qualifying Criteria	Evaluation Documents Required
1.	Technical Experience	a) The CNP's RF Mesh should have been implemented in project(s) with at least 25,000 (cumulatively) communication module/ endpoints involving Radio Frequency (RF) mesh in <del>India or abroad</del> Indian/ Global Power Distribution Utility(ies) <b>or Indian Power Distribution Franchisee</b> in the last 7 years (i.e. FY 2013-14 onwards) till the date of submission of bid. b) The CNP's <del>must have successfully integrated their</del> NIC/ Communication module <b>must have been successfully integrated</b> with meters of at least 3 manufacturers in <del>India or abroad</del> Indian/ Global Power Distribution Utility(ies) <b>or Indian Power Distribution Franchisee</b> till HES and/or MDMS.	i. Certificate of Incorporation and Registration certificate along with Memorandum & Articles of Association <b>(This is required to be submitted only if the CNP is a Bidder or part of the Consortium).</b> <del>ii. Copy of valid Licenses (In case of RF, Valid certificate issued by Wireless Planning &amp; Coordination (WPC) Wing of Ministry of Communications, GOI)</del> iii. Contract/ Purchase Order (PO)/ Work Order (WO) indicating client name, scope of work, period of work etc. iv. Certificate from client on successful implementation of project v. Signed agreements/ MoUs for integration of NIC module or Certificate of successful integration



2	Quality Certification	<p>a) CNP should be ISO 9001:2015 certified or Bidder should have CMMI Level 3 (minimum) certification.</p> <p>b) <b>CNP or the Original Equipment Manufacturer (OEM) from where CNP would be sourcing the hardware should have ISO 27001 and ISO 14001 certifications. In case, CNP would be sourcing the hardware from an OEM, then the OEM would have to submit an undertaking stating the required support from the OEM with respect to supply, support, etc. would be provided to the CNP during the entire contract period. In such a case, CNP and the OEM would be jointly and severally responsible for ensuring compliance of communication system requirements.</b></p> <p><del>c) CNP or the Original Equipment Manufacturer (OEM) should have ISO 14001 certifications.</del></p>	<p>i. For S.No. 2(a) - A valid ISO 9001:2015 / CMMI Level 3 (minimum) certificate on or before the date of submission of bid</p> <p>ii. For S.No. 2(b) - A valid ISO 14001 and ISO 27001 certificates (a) on or before the date of submission of bid or (b) before completion of Evaluation of Technical bids and Opening of Financial Bids.</p>
<b>C1. QR For System Integration (SI) - Integration with MDM (Any Bidder can use credentials of same SI as a Sub-Contractor for meeting Qualifying Requirement. However, the SI, if desires, can participate as a Consortium Member only in one (1) Consortium and in such a case, the SI cannot be a Sub-Contractor of any other Bidder)</b>			
S.No.	Description	Qualifying Criteria	Evaluation Documents Required
1	Technical Experience of Integration with MDM	<p>a) The SI must have experience of integration of HES with MDM on standard interfaces and data exchange models (CIM/XML/ IEC 61968 or any other open standard)) for at least 25,000 consumers (cumulatively) in Indian/ Global Power Distribution Utility(s) <b>or Indian Power Distribution Franchisees</b> in the last 7 years (i.e. FY 2013-14 onwards) till the date of submission of bid.</p>	<p><b>i. Certificate of Incorporation and Registration certificate along with Memorandum &amp; Articles of Association (This is required to be submitted only if the SI is a Bidder or part of the Consortium)</b></p> <p>ii. Contract/ Purchase Order (PO)/ Work Order (WO) indicating client name, scope of work, period of work etc.</p> <p>iii. Certificate from the client on successful implementation and operation of the project.</p> <p>iv. In case SI is a Power Distribution Utility which is having an in house experience, it should submit documentary evidence of such experience with self-certification from authorized signatory of System Integrator.</p>
<b>C2. QR for Cloud Service Provider (CSP) (Any Bidder can use credentials of same CSP as a Sub-Contractor for meeting Qualifying Requirement. However, the CSP, if desires, can participate as a Consortium Member only in one (1) Consortium and in such a case, the CSP cannot be a Sub-Contractor of any other Bidder.)</b>			
S.No.	Description	Qualifying Criteria	Evaluation Documents Required
1	Technical Experience as Cloud Service Provider	<p>a) CSP must be Empanelled Cloud Service Provider by MEITY (Ministry of Electronics and Information Technology) for Public cloud, Virtual Private Cloud and Community Government Cloud</p> <p>b) CSP Member must have at least 3 Data Centers in at least two different seismic zones in India</p> <p>c) CSP should have at least 5 different Internet Carrier Terminating</p> <p>d) CSP should be having the capability to provide Hybrid Cloud services, i.e. a combination of Private Cloud and Public Cloud infrastructure from each availability zone.</p> <p>e) CSP should have at least two (2) Work Orders from Central Government/ State Government/ PSU /Semi- Government of India in the last 7 years (i.e. FY 2013-14 onwards) till the date of submission of bid.</p>	<p><b>i. Certificate of Incorporation and Registration certificate along with Memorandum &amp; Articles of Association (This is required to be submitted only if the CSP is a Bidder or part of the Consortium)</b></p> <p>ii. For S.No (a), Bidder should provide valid certificates</p> <p>iii. For S.No (b), (c) and (d), Bidder should submit self-experience certificate duly signed by the Authorized Signatory who is authorized to sign the Bid document</p> <p>iv. For S.No. (e), Contract/ Purchase Order (PO)/ Work Order (WO) indicating client name, scope of work, period of work etc.</p>
	Quality Certification	<p>f) CSP should have the following Quality Certifications:</p> <p>i. ISO/IEC 27001 certified for Information Security with well-</p>	Valid certificates on or before the date of submission of bid.

		planned and structured escalation procedures ii. Certified ISO/IEC 20000-1 for DC service quality and delivery iii. The data centers where cloud servers of CSP are hosted should be certified for minimum of Tier III level against TIA-942 specifications iv. Must have Government Community Cloud running audited and successfully audited by STQC.	
<b>D. QR For Meter Data Management Provider (MDMP) (Any Bidder can use credentials of same MDMP as a Sub-Contractor for meeting Qualifying Requirement. However, the MDMP, if desires, can participate as a Consortium Member only in one (1) Consortium and in such a case, the MDMP cannot be a Sub-Contractor of any other Bidder)</b>			
S. No.	Description	Qualifying Criteria	Evaluation Documents Required
1	Data handling Capability	a) The MDMP should have successfully implemented and integrated with HES for at-least 25,000 (cumulatively) numbers of smart meter/ AMI system and AMR system (managing 15/ 30 minutes interval data) out of which at-least 10% (i.e. at least 2,500 numbers cumulatively) should be of smart meter/ AMI system in any Indian/ Global Power Distribution Utility) <b>or Indian Power Distribution Franchisees</b> in the last 7 years (i.e. FY 2013-14 onwards) till the date of submission of bid.	i. <b>Certificate of Incorporation and Registration certificate along with Memorandum &amp; Articles of Association (This is required to be submitted only if the MDMP is a Bidder or part of the Consortium)</b> ii. Contract/ Purchase Order (PO)/ Work Order (WO) indicating client name, scope of work, period of work etc. iii. Certificate from client on successful implementation on and operation of project.
2	Ease of integration with HES/ MDAS and Billing	a) The Proposed MDM should have been integrated with minimum 3 different Head End Systems/ MDAS system and 2 different billing system in any Indian/ Global Power Distribution Utility in the last 7 years (i.e. FY 2013-14 onwards) till the date of submission of bid.	i. Contract/ Purchase Order (PO)/ Work Order (WO) indicating client name, scope of work, period of work etc. ii. Client Certificate on successful implementation and operation of project.
3	Quality Certification	a) The MDMP should be a 9001:2015 or CMMI Level 3 (minimum) certified. b) MDMP should have ISO 27001 certification	i. For S.No. 3(a) - A valid ISO 9001:2015 / CMMI Level 3 (minimum) certificate on or before the date of submission of bid ii. For S.No. 3(b) - A valid ISO 27001 certificate on or before the date of submission of bid
<b>E. QR - Financial Criteria</b>			
S.No.	Description	Qualifying Criteria	Evaluation Documents Required
1	Financial Requirement	a) Net Worth in best Three Financial Years out of the last five (5) years (i.e. FY 2015-16 onwards) should be positive. Net worth shall be as defined under the Companies Act, 2013. b) Minimum Average Annual Turnover (MAAT) of the bidder (Average of best Three Financial Years out of the last five (5) Financial Years i.e. FY 2015-16 onwards) should not be less than INR 100 Cr. MAAT means annual total income as incorporated in the profit & loss account except non-recurring income e.g. sale of fixed assets.	Audited Annual financial statements, Balance Sheet and P&L Account for the respective financial years.

**In case the experience in Indian Distribution Franchisees is claimed by the Bidder/ Consortium, then the following additional documents need to be submitted:**

- a. **Documentary evidence that the Distribution Franchisee has been selected through a competitive bidding process**
- b. **Copies of Contract/ Work Order (WO) along with any Contract Extension Order(s) issued to the Distribution Franchisee indicating the scope of work, no. of consumers to be handled, period of contract etc. The contract must be valid and in force as on the date of submission of bid**
- c. **Copies of Satisfactory Performance Certificate issued by the concerned Power Distribution Utility to the Distribution Franchisee. Such Performance Certificate should not be older than 30 days prior to the date of submission of bid.**

## Volume-I, Annexure A – Revised Tender Evaluation Methodology

S.No	Description	Qualifying Criteria	Max Score
1	<b>Manpower Experience</b>	Strength of the team proposed for undertaking the assignment including the qualification, experience and time proposed on field as well as on support & maintenance. (Bidders need to provide names of the team members proposed to be deployed along with their relevant experience and Curriculum Vitae signed by the respective person and counter signed by the Authorized Signatory signing the Bid. PFCCL/ <b>WESCO TPWODL</b> may ask for suitable substitution in place of the proposed manpower, if it is found that the manpower is not suitable as per the requirements of the assignment)	20
2	<b>Meter Manufacturing Experience</b>	The Bidder or any Consortium Member must have: a. Manufactured and supplied minimum 25,000 nos. (cumulative) AMI Meters and successfully integrated with its own or Third Party software and with the existing system of Indian/ Global Power Distribution Utility(ies) <b>or Indian Power Distribution Franchisees</b> in the last 7 years (i.e. FY 2013-14 onwards) till the date of submission of bid Or Manufactured and supplied minimum 25,000 nos. (cumulative) AMR Meters along with required hardware, software & other associated accessories etc. and successfully integrated with its own or Third Party software and manufactured and supplied minimum 25,000 nos. (cumulative) Pre-payment Meters as per IS 15884 to Indian/ Global Power Distribution Utility(ies) <b>or Indian Power Distribution Franchisee</b> in the last 7 years (i.e. FY 2013-14 onwards ) till the date of submission of bid	15
3	<b>Experience in Integration with MDM</b>	The System Integration (SI) must have experience of integration of HES with MDM on standard interfaces and data exchange models (CIM/XML/ IEC 61968 or any other open standard)) for at least 25,000 consumers (cumulatively) in Indian/ Global Power Distribution Utility(s) <b>or Indian Power Distribution Franchisee</b> in the last 7 years (i.e. FY 2013-14 onwards) till the date of submission of bid.	10
4	<b>Experience as Cloud Service Provider</b>	Cloud Service Provider (CSP) should have at least two (2) work orders from Central Government / State Government/ PSU /Semi- Government of India in last 7 years (i.e. FY 2013-14 onwards) (In case the Bidder is proposing more than one CSP, then marking would be done based on experience of that CSP which has lower no. of work orders)	10
5	<b>Experience in Communication</b>	The Communications Network Provider's (CNP's) RF Mesh should have been implemented in project(s) with at least 25,000 (cumulatively) communication module/ endpoints involving Radio Frequency (RF) mesh in <b>India-or-abroad Indian/ Global Power Distribution Utility(ies) or Indian Power Distribution Franchisee</b> in the last 7 years (i.e. FY 2013-14 onwards) till the date of submission of bid	10
6	<b>Experience as Meter Data Management (MDM) Provider</b>	Meter Data Management Provider (MDMP) should have successfully implemented and integrated with HES for at-least 25,000 (cumulatively) numbers of smart meter/ AMI system and AMR system (managing 15/ 30 minutes interval data) out of which at-least 10% (i.e. at least 2,500 numbers cumulatively) should be of smart meter/ AMI system in any Indian/ Global Power Distribution Utility <b>or Indian Power Distribution Franchisee</b> in the last 7 years (i.e. FY 2013-14 onwards) till the date of submission of bid	10
7	<b>Approach &amp; Methodology</b>	Bidder to submit a brief on Approach & Methodology for executing the Project	10
8	<b>Financial Criteria</b>	Minimum Average Annual Turnover (MAAT) of the bidder (Average of best Three Financial Years out of the Last Five Financial Years i.e. FY 2015-16 onwards) should not be less than INR 100 Cr	15
<b>Total</b>			<b>100</b>

The technical evaluation parameters have been discussed in detail below:

#### 1. Manpower Experience (20% of Maximum Technical Score)

This evaluates strength of the team proposed for undertaking the assignment including the qualification, experience and time proposed on field as well as on support & maintenance.

The proposed core team shall comprise of the following experts:

Requirement	Criteria	Score
Expert 1: Team Leader/ Project Manager	Expert in AMI Implementation including metering and related aspects, installation and management of smart meters, communication network, last mile connectivity, head end system and MDMS. He should have minimum 10 years of relevant experience.	5
Expert 2	Expert in System Integration covering application software, hardware and network installation, integration design and ability to manage multiple partners with different skill sets in different technology domains. He should have minimum 5 years of relevant experience.	5
Expert 3	Expert in cyber security related aspects covering planning & implementing high level system security requirements, managing data privacy & confidentiality, information flow through adequate authorizations, threat modelling & security testing. He should have minimum 5 years of relevant experience.	5
Expert 4	Expert in communication protocols and in implementing applications using different communication technologies and ensuring communication inter-operability across applications/functionalities. He should have minimum 5 years of relevant experience.	5

Above core team shall not be allowed to be replaced during project execution. In exceptional cases same maybe done with prior approval.

## 2. Meter Manufacturing Experience (15% of Maximum Technical Score)

Requirement	Criteria	Score
Bidder or any Consortium Member must have a. Manufactured and supplied minimum 25,000 nos. (cumulative) AMI Meters and successfully integrated with its own or Third Party software and with the existing system of Indian/ Global Power Distribution Utility(ies) <b>or Indian Power Distribution Franchisee</b> in the last 7 years (i.e. FY 2013-14 onwards) till the date of submission of bid Or Manufactured and supplied minimum 25,000 nos. (cumulative) AMR Meters along with required hardware, software & other associated accessories etc. and successfully integrated with its own or Third Party software and manufactured and supplied minimum 25,000 nos. (cumulative) Pre-payment Meters as per IS 15884 to Indian/ Global Power Distribution Utility(ies) <b>or Indian Power Distribution Franchisee</b> in the last 7 years (i.e FY 2013-14 onwards ) till the date of submission of bid	>=60,000	15
	>= 40,000 and <60,000	10
	>= 25,000 and <40,000	5

## 3. Experience as System Integrator (SI) with MDM (10% of Maximum Technical Score)

Requirement	Criteria	Score
The System Integrator (SI) must have experience of integration of HES with MDM on standard interfaces and data exchange models (CIM/XML/ IEC 61968 or any other open standard)) for at least 25,000 consumers (cumulatively) in Indian/ Global Power Distribution Utility(s) <b>or Indian Power Distribution Franchisee</b> in the last 7 years (i.e. FY 2013-14 onwards) till the date of submission of bid.	>=60,000	10
	>= 40,000 and <60,000	7
	>= 25,000 and <40,000	5

## 4. Experience as Cloud Service Provider (CSP) (10% of Maximum Technical Score)

Requirement	Criteria	Score
Cloud Service Provider (CSP) should have at least two (2) work orders from Central Government / State Government/ PSU /Semi-Government of India in last 7 years (i.e. FY 2013-14 onwards) (In case the Bidder is proposing more than one CSP, then marking would be done based on experience of that CSP which has lower no. of work orders)	>= 4	10
	=3	7
	=2	5

## 5. Experience as Communication Network Provider (CNP) (10% of Maximum Technical Score)

Requirement	Criteria	Score
The Communications Network Provider's (CNP's) RF Mesh should have been implemented in project(s) with at least 25,000 (cumulatively) communication module/ endpoints involving Radio Frequency (RF) mesh in <del>India-or-abroad</del> <b>Indian/ Global Power Distribution Utility(ies) or Indian Power Distribution Franchisee</b> in the last 7 years (i.e. FY 2013-14 onwards) till the date of submission of bid	>=60,000	10
	>= 40,000 and <60,000	7
	>= 25,000 and <40,000	5

## 6. Experience as Meter Data Management Provider (MDMP) (10% of Maximum Technical Score)

Requirement	Criteria	Score
The Meter Data Management Provider (MDMP) should have successfully implemented and integrated with HES for at-least 25,000 (cumulatively) numbers of smart meter/ AMI system and AMR system (managing 15/ 30 minutes interval data) out of which at-least 10% (i.e. at least 2,500 numbers cumulatively) should be of smart meter/ AMI system in any Indian/ Global Power Distribution Utility <b>or Indian Power Distribution Franchisee</b> in the last 7 years (i.e. FY 2013-14 onwards) till the date of submission of bid	>=60,000	10
	>= 40,000 and <60,000	7
	>= 25,000 and <40,000	5

## 7. Financial Criteria

Requirement	Criteria	Score
Minimum Average Annual Turnover (MAAT) of the bidder (Average of best Three Financial Years out of the Last Five Financial Years i.e. FY 2015-16 onwards) should not be less than INR 100 Cr. MAAT means annual total income as incorporated in the profit & loss account except non-recurring income e.g. sale of fixed assets.	>= Rs 200 Cr	15
	>= Rs 150 Cr and < Rs 200 Cr	10
	>= Rs100 Cr and < Rs 150 Cr	5

**Annexure 1 to RfP: Format for Declaration of Bid Security***[On the official letterhead of the Bidder/ Lead Consortium Member of the Bidding Consortium]*

[Reference No.]

From:

[Address of the Lead Consortium Member]

[Telephone No., Fax No., Email], [Date]

To:

Sh. Sachin Shukla

General Manager

PFC Consulting Limited

9th Floor, A-Wing, Statesman House

Connaught Place, New Delhi – 110 001

**Sub: Declaration of Bid Security in lieu of Bid Security in respect of RfP issued by PFCCL (RfP No. \_\_\_\_\_ dated \_\_\_\_\_) for Appointment of Smart Grid Implementation Agency (SGIA) for implementation of Smart Grid in Rourkela Smart City in Odisha**

Being duly authorized to present and act on behalf of ..... *[Insert name of the Bidder/ Lead Consortium Member]* and having read and examined in detail the RfP document, the undersigned hereby agrees to the following:

1. We, ..... *[Insert name of the Bidder/ Lead Consortium Member]* are submitting the Bid in response to the RfP issued by PFCCL (RfP No. \_\_\_\_\_ dated \_\_\_\_\_) for Appointment of Smart Grid Implementation Agency (SGIA) for implementation of Smart Grid in Rourkela Smart City in Odisha, as per the terms of the RfP.
2. We, ..... *[Insert name of the Bidder/ Lead Consortium Member]* are submitting this Bid Security Declaration in lieu of the Bid Security
3. We, ..... *[Insert name of the Bidder/ Lead Consortium Member]* have read the terms & conditions of the RfP in particular regarding invocation/ forfeiting of the Bid Security by PFCCL under various circumstances
4. We, ..... *[Insert name of the Bidder/ Lead Consortium Member]* undertake not to withdraw or modify our bid during the bid validity period, in line with provisions of the RfP
5. We, ..... *[Insert name of the Bidder/ Lead Consortium Member]* undertake that we will abide by the provisions of the RfP for the activities pertaining to submission of response to RfP, during the bid validity period.
6. We agree that ..... *[Insert name of the Bidder/ Lead Consortium Member]* shall be suspended from participation in the bidding process for future tenders of PFCCL for a period of two (02) years from the bid submission date upon occurrence of a situation that otherwise would have led to revocation/forfeiture of Bid Security as per provisions of the RfP.

Dated the ..... *[Insert date of the month]* day of ..... *[Insert month, year]* at ..... *[Insert place]*.

For and on behalf of *[Insert name of the Bidder/ Lead Consortium Member]*

*[Insert Signature here]*

*[Insert Name here]*

*[Insert Designation here]*

*[Insert Date here]*

*[Insert Place here]*

## Volume-I, Annexure 10 – Revised Format of Bill of Quantities

## A. Supply of Items

S. No.	Particulars	Unit	Total Base Year Quantity	Total Incremental Quantity over a period of 10 years	Total Quantity over a period of 10 years
1	2	4	5A	5B	5C=5A+5B
<b>A.</b>	<b>SMART METERS</b>				
1	Single Phase SMART Meters (5-30 A) (Consumer End) with Modular RF Mesh Module (for installation with each meter)	No.s	33596	11554	45150
2	Single Phase SMART Meters (10-60 A) (Consumer End) with Modular RF Mesh Module (for installation with each meter)	No.s	50395	17332	67727
3	Three Phase SMART Meters (20-100 A) (Consumer End) with Modular RF Mesh Module (for installation with each meter)	No.s	5050	1106	6156
4	Three Phase LT-CT SMART Meters (/5A) (Consumer End) with Modular RF Mesh Module (for installation with each meter)	No.s	431	149	580
5	Single Phase SMART Meters (5-30 A) (at DT) with Modular RF Mesh Module (for installation with each meter)	No.s	283	0	283
6	HT SMART Meters (/5A) (Consumer End) with Modular RF Mesh Module (for installation with each meter)	No.s	99	22	121
7	Three Phase LT-CT SMART Meters (at DT) with Modular RF Mesh Module (for installation with each meter) (Please refer Sheet named "LT-CT SMART Meters (at DT)")	No.s	1115	0	1115
8	HT SMART Meters (/5A) (at Feeder) (11KV Feeder) with Modular RF Mesh Module (for installation with each meter)	No.s	10	0	10
9	HT SMART Meters (/1A) (at Feeder) (11KV Feeder) with Modular RF Mesh Module (for installation with each meter)	No.s	37	0	37
10	HT SMART Meters (/5A) (at Feeder) (33KV Feeder) with Modular RF Mesh Module (for installation with each meter)	No.s	4	0	4
11	HT SMART Meters (/1A) (at Feeder) (33KV Feeder) with Modular RF Mesh Module (for installation with each meter)	No.s	14	0	14
12	Box for Single Phase SMART Meters (5-30 A)	No.s	33879	11554	45433
13	Box for Single Phase SMART Meters (10-60 A)	No.s	50395	17332	67727
14	Box for Three Phase SMART Meters (20-100 A)	No.s	5050	1106	6156
15	Box for Three Phase LT-CT SMART Meters (/5A)	No.s	1546	149	1695
16	Box for HT SMART Meters (/5A)	No.s	113	22	135
17	Box for HT SMART Meters (/1A)	No.s	51	0	51
18	Data Concentrator Units/ Gateway/ Router for forming RF Mesh Canopy	Lumpsum		1	
19	<b>Additional 10% Cable for Single Phase SMART Meters (5-30 A) (Consumer End)</b>	<b>Lumpsum</b>		<b>1</b>	
20	<b>Additional 10% Cable for Single Phase SMART Meters (10-60 A) (Consumer End)</b>	<b>Lumpsum</b>		<b>1</b>	
19	<b>Additional 10% Cables (Service cables and DTR cables)</b>	<b>Lumpsum</b>		<b>4</b>	
<b>B.</b>	<b>IT INFRASTRUCTURE</b>				
1	IT Infrastructure over cloud & Connectivity, system Integration (Including application License fees) and any other hardware equipment/ software as defined in the Technical Specifications of RfP				
i.	Head End System with Integration	Lumpsum		1	
ii.	Meter Data Management System	Lumpsum		1	
iii.	Android &/ IOS Mobile App and web portal.	Lumpsum		1	
iv.	<b>NMS System</b>	<b>Lumpsum</b>		<b>1</b>	
v.	<b>Database Software &amp; Centralised NMS management s/w</b>	<b>Lumpsum</b>		<b>1</b>	
vi.	GIS System (including relevant software) & License including Technical audit of substations and Preparation of	Lumpsum		1	



	digitized network on base map in pre-defined scale with features and attributes of data collected through survey for GIS application.		
vii.	System Implementation including integration with Cloud and MDM Integration with Billing & other systems	Lumpsum	1
<b>C. SMART GRID CONTROL ROOM INFRASTRUCTURE (Supply &amp; Installation)</b>			
1	Desktops/ Workstation (with UPS, Table, Chair, OS and latest MS Office)	No.s	2
2	Network LaserJet (B/W) Photo copy, scanning and Printing	No.s	2
3	A4 Size Inkjet / Bubble Jet printer	No.s	2
4	A3 Size Inkjet Color Printer/All in one Color laser jet Printer	No.s	1
5	Work Station with Dual TFT Monitors	No.s	4
6	<del>NMS System</del>	<del>No.s</del>	<del>4</del>
6	Antivirus Software/ UTM application	Lumpsum	1
8	<del>Database Software &amp; Centralised NMS management s/w</del>	<del>No.s</del>	<del>2</del>

## B. Erections of Items

S. No.	Particulars	Unit	Total Base Year Quantity	Total Incremental Quantity over a period of 10 years	Total Quantity over a period of 10 years
1	2	3	4A	4B	4C=4A+4B
1	Single Phase SMART Meters (5-30 A) (Consumer End)	No.s	33596	11554	45150
2	Single Phase SMART Meters (10-60 A) (Consumer End)	No.s	50395	17332	67727
3	Three Phase SMART Meters (20-100 A) (Consumer End)	No.s	5050	1106	6156
4	Three Phase LT-CT SMART Meters (/5A) (Consumer End)	No.s	431	149	580
5	Single Phase SMART Meters (5-30 A) (at DT)	No.s	283	0	283
6	HT SMART Meters (/5A) (Consumer End)	No.s	99	22	121
7	Three Phase LT-CT SMART Meters (at DT)	No.s	1115	0	1115
8	HT SMART Meters (/5A) (at Feeder) (11KV Feeder)	No.s	10	0	10
9	HT SMART Meters (/1A) (at Feeder) (11KV Feeder)	No.s	37	0	37
10	HT SMART Meters (/5A) (at Feeder) (33KV Feeder)	No.s	4	0	4
11	HT SMART Meters (/1A) (at Feeder) (33KV Feeder)	No.s	14	0	14
12	Box for Single Phase SMART Meters (5-30 A)	No.s	33879	11554	45433
13	Box for Single Phase SMART Meters (10-60 A)	No.s	50395	17332	67727
14	Box for Three Phase SMART Meters (20-100 A)	No.s	5050	1106	6156
15	Box for Three Phase LT-CT SMART Meters (/5A)	No.s	1546	149	1695
16	Box for HT SMART Meters (/5A)	No.s	113	22	135
17	Box for HT SMART Meters (/1A)	No.s	51	0	51
18	Data Concentrator Units/ Gateway/ Router for forming RF Mesh Canopy	Lumpsum	1		

## C. Year 1 FMS Cost

S. No.	Particulars	Unit	Total Base Year Quantity
1	2	3	4
1	Year 1 FMS Cost (inclusive of Year 1 charges towards GIS updation & monthly cloud usage)	Lumpsum	91034



**D. Details of LT-CT SMART Meters (at DT)**

S.No	Transformer Rating (in KVA)	No. of Transformers	No. of Circuit	No. of LT-CT meters at DT Level	CT Ratio
1	1000	6	4	24	800/5
2	630	6	4	24	800/5
3	500	141	3	423	800/5
4	315	33	2	66	400/5
5	250	113	2	226	400/5
6	200	14	2	28	400/5
7	100	274	1	274	200/5
8	63	29	1	29	100/5
9	25	21	1	21	100/5
<b>Total</b>				<b>1115</b>	
No. of LT-CT Non-Smart Meters at DT Level already under implementation				230	
<b>Total No. of LT-CT Smart Meters required at DT Level as per this RfP</b>				<b>1115</b>	