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E- Tender No. SG/Rourkela/SGIA Date: 21.10.2020

Clarifications to Queries
with respect to
Request for Proposal (RfP)
for
Selection of Smart Grid Implementation Agency (SGIA)
for
Implementation of Smart Grid
in
Rourkela Smart City, Odisha

Clarifications with respect to RfP (Volume – I)

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
1.	Document Checklist	General	Contents of the table are not fully visible corresponding to S.No. 17 and S.No. 18 of the table. Such error may be present with other points too. Kindly review and provide full content.	Please refer Amendment No. 2 to RfP
2.	Document Checklist (S.No. 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	Please confirm whether the clause refers to restrictions on import of components/ raw material in power sector from china	The restrictions would be as per 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
3.	Volume-I	Last Date of downloading of RFP - 1.12.2020 upto 12:00 hrs	In view of the complexity of the project, it is requested to extend the last date of bid submission by at least 4 to 6 weeks	Please refer Amendment No. 2 to RfP
4.	Important Dates and Amounts	Last date and time for online bidding & receipt of RFP – 1.12.2020 upto 15:00 hrs Technical Bid Opening - 1.12.2020 at 16:00 hrs	Due to OPEX nature of the tender, we will need to do a higher amount of due diligence. Accordingly, it is requested to extend the last date of bid submission by 4 weeks	
5.		Tender Fee to be submitted with the RFP as Demand Draft (Non-Refundable) - Rs. 1,00,000 plus GST @18% Transaction Fee (Non- Refundable) - Rs. 15,000 plus GST @18%	Non-Refundable Tender Fee amount is very high. It is requested reduce the Tender fee amount or make this refundable if the tender gets cancelled / retendered.	The provisions of the RfP shall prevail.
6.	Volume-I	Rourkela is divided into mainly 2	Please confirm that the incremental no. of	The understanding of the

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	Clause 3.1.3 (Background)	urban centers – Rourkela Municipal Corporation (RMC) with an area of 53.3 Km ² and the Rourkela Steel Township (RST) with an area of approximately 54 Km ² . The current proposal is for development of Smart Grid in RMC area	consumers stipulated in the RfP will be in the same project area of 53.3 Km ² .	Bidder is correct.
7.	Volume-I Clause 3.2.2 (About the Smart Grid Project)	The CAPEX funding for the project for initial 90,801 consumers would be as per the following: a. NSGM Grant - 30% of Total Capital Expenditure (excluding cost of Meter Box and cost towards additional 10% Cables (Service cables and DTR cables)) limited to about Rs. 18 crore with no GST component. The NSGM Grant portion is under review based on change in scope vis-à-vis approved DPR. In case the Grant portion is reduced by NSGM, the shortfall in the same would be funded by the Utility. b. Funding by Utility – 20% of Total Capital Expenditure (limited to about Rs. 12 crore) plus shortfall in the Grant portion as mentioned in clause 3.2.2(a) plus 2/7 portion of GST on Total Capital Expenditure. c. Funding by SGIA i. Balance Total Capital Expenditure plus 5/7 portion of GST on Total Capital Expenditure. ii. Cost of Meter Box and cost towards additional 10% Cables (Service cables and	Please share the sources of Rs. 18 crore & Rs. 12 crore as decided for this project (i.e. project cost of 60 Cr excluding Box & 10% Cable).	The details regarding project funding (i.e. NSGM Grant, Utility's Contribution and funding by SGIA) are mentioned in Volume-I, clause 3.2.2 to 3.2.4
8.			The clause may be amended as the total amount of the GST should be paid as extra by WESCO since WESCO will be taking credit for the entire amount. Further, this statutory liability should be borne by WESCO and it is not acceptable to be funded by the Bidder.	WESCO cannot take input tax credit under GST since the output is exempted supply under (GST Act). Funding Strategy will be as per RFP

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		DTR cables) as per Annexure 10 of RfP.		
9.	Volume-I Clause 3.2.3 (About the Smart Grid Project)	<p>The funding for FMS Cost for the project for initial 90,801 consumers would be as per the following:</p> <p>a. NSGM Grant - 30% of Year 1 FMS cost (inclusive of Year 1 charges towards GIS updation & monthly Cloud usage) limited to about Rs. 1.10 crore inclusive of GST No funding for GST against this component is available.</p> <p>b. Funding by Utility – Nil.</p> <p>c. Funding by SGIA</p> <p>i. Balance Year 1 FMS Cost (inclusive of Year 1 charges towards GIS updation & monthly Cloud usage) for initial 90,801 consumers</p> <p>ii. Balance FMS cost (inclusive of balance charges towards GIS updation & monthly Cloud usage from the date of Operational Acceptance of a particular lot of Smart Meters till a period of 8 years) from the date of Operational Acceptance of a particular lot of Smart Meters till a period of 8 years for 90,801 consumers</p> <p>iii. GST on Total FMS Cost till 8 years from Operational Acceptance of Project.</p>	The clause may be amended as the total amount of the GST should be paid as extra by WESCO since WESCO will be taking credit for the entire amount. Further, this statutory liability should be borne by WESCO and it is not acceptable to be funded by the Bidder.	<p>WESCO cannot take input tax credit under GST since the output is exempted supply under (GST Act).</p> <p>Funding Strategy will be as per RFP</p>
10.	Volume-I Clause 3.2.4 (About the Smart Grid Project)	CAPEX as well as FMS funding (inclusive of charges towards GIS updation & monthly Cloud usage) for the project for additional number of consumers beyond 90,801	Capex of additional meters along with GST should be paid as extra on the quoted rates, as this is variable additional quantity from the scope defined in the project. The payment for these additional meters could be in lines with the payment terms as	<p>The provisions of the RfP shall prevail.</p> <p>WESCO cannot take input tax credit under</p>

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		consumers (i.e. 1,20,964 - 90,801 = 30,163 consumers) along with GST thereof would be entirely borne by SGIA	defined in Volume-I, Clause 6.19 but for the total Capex amount as quoted by the bidder.	GST since the output is exempted supply under (GST Act). Funding Strategy will be as per RFP
11.	Volume-I Clause 3.3.1 (About this Request for Proposal)	....implementation of Smart Grid in Rourkela Smart City in Odisha under Western Electricity Supply Company of Odisha (WESCO) for around 90,801 consumers at present plus additional consumers over a period of 10 years including O&M services for a period till 8 years from Operational Acceptance of the Project...	As cost towards incremental no. of consumers would be included in the Meter Rent, please clarify whether bidder will be receiving monthly rental for 96 months from operations acceptance of a particular lot out of incremental no. of consumers. Please also clarify the Project duration in that case.	For initial number of meters (i.e. 91,034), FMS period would commence for a particular lot of meters from the date of Operational Acceptance of that lot and would continue for a period till 96 months from that date. For 30,163 incremental number of meters, FMS period for a particular lot of those incremental number meters would commence from the date of Operational Acceptance of that lot and would continue for a period till 96 months from Operational Acceptance of the Project are completed.
12.	Volume-I Clause 4.3.1(A)(a) (Qualifying Requirement- QR forMeter 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...	Please allow Meter Manufacturer to participate as a Sub-Contractor	The provisions of the RfP shall prevail.

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	Meter Manufacturing)			
13.	Volume-I Clause 4.3.1(A)(1)(a) (Qualifying Requirement- QR for Meter Manufacturing - Technical Experience)	The Bidder/ consortium member must have i. 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 Power Distribution Utility(ies) in the last 7 years (i.e. FY 2013-14 onwards) till the date of submission of bid Or ii. 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 Power Distribution Utility(ies) in the last 7 years (i.e. FY 2013-14 onwards) till the date of submission of bid	It is requested to allow the Global experience as well and supply of goods under this project from India facility . This will encourage other global players to invest in India. Please reduce the threshold from 25,000 no. of meters to 5,000 no. of meters	Please refer Amendment No. 2 to RfP for Modified Qualifying Requirement
14.				
15.	Volume-I Clause 4.3.1(A)(1)(b) (Qualifying Requirement- QR for Meter Manufacturing - Technical	The Bidder/ Consortium Member must have manufacturing facility in India with an in-house NABL accredited lab on the date of submission of bid	We have we Meter Testing Laboratory as per IEC/ISO 17025 accredited from "Slovenian Accreditation" which is same as NABL in India. NABL is the India representative of ILAC Mutual Recognition Arrangement. Similarly, Slovenian Accreditation (SA) is the representative in Slovenia. As NABL provides the accreditation as per IEC/ISO 17025, the clause may be modified as per the following:	The provisions of the RfP shall prevail.

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	Experience)		<i>"The Bidder/ Consortium Member must have manufacturing facility in India with an in-house NABL/ IEC/ISO 17025 accredited lab on the date of submission of bid"</i>	
16.			The clause may be modified as per the following: <i>"The Bidder/ Consortium Member must have manufacturing facility in India with an in-house NABL accredited lab on the date of submission of bid or at the time of meter supply"</i>	
17.			The clause may be modified as per the following: <i>"The Bidder/ Consortium Member must have manufacturing facility in India with an in-house NABL accredited lab on the date of submission of bid or tie-up with an NABL lab"</i>	
18.			The clause may be modified as per the following: <i>"The Bidder/ Consortium Member must have manufacturing facility in India with an in-house NABL accredited lab facility complying to the NABL Standards, to conduct the Meter testing on the date of submission of bid"</i>	
19.			The clause may be modified as per the following: <i>"The Bidder/ Consortium Member must have applied for manufacturing facility in India with an in-house NABL accredited lab on the date of submission of bid and in-house NABL accredited lab to be available at the time of acceptance testing of offered meter lots"</i>	
20.	Volume-I Clause 4.3.1(B)(1)(a) (Qualifying Requirement- QR for Communications Network Provider - Technical Experience)	The CNP should have implemented project(s) with at least 25,000 (cumulatively) communication module/ endpoints (manufacturing, supply, installation, integration, maintenance & management) involving Radio Frequency (RF) mesh in Licensed frequency band as permitted by WPC, Ministry of	From the perspective of CNP, its RF Mesh technology should be considered and not the manufacturing, maintenance & management of Network. Accordingly, the clause may be modified as per the following: <i>"The CNP's RF Mesh Network should have been implemented in project(s) with at least 25,000 (cumulatively) communication module/ endpoints (manufacturing, supply, installation, integration,</i>	Please refer Amendment No. 2 to RfP for Modified Qualifying Requirement

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21.		Communication, Govt. of India or in Unlicensed frequency band in India in the last 7 years (i.e. FY 2013-14 onwards) till the date of submission of bid.	maintenance & management involving Radio Frequency (RF) mesh in Licensed frequency band as permitted by WPC, Ministry of Communication, Govt. of India or in Unlicensed frequency band in India in the last 7 years (i.e. FY 2013-14 onwards) till the date of submission of bid.”	
22.			As very few AMI projects have been undertaken with RF Mesh, the clause may be modified as per the following: “The CNP should have implemented project(s) with at least 25,000 (cumulatively) RF mesh based communication module/ endpoints (manufacturing, supply, installation, integration, maintenance & management) involving Radio Frequency (RF) mesh in Licensed frequency band as permitted by WPC, Ministry of Communication, Govt. of India or in Unlicensed frequency band in India/ out of India in the last 7 years (i.e. FY 2013-14 onwards) till the date of submission of bid.”	
23.			Global experience may be considered	
23.	Volume-I Clause 4.3.1(B)(1)(b) (Qualifying Requirement- QR for Communications Network Provider - Technical Experience)	The CNP must have successfully integrated their NIC/ Communication module with meters of at least 3 manufacturers in India till HES and/or MDMS	The clause may be modified as per the following: “The CNP must have successfully integrated their NIC/ Communication module/ RF Mesh protocol with meters of at least 3 manufacturers in India till HES and/or MDMS ”	The provisions of the RfP shall prevail.
24.	Volume-I Clause 4.3.1(B)(2) (Qualifying Requirement- QR for Communications Network Provider –	a) CNP should be ISO 9001:2015 certified or Bidder should have CMMI Level 3 (minimum) certification. b) CNP should have ISO 14001 and ISO 27001 certifications.	The clause may be modified as per the following: “ a) CNP should be ISO 9001:2015 certified or Bidder should have CMMI Level 3 (minimum) certification. b) CNP should have ISO 14001 and ISO 27001 certifications. ”	Please refer Amendment No. 2 to RfP for Modified Qualifying Requirement

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	Quality Certification)			
25.	Volume-I	The SI must have experience of integration of HES with MDM on standard interfaces and data exchange models (CIM/XML) for at least 25,000 consumers (cumulatively) in Indian Power Distribution Utility(s) in the last 7 years (i.e. FY 2013-14 onwards) till the date of submission of bid	Global experience may be considered	Please refer Amendment No. 2 to RfP for Modified Qualifying Requirement
26.	Clause		Please reduce the threshold from 25,000 no. of meters to 5,000 no. of meters	
27.	4.3.1(C2)(1)(e) (Qualifying Requirement- QR for System Integrator - Technical Experience of Integration with MDM)		As per AMI functional guidelines issued by CEA, HES shall preferably interface with MDM on standard interfaces and the data exchange models and interfaces shall comply with CIM / XML / IEC 61968 or any other open standard . The solution shall be Service Oriented Architecture (SOA) enabled. Accordingly, the clause may be modified as per the following: <i>"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/ Meters (cumulatively) in Indian Power Distribution Utility(s) in the last 7 years (i.e. FY 2013-14 onwards) till the date of submission of bid"</i>	
28.			In both Clause 4.3.1(C2)(1)(e) and Clause 4.3.1(D)(1), HES Integration experience has been sought. Please clarify whether Meter Data Management Provider (MDMP) Sub-Contractor's credentials would be acceptable for System Integration (SI) Sub-Contractor's qualifying requirement as well.	
29.	Volume-I Clause 4.3.1(C2)(1)(e) (Qualifying Requirement- QR for	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	The clause may be modified as per the following: <i>"CSP should have at least two (2) ten (10) 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"</i>	The provisions of the RfP shall prevail.

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	Cloud Service Provider - Technical Experience as Cloud Service Provider)	of bid		
30.	Volume-I Clause 4.3.1(D)(1) (Qualifying Requirement- QR for Meter Data Management Provider - Data handling Capability)	The MDMP should have successfully implemented and integrated with HES for at-least 25,000 (cumulatively) numbers of smart meter/ AMI system in any Indian Power Distribution Utility in the last 7 years (i.e. FY 2013-14 onwards) till the date of submission of bid	MDM's role is primarily to manage the meters interval data, events, dash boarding & analytics and same is being done in AMR projects as well. Accordingly, the clause may be modified as per the following: <i>"The MDMP should have successfully implemented and integrated with HES for at-least 25,000 (cumulatively) numbers of smart meter/ AMI/ AMR system (handling 30 minutes interval data) in any Indian Power Distribution Utility in the last 7 years (i.e. FY 2013-14 onwards) till the date of submission of bid"</i>	Please refer Amendment No. 2 to RfP for Modified Qualifying Requirement.
31.			Global experience may be considered	
32.			The clause may be deleted	
33.	Volume-I	The Proposed MDM should have been integrated with minimum 3 different Head End Systems/ MDAS system and 2 different billing system in any Indian Power Distribution Utility in the last 7 years (i.e. FY 2013-14 onwards) till the date of submission of bid	Global experience may be considered	Please refer Amendment No. 2 to RfP for Modified Qualifying Requirement.
34.	Clause 4.3.1(D)(2) (Qualifying Requirement- QR for Meter Data Management Provider - Ease of integration with HES/ MDAS and Billing)		The clause may be deleted	
35.	Volume-I Clause 4.3.1(D)(3)(b) (Qualifying Requirement- QR for Meter Data Management	MDMP should have CMMI Level 3 (minimum) certification.	The clause may be modified as per the following: <i>"MDMP should have CMMI Level 3 (minimum) certification or ISO 9001:2015 Certification"</i>	Please refer Amendment No. 2 to RfP for Modified Qualifying Requirement

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	Provider - Quality Certification)			
36.	Volume-I Clause 4.3.1(E)(b) (Qualifying Requirement- Financial Requirement)	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	The clause may be modified as per the following: <i>“Net Worth in best Three Two 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”</i>	The provisions of the RfP shall prevail.
37.	Volume-I Clause 4.3.1 (Qualifying Requirement)	General	<p>The following would like to be highlighted:</p> <ul style="list-style-type: none"> a. As per clause 4.3.1, in case Smart Meters are imported by the bidder, then bidder shall ensure that minimum 30% of Smart Meter supply shall be from its Indian manufacturing/ assembly unit b. Most of the Software vendors like the HES, MDM, Communication providers are inherently of International origin c. NSGM & MoP guidelines have not put any embargo on the bidder's origin and experience d. The project largely being Opex in nature, it is unlikely that a there will be many bidders since it involves bidders to take significant capital and risk exposures with Indian Utilities. With the restrictive Qualifying Requirement, the opportunity is getting limited to very few participants <p>In view of the above, it is requested to consider Global/ International AMI experience.</p> <p>In case, Indian experience is insisted upon, then it is requested to broad base the requirements like experience of Indian Distribution Utilities (for some</p>	Please refer Amendment No. 2 to RfP for Modified Qualifying Requirement

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			size, scope and nature of projects) rather than a very focused and precise AMI experience only.	
38.			Please allow Master System Integrator (MSI) as consortium partner in a manner similar to the tender issued by Jammu & Kashmir Power Development Department with experience in delivering ICT solutions for Power/Telecom/O&G sector with at least one order of Rs. 100 Cr in last 5 years	The provisions of the RfP shall prevail.
39.		.....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....	Please confirm whether a company which is not into smart meter manufacturing or other components related to the same but has requisite financials as per Financial Qualification Requirement can form a JV with a smart meter manufacturing company. Please also confirm that such a company can be the Lead Bidder.	<p>The understanding of the bidder is correct subject to such company meeting the Financial Qualification Requirements.</p> <p>As the Meter Manufacturer/ Supplier has to be part of the Consortium (not necessarily as a Lead Bidder), the Company can form a consortium with such Meter Manufacturer/ Supplier and act as the Lead Bidder in line with the requirements of the Consortium mentioned in the RfP.</p>
40.		.....To be eligible for the tender for appointment of Smart Grid Implementation Agency, the Bidder	Please confirm that this clause is applicable only to the Meter Manufacturers.	Please refer Amendment No. 2 to RfP.
41.			Please clarify whether this clause is only for installation of Meter or for supply of meters as well.	

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		(or any of its consortium member) shall not have 5 (five) or more AMI projects / 20 Lakhs meters in India which are outstanding to be installed on the bid due date for submission.	In case it is applicable for supply of meters as well, then it is requested to remove this clause as for large Meter Manufacturers in India, 20 Lakh outstanding meters is normal.	
42.	Volume-I Clause 4.3.2.1 (Consortium Bids)	In case a bid is submitted by a consortium of two or more firms (No. of members shall not be more than 3) as consortium members, the members of consortium shall meet the following requirements: a. All the members of the consortium shall meet individually the financial requirement criteria given at 4.3.1.E1 (a) above. b. The Lead Consortium Member shall meet not less than 50% of the minimum financial requirement criteria given at clause no. 4.3.1.E.1 (b) above. c. Each of the other Consortium Member(s) individually shall meet not less than 25% of the minimum financial requirement criteria given at clause no. 4.3.1.E.1 (b) above.	The Financial requirement as mentioned in 4.3.1.E1 (a) and 4.3.1.E.1 (b) should be met by the Lead bidder in totality as the Lead bidder is commercially responsible for the successful implementation of the project.	The provisions of the RfP shall prevail.
43.	Volume-I Clause 4.3.2.4 (Consortium Bids)	The Lead Consortium Member shall submit the Bid to PFCCL and shall be liable towards fulfilling the obligations in this RFP.	Please confirm that all the Forms/ Undertakings/ BG/ Agreement/ other relevant documents will be addressed to PFCCL only.	All documents required to be submitted during the bid process (i.e. before the award of contract by WESCO) would have to be addressed to PFCCL only. All subsequent

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				documents (i.e. Performance Security, Contract Agreement etc.), post award of contract by WESCO would have to be addressed to WESCO.
44.	Volume-I Clause 4.3.2.5 (Consortium Bids)	Lead Consortium Member shall have a valid Goods and Services Tax Registration Number, Provident Fund (PF) Code and Permanent Account Number (PAN)	Provident Fund (PF) Registration may either be made optional or bidder may be allowed to get PF Registration done before the award of the Contract.	The provisions of the RfP shall prevail.
45.	Volume-I Clause 4.6.2 (Bidders to Inform Itself Fully)	The Bidders should particularly acquaint themselves with the technical requirements of WESCO's systems, operations, assets, equipment, statutory codes and standards	Please provide additional technical requirements (if any) other than Volume II of this RFP.	Although technical requirements with respect to the project have been mentioned in Volume-II, any other items/ accessories required for successful commissioning of the project and not specifically mentioned in the RfP shall also deemed to be in the scope of the bidder.
46.	Volume-I Clause 4.7.9 (Compliance)	WESCO reserves the right to remove any proposed subcontractor of the Bidder prior to award of any work by WESCO related to either the Bidding or Project, or during the work, without assigning any reason thereof	As removal of proposed subcontractor can hamper the price offered, it is requested to delete the clause.	The provisions of the RfP shall prevail.
47.	Volume-I	Any such clarifications issued shall be sent to all the Bidders to whom	Please confirm whether clarifications sought by all the parties will be sent to all of them or displayed	Please refer Amendment No.2 to RfP.

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	Clause 4.9.3 (Clarifications)	the RFP has been issued	on the portal.	
48.	Volume-I Clause 4.12.3 (Method of Submission of Bid)	In addition to the electronic submission, the Bidder shall also provide 1 no. of hard copy/(ies) of the Technical Bid to PFCCL in a sealed envelope before the Bid Submission Deadline at PFC Consulting Ltd. 9th Floor, A-Wing, Statesman House, Connaught Place, New Delhi – 110 001	As an eco-friendly initiative, please restrict the submission of only following documents in original as per the prescribed time schedule: a. Letter of Technical bid. b. Power of attorney. c. Consortium agreement (if applicable). d. Bank Guarantee & Fee payment receipt	The provisions of the RfP shall prevail.
49.	Volume-I Clause 4.14.10(b) (Technical Bid)	Attested copy of Certificate of Registration/ Incorporation issued by the Registrar of Companies for each Consortium Member	The clause may be modified as per the following: <i>“Attested copy of Certificate of Registration/ Incorporation issued by the Registrar of Companies for each Consortium Member”</i>	The provisions of the RfP shall prevail.
50.	Volume-I Clause 4.14.10(d) (Technical Bid)	Provident Fund (PF) Certificate indicating PF Code of Lead Consortium Member	Provident Fund (PF) Registration may either be made optional or bidder may be allowed to get PF Registration done before the award of the Contract.	The provisions of the RfP shall prevail.
51.	Volume-I Clause 4.14.12 (Technical Bid)	The Technical Bid of the Bidder shall contain the Bill of Quantities (BoQ) in the format prescribed in Annexure 10 that should commensurate with the Financial Bid without any mention of costs/ prices	We understand that Un-priced schedule with only quantity and GST tax mentioned is to be submitted along with technical Bid	In the Technical Bid, Bidder has to submit signed and stamped Bill of Quantities (BoQ) as per the format prescribed in Volume-I, Annexure 10 without any mention of costs/ prices.
52.	Volume-I Clause 4.15.2.1.1(c) (Financial Bid)	Cost of Meter Box and cost towards additional 10% Cables (Service cables and DTR cables) as per Annexure 17 of RfP	The clause may be modified as per the following: <i>“Cost of Meter Box and cost towards additional 10% Cables (Service cables and DTR cables) as per Annexure 17 of RfP and Cost of the meter box and cost towards additional 10% Cables (Service cables and DTR cables) should be</i>	The provisions of the RfP shall prevail. As per this clause, SGIA has to supply 100% of the cable requirements and

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			<i>paid as extra as per the deployment of such infrastructure items as per the schedule of rates prevailing in the project area”</i>	colour should be other than Black and white. The provision for additional 10% cable may be considered.
53.	Volume-I Clause 5.8.2 (Tender Evaluation Methodology – Opening of Financial Bid)	... The Bidders would be asked to participate in the Reverse Auction process, if undertaken, as per the Terms and Conditions provided in Annexure B	In order to have healthy competition, it is requested to remove ‘Reverse Auction process’ clause from the NIT’.	Reverse Auction would not be undertaken
54.	Clause 5.9.6 (Tender Evaluation Methodology – Award of Contract)	Within fourteen (14) days of receipt of the Agreement, the successful Bidder shall sign, date, and return it to WESCO. If Agreement has not been signed within 14 days from issuance of Letter of Award, then penalty @0.35% per week or part thereof of the value of Performance Security for Project Implementation amount will be recovered from the firm by WESCO which will be calculated from due date of signing of agreement till the actual date of signing of the agreement	The clause may be deleted	The provisions of the RfP shall prevail.
55.	Volume-I Clause 5.9.7 (Tender Evaluation Methodology – Award of Contract)	The successful Bidder shall provide an undertaking that the key staff identified for the project (as submitted in its Technical Bid) shall be available for the respective proposed work requirement, anytime during the duration of the	Please modify the clause as per the following” <i>“The successful Bidder shall provide an undertaking that the key staff identified for the project (as submitted in its Technical Bid) shall be available for the respective proposed work requirement, anytime during the duration of the Project, till its successful completion. If due to any</i>	The provisions of the RfP shall prevail.

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
		Project, till its successful completion. If due to any circumstances the key staff is not available for the project, a similar experienced key staff will be replaced with approval of WESCO	<i>circumstances the key staff is not available for the project, a similar experienced key staff will be replaced with approval of WESCO PFCCL."</i>	
56.	Volume-I Clause 5.9.10 (Tender Evaluation Methodology – Award of Contract)	Prior to opening of Financial Bid, PFCCL may ask the technically qualified bidders to demonstrate their interoperability solutions through use cases as per the requirements provided in Annexure D on a specified date. The bidders should be able to successfully demonstrate integration of their NIC/Communication module with meters of at least 3 manufacturers in India till HES and/or MDMS	The requirements mentioned in Annexure-D are very extensive and difficult to demonstrate before opening of the Financial Bid. Accordingly, it is requested to limit demo upto HES with single Make Meter Manufacture.	The provisions of the RfP shall prevail.
57.	Volume-I Clause 6.8.1 (Consortium)	..... The composition of the consortium cannot be altered	The clause may be modified as per the following: <i>".....The composition of the consortium cannot be altered without the prior permission of WESCO"</i>	The composition of the consortium cannot be altered without prior permission of WESCO.
58.	Volume-I Clause 6.13.2 (Scope of Work)	At the time of awarding the contract, WESCO shall specify any change in the Scope of Work. Such changes may be due for instance, if the quantities of supply and Related Services are increased or decreased at the time of award	The scope of work should be limited to tender scope only as it will have financial implication. Accordingly, it is requested to remove this clause. <i>The clause may be modified as per the following: "At the time of awarding the contract, WESCO shall specify any change in the Scope of Work. Such changes may be due for instance, if the quantities of supply and Related Services are increased or decreased at the time of award. Such changes shall be made after mutual discussion with the contractor"</i>	Please refer Amendment No. 2 to RfP.
59.				
60.	Volume-I	Allow Contractor to use existing power and water supply and	As per this clause, WESCO would allow SGIA to use existing power and water supply and necessary	WESCO can only allow SGIA to avail power and

Clarifications to Queries against the Request for Proposal (RfP) for Selection of Smart Grid Implementation Agency (SGIA) for implementation of Smart Grid in Rourkela Smart City, Odisha

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
	Clause 6.16.1(l) WESCO's Responsibilities)	necessary equipment required for civil construction (if applicable)	equipment required for civil construction. However, as per Volume-II, Clause 2.6.1(11), providing A.C. power supply inputs as defined in this specification is excluded from Contractor's scope. In view of the above, please clarify that the Power Supply charges to field equipment like DCU / Routers / Canopy shall be borne by WESCO.	water supply for civil construction where it is available
61.	Volume-I Clause 6.16.1(t) WESCO's Responsibilities)	Contractor has to arrange office space on its own in Rourkela and bear expenses and WESCO will not bear any liability for the same. However, space for material storage would be provided by WESCO at no extra cost for storing supplied equipment in respective areas where project work is in progress	We understand the material shall be first delivered in WESCO's stores from Manufacturers Works for accounting purpose and the same shall be re-issued for installation depending on field consumption	The understanding of the Bidder is correct.
62.	Volume-I	General	As a payment security, please open an Escrow account with bidder and this Escrow account should be linked with consumer billing accounts	To be intimated later
63.	Clause 6.18 (Terms of Payment)		As this project is on OPEX model, please include payment security mechanism as per the New Model SBDs issued by NSGM i.e. Utility and SGIA will have the option to choose either an 'Escrow Arrangement' or a 'Letter of Credit Mechanism' to ensure payment security. The terms & conditions for the same shall be mutually agreed upon post Award of Contract.	
64.	Volume-I Clause 6.18 (Terms of Payment)		Payment terms for Intentionally Burnt/ Tampered meters are not covered in RfP Document. It is requested to pay the Unit price of Supply, Installation at Unit rate as per Schedule B&C for these meters	The provisions of the RfP shall prevail.
65.	Volume-I	Payments shall be made promptly by WESCO, no later than fifty (50)	The clause may be modified as per the following: <i>"Payments shall be made promptly by WESCO, no later than fifteen (15) fifty (50) days after</i>	The provisions of the RfP shall prevail.

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S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
	Clause 6.18.6 (Terms of Payment)	days after submission of an invoice or request for payment by Lead Consortium Member, and WESCO has accepted it. No interest shall be paid by WESCO on delayed payments	<i>submission of an invoice or request for payment by Lead Consortium Member, and WESCO has accepted it. No interest shall be paid by WESCO on delayed payments"</i>	
66.	Volume-I Clause 6.19.1.1 (Payment Schedule)	While making payment of Meter Rent, FMS period for a particular lot of meters would commence from the date of Operational Acceptance of that lot and would continue for a period till 96 months	Please confirm whether meter rent will start from lot wise acceptance and continue till 96 months of operational acceptance of entire project. Please note that lot wise operational acceptance may happen within the implementation period of 2 years and meter rent will have to be paid for a period beyond 96 months for these lots. However, in the Price schedule only 96 months of payment has been mentioned. So, please confirm how Bidder will be paid for the additional months.	Please refer Amendment No.2 to RfP
67.	Volume-I Clause 6.19.1.2 (Payment Schedule)	....Delivery of first lot of 5% of total quantity of smart meters with related hardware, software and equipment at Project site after Factory Acceptance Test (FAT) including GIS for equivalent area.... The payment shall be released on lot basis considering delivery of each of 9 lots of having 10000 smart meters in each lot and the balance no. of smart meters in the 10 th lot with related hardware, software & equipment including GIS for equivalent area....	The total no. of meters in all lots is coming out to be more than 90,801. Please clarify.	Please refer Amendment No. 2 to RFP.
68.	Volume-I Clause 6.19.2(8) (Payment Schedule)	Charges towards 30% of Year 1 FMS Cost (i.e. NSGM Grant Component towards Year 1 FMS Cost) - On Quarterly basis for four (4) quarters after Operational	Please confirm that the payment would be lot-wise instead of quarterly basis	The provisions of the RfP shall prevail.

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
		Acceptance of the entire project		
69.	Volume-I Clause 6.19.3 (Payment Schedule)	Bidder to provide cyber security audit of complete system from Cert-In certified agencies at end of each Financial Year.	Please confirm if this refers to Vulnerability Assessment and Penetration Testing (VAPT) audit of hosted infra by Cert-in empaneled agency. If yes, please confirm frequency of audit in a year.	Bidder is required carry out cyber security audit of complete system as per as per MEITY Guidelines.
70.	Volume-I Clause 6.20.5 (Taxes and Duties)	Any statutory increase or decrease in the taxes and duties including GST and Cess as applicable or in event of introduction of new tax/cess or cessation of existing tax/cess subsequent to the Contractor's offer if it takes place within the original contractual delivery date will be to WESCO's account subject to the claim being supported by documentary evidence. However, if any decrease takes place after the contractual delivery date, the advantage will have to be passed on to WESCO.	Please amend the clause as per the following: <i>"Any statutory increase or decrease in the taxes and duties including GST and Cess as applicable or in event of introduction of new tax/cess or cessation of existing tax/cess subsequent to the Contractor's offer if it takes place within the original actual contractual delivery date will be to WESCO's account subject to the claim being supported by documentary evidence. However, if any decrease takes place after the actual contractual delivery date, the advantage will have to be passed on to WESCO."</i>	The provisions of the RfP shall prevail.
71.	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	Performance Security should be limited to 10% CAPEX amount paid by NSGM and the WESCO and not on the balance amount that is funded by the bidder, as the amount which is funded by the Bidder is recovered over a period of 96 months which implies that there is already enough security with WESCO for the performance of the project.	The provisions of the RfP shall prevail.
72.			As banks have constrained to issue the Bank Guarantee for a period of 8 years and are restricting it for only 5 years, the initial validity of Performance Security may be kept for 5 Years and the same shall be renewed subsequently before expiry of the same until the contract expires.	

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
		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 30 days from issuance of Letter of Award, 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		
73.	Volume-I Clause 6.22.1 (Intellectual Property)	WESCO shall own and have a right in perpetuity to use all newly created Intellectual Property which have been developed solely during execution of this Contract, including but not limited to all Source code, Object code, records	Please elaborate the requirement/ necessity of Source Code. Source Code is an Intellectual Property (IP) and sharing the Source Code will have security related issues. However, suitable API's and related services can be facilitated which will meet this requirement.	The provisions of the RfP shall prevail.
74.	Volume-I Clause 6.31.1 (Liquidated Damages and Penalty)	... liquidated damages, a sum equivalent to 0.5% of Meter Rent Per Consumer Per Month x Total number of consumers for which the Bidder has quoted Meter Rent x 96 months for each week or part thereof	As, LDs are normally applicable for delayed portions, LD should be applicable for the undelivered lot and not on the entire contract value limited to 10%. LD should be applicable only on the backlog quantity of meter. In case the backlog in supply/	The provisions of the RfP shall prevail.
75.				

Clarifications to Queries against the Request for Proposal (RfP) for Selection of Smart Grid Implementation Agency (SGIA) for implementation of Smart Grid in Rourkela Smart City, Odisha

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
		of delay...	erection is completed in subsequent milestone, the deducted LD Penalty should be reimbursed.	
76.	Volume-I	Contractor shall be responsible for comprehensive maintenance of all the equipment and systems supplied & installed under this Contract during 5 years of warranty period + balance three (3) years of FMS period...	Please confirm that for last 3 year no product warranty is required and any defect in the product will be addressed on additional cost	<p>The FMS period is for 8 years which would include 5 years of warranty period from the date of operational acceptance of the entire system by WESCO and balance 3 years of Annual Maintenance Support.</p> <p>Please refer Volume-I, clause 6.32.3 as per which “The complete cover warranty shall remain valid for the period of 5 years after operational acceptance of the AMI system by WESCO and for the <u>balance period (post warranty)</u> during Engagement of the Contractor, the <u>Contractor shall provide Annual Maintenance Support to WESCO at no extra cost</u>”</p>
77.	Clause 6.32.4 (Warranty)		Warranty clause should be as per the warranty clause mentioned in RfP Volume-II.	
78.			We understand that the Project is for 8 years but in this clause 5 + 3 years is mentioned. Please clarify the actual difference in scope between first 5 years and then next 3 years.	
79.	Volume-I Clause 6.32.5	The Maintenance of the system supplied & installed by the Contractor shall be comprehensive.	Please provide the list of mandatory spares required for this project	The Bidder has to ascertain the requirement of mandatory spares on

Clarifications to Queries against the Request for Proposal (RfP) for Selection of Smart Grid Implementation Agency (SGIA) for implementation of Smart Grid in Rourkela Smart City, Odisha

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
	(Warranty)	The Contractor shall be responsible for providing all the spares (cards/modules/accessories etc.) for supplied & installed equipment....		its own.
80.	Volume-I Clause 6.32.8 (Warranty)	If having been notified, the Contractor fails to remedy the defect within the period of warranty specified; WESCO may proceed to take within a reasonable period such remedial action as may be necessary, at the Contractor's risk and expense and without prejudice to any other rights which WESCO may have against the Contractor under the Contract	On the notification of defect/ issue within the period of warranty, the contractor will make its best efforts to remedy the defect within the agreed timeframe. However, please accept that in such a scenario the cost will not be borne by the Bidder.	The provisions of the RfP shall prevail.
81.	Volume-I Clause 6.37.2 (Force Majeure)	"Force Majeure" shall mean any event beyond reasonable control of Employer or of Contractor, as the case may be, and which is unavoidable....	As pandemic disease is also beyond our control, it is requested to include Pandemic in Force Majeure list.	Please refer Amendment No. 2 to RfP.
82.	Volume-I Clause 6.38.1 (Change Orders and Contract Amendments)	WESCO may at any time order the Contractor through Notice in accordance Clause 6.9 ("Change Order") to make changes...	The scope of work should be limited to tender scope only as it will have financial implication. Accordingly, it is requested to remove this clause.	The provisions of the RfP shall prevail.
83.	Volume-I Clause 6.40.3(b) (Termination – Termination for Convenience)	If in the above case, the Contractor is directed to discontinue work, the "Drop Dead Fee" would be the payments received by the Contractor and the claims already raised to WESCO plus the sum of all liabilities and expenditure incurred (as	Please modify the clause as per the following: <i>"If in the above case, the Contractor is directed to discontinue work, "Drop Dead Fee" would be the payments received by the Contractor and the claims already raised to WESCO balance CAPEX amount and GST value that is due to the contractor for the meters and infrastructure</i>	The provisions of the RfP shall prevail.

Clarifications to Queries against the Request for Proposal (RfP) for Selection of Smart Grid Implementation Agency (SGIA) for implementation of Smart Grid in Rourkela Smart City, Odisha

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
		approved by WESCO), if any, relating to the assignment, till the point of calling off the assignment.	<i>already deployed plus the sum of all liabilities as expenditure incurred (as mutually agreed between the Bidder and WESCO), if any relating to the assignment, till the point of calling off the assignment."</i>	
84.	Volume-I	...Three Phase LT-CT SMART Meters (/5A)...	Please confirm the CT requirements along with all the Boxes.	Please refer Volume-II, Annexure-C which mentions the following: "....All CT operated meters have to be supplied by the Bidder. CT for meters at consumer end as well as for HT meters would be provided by WESCO. However, CT for meters at DT level is to be supplied by the Bidder. The CT ratios for meters at DT level have been mentioned in Annexure-17 to the RfP. Further, the Bidder has to supply boxes for all types of CT operated meters of polycarbonate material. For HT Meters, the specifications of Meter Box for Three Phase Meters may be used. For LT CT meters, the Bidder has to supply Meter Box of
85.	Annexure 10 Clause A (Format of Bill of Quantities)	...Box for Three Phase LT-CT SMART Meters (/5A)...	The external LT CTs and Box for LT CTs have not been mentioned in BOQ. We understand that external LT CTs and SMC Box are already available at DT site and are in working condition. Please confirm that in case any LT CT/ SMC Box are not in working condition, the same shall be arranged by WESCO as per the field requirement.	

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
				polycarbonate material as per its own specifications ensuring proper communication from the meters. However, the specifications of the boxes have to be submitted to WESCO after award of the project to the selected Bidder and before supply of meters.....”
86.		.... HT Meters for Feeders	Please provide the details of substations (locations & Numbers) wherein these feeder meters have to be installed. The same is needed to estimate the number of additional gateways to be required for RF Communication.	The details regarding HT Meters for Feeders are provided in the Modified Annexure-17 of the RfP
87.		... Additional 10% Cables (Service cables and DTR cables)	Please confirm that the balance 90% cables are available with the Utility.	As per this clause, SGIA has to supply 100% of the cable requirements and colour should be other than Black and white. The provision for additional 10% cable may be considered
88.			Please provide the technical specifications, size, Length per Connection etc. of Service Cables	The size of cable varies as per the load requirement. The load details (consumer-wise) are already mentioned in RFP. The cable colour

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S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
				should be other than Black and White. If possible the type of cable may be co-axial.
89.	Volume-I Annexure A (Tender Evaluation Methodology - Manpower Experience)	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/ WESCO 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)	The CV of the Personnel proposed will be working under ongoing project and the deployment of same manpower is practically not possible. Please amend the clause so that suitable manpower similar to proposed manpower shall be deployed with the approval of PFCCL/ WESCO	The provisions of the RfP shall prevail.
90.	Volume-I Annexure D (Use Cases for Demonstration of Interoperability Solutions)	General	It seems that RFP is asking for end to end demonstration of integrated offered solution before the commencement of order. As there are many new players entering in AMI Implementation, in order to ensure maximum participation in the bid by bidders, please amend this clause to allow end-to-end demonstration with IS:16444 meters which should be done with any two meters	The provisions of the RfP shall prevail.
91.			As integration of HES with MDM is a complex and time taking process, demonstration of operation which has source as MDM cannot be done in a	

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
			short notice of time. However, demonstration of operation which has source as HES can be demonstrated. Please accept the same.	
92.	Volume-I Annexure D(3) (Use Cases for Demonstration of Interoperability Solutions)	All use cases shall be tested for each meter make	Please amend the clause as per the following: <i>"All use cases shall be tested for each at least one meter make"</i>	The provisions of the RfP shall prevail.
93.	Annexure D (Use Cases for Demonstration of Interoperability Solutions - Utility detects tampering or theft at customer site)	... Meter sending the high priority events to HES as and when occurred...	We understand that here high priority events means the tamper events which shall be sent to HES by meter as and when occurs.	The understanding of the Bidder is correct.
94.		.... Meter is sending non-critical events data to HES as per scheduled frequency...	We understand that here non critical data comprise of LS data which can be made available at HES by meter at schedule frequency.	The understanding of the Bidder is correct.
95.	Volume-I Annexure D (Use Cases for Demonstration of Interoperability Solutions - Load monitoring at demand side)	When there is a load violation event recorded in the meter, the information is sent to the CC	Please define "CC". If this use case included integration with systems other than MDM & HES then such use case should be omitted at this stage. However, the same could be checked when integration with actual system is done.	"CC" means Control Centre The provisions of the RfP shall prevail.
96.	Volume-I Annexure E (Project Implementation Schedule)	.... Warranty (Defect Liability) Period – 5 years from Operational Acceptance.....	Defect liability of each Lot must be from the operational acceptance of that particular lot and not after operational acceptance of the complete project.	The provisions of the RfP shall prevail.
97.	Volume-I	General	Please confirm whether Power of Attorney is to be	The understanding of the

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S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
	Annexure 5 (Format of Power of Attorney by Consortium Member in favor of Lead Consortium Member)		executed on Rs. 100/- non-judicial stamp paper.	Bidder is correct.
98.	Volume-I Annexure 10 Clause B (Format of Bill of Quantities)	....GIS System (including relevant software) & License including Technical audit of substations and Preparation of digitized network on base map in pre-defined scale with features and attributes of data collected through survey for GIS application...	Please share the scope of technical audit of Substation.	The scope of technical audit of sub-stations shall be mutually agreed between WESCO and SGIA as per prevalent norms
99.	Volume-I Annexure 10 Clause D (Format of Bill of Quantities)	.... No. of LT-CT Meters at DT Level already under implementation....	As per BOQ, Total No. of No. of LT-CT Meters at DT Level is 1115 out of which 230 meters are under implementation and balance 885 meters are covered under this project. However, CT ratio of entire 1115 of LT-CT Meters has been provided in the BoQ. But, the same is not provided for 885 meters covered under this project. Please provide the CT ratio breakup of these 885 meters.	The CT ratio of entire 1115 of LT-CT meters has been provided in BOQ. As 230 meters under implementation are not smart meters, the entire 1115 number of LT-CT meters will be installed by SGIA.
100.	Volume-I Annexure 11 (Format of Submission of Financial Bid)	.... Bidders to upload the Price Bid in the form of excel sheet as per Annexure 17 as well as submit the duly signed scanned copy of the same.....	Please confirm that only excel file will be uploaded for financial bid and blank signed stamped Annexure 11 will be submitted along with technical bid.	Please refer Amendment No.2 to RfP.
101.	Volume-I Annexure 17 (Price Bid Schedule)	-	As Training is to be provided for 6-person batch for WESCO and PFCCL 2 times a year during first 3 years, please add the following line item in Annexure-17 (Price Bid Schedule): <i>"Training & Development – Providing training of</i>	The provisions of the RfP shall prevail.

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S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
			<i>identified personnel of PFCCL and WESCO on operation and maintenance of AMI Infrastructure (at least 2 times a year during first 3 years for 6 persons per batch)."</i>	
102.	General	-	We understand that WESCO is in process of privatization and there are chances that some new licensee takes over the power distribution. Accordingly, clarification is required that this project will be owned, executed, & operated by the new licensee (in case awarded)	It shall be as per the directives of the Hon'ble Commission and the same shall be assured by Government of Odisha
103.		-	Annexure-17 of RfP is missing.	Annexure-17 has been separately uploaded on PFCCL's website along with RfP (Volume-I), RfP (Volume-II) and Annexure-18 (Baseline KPI study report) under the heads "tenders"
104.	Volume-II Clause 1.2.2 (Project Objective)	.... In future, SCADA and Real Time Data Acquisition System (RT-DAS) projects may be implemented in WESCO. Accordingly, instant Smart Grid project shall also include integration of HES with MDMS and MDMS with existing and future Utility applications....	Please elaborate on the Real time Data Acquisition System (RT-DAS) and its use cases for the AMI for integration	At present RT-DAS project would not be undertaken in WESCO. However, it may be implemented in Future.
105.			Please share the details of future utility applications. It is understood that the utility would ensure full support from any future application provider without financial implication.	WESCO may decide to implement SCADA, RT-DAS as well as any other applications in future. Further, in Volume-II, Clause 1.4.1(vi), Bidder would <u>only</u> have to facilitate WESCO in integration of future technologies/ new

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S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
				application/ equipment by providing whatever data/codes/APIs required by WESCO at that time.
106.	Volume-II Clause 1.2.3 (Project Objective)	Architecture of the AML system	The diagram shows two HES. Please clarify why two HES has been depicted.	The diagram is just for depiction purpose. Bidder would need to submit the best fit solution and the detail architecture including connectivity upto last mile at the time of bid submission.
107.	Volume-II Clause 1.2.5(g) (Project Objective)	Signal transmission for variable pricing	Please delete this clause	The provisions of the RfP shall prevail.
108.	Volume-II Clause 1.4.1(iii) (Scope of Work)	CT operated three phase Smart Meter (with/without net-metering) with suitable communication technology. The CT operated meters should also have capability to control external switching device, say a potential free contact (1 amp). In future if such a connect-disconnect feature is available for CT operated meters, the provision for pre-paid functionality shall be possible through software at MDM/ HES level	It is understood that the DIDO functionality is recommended which is generally used at DT. Please clarify if the same is a requirement in LT Consumer meters.	The same would be as per prevalent IS.
109.	Volume-II Clause 1.4.1(v) (Scope of Work)	RF canopy or GPRS based communication: Router based canopy type Radio Frequency (RF) network (based on Radio Frequency	NB-IoT based communication should be used instead of RF/ GPRS	The provisions of the RfP shall prevail.

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
		(RF) mesh Licensed frequency band...		
110.	Volume-II Clause 1.4.1(v)(a) (Scope of Work)	Site survey for identification of Consumers, Distribution Transformers, Feeders and Sub-Station for the installation of Smart Meters. The geographical boundary will be boundary of Sub-Divisions for conducting the site survey	Please provide details of the sub-division as per project area with boundary map, Substation locations, utility offices, endpoints location, DT location	Please refer Volume-I, Annexure-18 to RfP. The other details would be shared with the Successful Bidder on award of contract.
111.	Volume-II Clause 1.4.1(vi) (Scope of Work)	Integration of Network Integration Card (NIC)/ Communication Module with meters of at least 3 manufacturers in India, to enable the respective meters to seamlessly integrate with proposed HES and MDMS thus enabling interoperability of the system. In future, it would be bidders' responsibility to integrate new meter or any other application/equipment as decided by WESCO.....	We understand that the RFP is for smart meters, so please confirm that any new meters to be integrated will be complying to IS 16444 and IS 15959. Please provide clarity on the new application/ equipment that need to be integrated	Yes, the new meters to be integrated would have to comply with the latest amendments to the relevant IS 16444 and IS 15959. As regards new application/ equipment that need to be integrated, please refer our response at S.No. 105
112.			Integration of NIC has to be with meters of 3 Manufacturer. Hence, integration of any new meter or any other application may lead to unlimited scope. Accordingly, the clause may be amended as per the following: <i>"Integration of Network Integration Card (NIC)/ Communication Module with meters of at least 3 manufacturers in India, to enable the respective meters to seamlessly integrate with proposed HES and MDMS thus enabling interoperability of the system. In future, it would be bidders' responsibility to integrate new meter or any</i>	The provisions of the RfP shall prevail.

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
			other application/equipment as decided by WESCO.....	
113.	Volume-II Clause 1.4.1(ix) (Scope of Work)	Integration of HES with MDMS & MDMS with existing applications of WESCO. The MDMS shall be integrated with legacy applications installed under the RAPDRP Program or any other projects of WESCO. The integration would be done with the Billing system, MDAS system etc. The scope will also cover the future integration requirement given by WESCO till the contract period i.e. including O&M period. The details of existing legacy system of WESCO are as follows: a. <u>HT/ EHT and Three Phase Billing</u> – Meter reading is collected by AMR or MRT personnel. Advice related to billing (payment posting, sundry posting, new connections, consumer connections) is collected from Divisions. The centralized IT centre generates bills through the billing software Oracle and D2K.	Please confirm, how many other working MDAS systems are there in the utility at present.	No other MDAS system is there in WESCO. However, MDAS/ MDMS is under implementation for 3-phase metering.
114.			Please share the list of existing systems with which MDM has to be integrated. Also, let us know the OEM of the existing systems and versions.	Please refer Volume-II, Clause 1.4.1(ix) for the details of existing legacy system of WESCO which has to be integrated. WESCO has to implement IBM DB 2 in JAVA platform in IPDS(IT) Scheme
115.			Please clarify whether the "Single Phase Billing Advice" System is being replaced by a new IT Application System under RAPDRP or IPDS. Please also provide the roadmap of this application system and when will it be decommissioned.	WESCO has to implement IBM DB 2 in JAVA platform in IPDS(IT) Scheme
116.			Please clarify whether "Spot Billing Activities" will be discontinued in a phased manner based on Smart Meter installation Plan and the new MDM System would provide the meter reading data for Billing. Please also provide the roadmap of this application system and when will it be decommissioned.	"Spot Billing Activities" will be discontinued after complete installation and successfully implementation of AMI System in a particular area.
117.			In AMI system, spot billing is not applicable as the bill is generated at the system end from the reading acquired remotely. Accordingly, the same may be	

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
118.		<p>centre, the input data is processed in the billing software Oracle and D2K.</p> <p>c. The data uploading/ downloading/ meter reader management activities with respect to Spot Billing Activities is carried out by software in Sql server and .net.</p> <p>d. The Spot Billing is carried out by meter readers through mobile app in Android.</p>	<p>deleted</p> <p>Please provide details of the Oracle and D2K application with version and other use cases as required for AMI application</p>	<p>At present, Oracle D2K 8i version is used for Billing purpose and IBM DB 2 in JAVA platform in IPDS(IT) Scheme under implementation</p>
119.	Volume-II Clause 1.4.1(x) (Scope of Work)	Geographical Information System (GIS)...	Please provide the detailed specification of GIS application	Please refer Volume-II, Clause 3.9
120.	Volume-II Clause 1.4.1(xii) (Scope of Work)	Seamless integration of IT System with existing system of WESCO and to facilitate or provide full support for any new future/ new application/ equipment integration requirement of WESCO by providing whatever data required by WESCO at that time by/ through development of Web Services or any other Services. Development and monitoring of Web Services and any other services shall be in the scope of bidder. Further, if required, the Contractor has to switch all Smart Metering application and submit database in other Cloud Service Provider with details of each and every process to	<p>The clause may be amended as per the following: <i>“Seamless integration of IT System with existing system of WESCO and to facilitate or provide full support for any new future/ new application/ equipment integration requirement of WESCO by providing whatever data required by WESCO at that time by/ through development of Web Services or any other Services. Development and monitoring of Web Services and any other services shall be in the scope of bidder. Further, if required, the Contractor has to switch all Smart Metering application and submit database in other Cloud Service Provider with details of each and every process to be followed”</i></p>	The provisions of the RfP shall prevail.

Clarifications to Queries against the Request for Proposal (RfP) for Selection of Smart Grid Implementation Agency (SGIA) for implementation of Smart Grid in Rourkela Smart City, Odisha

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
		be followed		
121.	Volume-II Clause 1.4.1(xiii) (Scope of Work)	Mobile app (Android and iOS based) for consumers	Please provide the scope and functional details of Mobile Apps for Consumers.	Please refer Volume-II, Clause 3.7 regarding “Customer Portal”
122.	Volume-II Clause 1.4.1(xix) (Scope of Work)	Deployment of suitable backend communication technology (GPRS, Radio, Leased Line etc.) may be considered for data communication to HES. However, cellular connectivity may be checked before deployment. GPRS SIM cards shall be provided by the contractor in the name of utility for which necessary support shall be provided by utility. Service Level Agreement with service providers shall be done by contractor and it is the responsibility of the contractor to ensure the SLAs defined in section 4 are met.	For SIM cards to be name of Utility, tripartite agreement needs to be signed between the mobile service provider, successful bidder and Utility. Please modify the clause accordingly.	The provisions of the RfP shall prevail.
123.	Volume-II Clause 1.4.1(xxiii)(a) (Scope of Work)	The Contractor shall carry out a baseline study to identify the targets and establish Key Performance Indicators (KPIs) for measuring benefits of the AMI Project	Please confirm that baseline data given in the bid would be considered for identifying the target.	Baseline KPI Studies were carried out in the year 2018-19 to establish the baseline parameters for the project area. However, SGIA would have to carry out baseline studies to establish the latest baseline KPIs.
124.	Volume-II	The Contractor shall prepare Baseline Study Report which would	Some of the activities mentioned are part of DPR activity which is usually done before the issuance of	The provisions of the RfP shall prevail.

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
	Clause 1.4.1(xxiii)(e) (Scope of Work)	include narrative description of the project objective and rationale for its deployment, technical feasibility study, overall architecture and operational philosophy of the proposed AMI solution and methodology for achieving different functionalities, specified in this document and also highlight additional features, if any, financial projections, detailed cost benefit analysis, proposed cost recovery mechanism, implementation approach & methodology, project implementation schedule, performance incentives if any, monitoring, verification and evaluation plan, consumer engagement plan, governance framework, training and capacity building plan	tender and, accordingly, should be excluded from scope of the RfP. The clause may be amended as per the following: <i>"The Contractor shall prepare Baseline Study Report which would include narrative description of the project objective and rationale for its deployment, technical feasibility study, overall architecture and operational philosophy of the proposed AMI solution and methodology for achieving different functionalities, specified in this document and also highlight additional features, if any, financial projections, detailed cost benefit analysis, proposed cost recovery mechanism, implementation approach & methodology, project implementation schedule, if any, monitoring, verification and evaluation plan, governance framework, training and capacity building plan."</i>	
125.	Volume-II Clause 1.4.1(xxix) (Scope of Work)	The Contractor shall establish the Back-End IT system with scalability features to handle all WESCO consumers i.e. entire consumers of WESCO for next 15 years	Please elaborate WESCO's requirement, as in the RfP 10 years consumer estimation has been mentioned. In case of cloud based systems for HES & MDM, the subscription charges are based on the usage and load. As per RFP, Bidder has to take care of the Cloud based infrastructure cost for the initial period of 8 years and later WESCO has to take care once the Project is handed over to WESCO.	The Bidder has to establish a Back-End IT system which can be scaled by WESCO in future to handle their entire consumer base for next 15 years. Further, the Bidder has to bear cloud service charges from the date of operational acceptance

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
				of the first lot of Smart Meters till end of the entire contract period
126.	Volume-II Clause 1.4.1(xxx)(j) (Scope of Work)	Smart Meters proposed should have the provision of Pre-paid mode also Integration for pre-payment recharge coupon with existing billing application of WESCO	The payment system should not be coupon based. This should be linked to existing payment collection system of utility. Further, recharge amount in consumer account must be calculated with integration with existing billing and tariff system.	The provisions of the RfP shall prevail.
127.	Volume-II Clause 1.4.1(xxxi)(e) (Scope of Work - Repair & Maintenance of installed AMI Infrastructure)	In case of any theft or sabotage of the AMI Infrastructure or if the reason(s) for failure/ malfunctioning or defect of the AMI Infrastructure is attributable to normal wear and tear, or mishandling or inappropriate usage of the AMI Infrastructure by WESCO, or reasons attributable to the negligence of WESCO, the Contractor will ensure replacement of same and cost will be borne by WESCO as per the price discovered through this tendering process	RfP mentions only price for the material part. Any material replaced due to theft can be accounted but replacement cost includes cost incurred in deploying the new equipment which should be mutually agreed. Accordingly, the clause may be amended as per the following: <i>"In case of any theft or sabotage of the AMI Infrastructure or if the reason(s) for failure/ malfunctioning or defect of the AMI Infrastructure is attributable to normal wear and tear, or mishandling or inappropriate usage of the AMI Infrastructure by WESCO, or reasons attributable to the negligence of WESCO, the Contractor will ensure replacement of same and cost will be borne by WESCO as per the price discovered through this tendering process and erection cost reimbursed as agreed mutually between successful bidder and utility."</i>	As per the RfP, prices for both supply and erection of meters would be discovered. Hence, cost towards replacement of meters due to reasons mentioned in this clause would be borne by WESCO as per the prices (supply and erection) discovered through this tendering process
128.	Volume-II Clause 1.4.1(xxxiii) (Scope of Work)	Cyber security audit of complete system from Cert-In certified agencies...	Cyber security is a cost and time consuming activity. Successful Bidders should be allowed to submit security audit reports of the application offered as an alternative/	The provisions of the RfP shall prevail.
129.	Volume-II Clause 2.4(8)	Achieving interoperability for AMI through incorporation of the communication modules (NICs)	Integration of NIC has to be with meters of 3 Manufacturer. Hence, integration of any new meter or any other application may lead to unlimited	The provisions of the RfP shall prevail.

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
	(Contractor's Responsibilities and Obligations)	inside the Smart meters of any make of Smart meters as short listed by utility for this project area in the future	scope. Accordingly, the clause may be deleted.	
130.	Volume-II Clause 2.4(12) (Contractor's Responsibilities and Obligations)	Updation of consumer indexing in AMI system during installation and maintenance period	Consumer indexing is usually carried out by the Utility. Hence, it is recommended that data should be given by the Utility to SGIA or else BOQ may be amended and detailed requirements may be given	The provisions of the RfP shall prevail.
131.	Volume-II Clause 2.4(23) (Contractor's Responsibilities and Obligations)	Supply all required spare parts, maintenance aids, and test equipment, software maintenance and testing tools	The clause may be amended as per the following: <i>"Supply all required spare parts, maintenance aids, and test equipment, software maintenance and testing tools"</i>	The provisions of the RfP shall prevail.
132.	Volume-II Clause 2.5(c) (Exclusion from Contractor's Scope)	A.C. input power supply for AMI Control Centre	Power Supply for RF coverage elements like DCU/ Gateways may be added. The clause may be amended as per the following: <i>"A.C. input power supply for AMI Control Centre the project as required"</i>	The provisions of the RfP shall prevail.
133.	Volume-II Clause 3.1.3 (xiii) (AMI Functional Requirement)	Communication network shall preferably be able to support multiple applications. Bidder needs to ascertain applications that would be required & submit bid accordingly	Request you to kindly provide the details of Applications	As mentioned in the clause, Bidder needs to ascertain applications that would be required & submit bid accordingly.
134.	Volume-II Clause 3.2.2 (General AMI System Requirement)	Contractor shall adhere with appropriate security algorithm for encryption & decryption. For smooth functioning of entire system, it is essential that the details of such algorithm including the mechanism of security key generation be kept in	Please elaborate and intimate who will own and maintain escrow account related to this requirement.	Please refer Amendment No.2 to RfP for details regarding Payment Security Mechanism

Clarifications to Queries against the Request for Proposal (RfP) for Selection of Smart Grid Implementation Agency (SGIA) for implementation of Smart Grid in Rourkela Smart City, Odisha

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
		a secured escrow account which shall be used by the utility only in case of termination of the contract for reasons whatsoever		
135.	Volume-II Clause 3.3 (Smart Meters)	Single Phase & Three Phase whole current smart meters shall comply with IS 16444 (latest version). Three Phase CT operated meter shall comply IS 16444: Part 2. The contractor has to furnish valid BIS certification at the time of bid submission.....	As per clause 3.3, BIS certificate is required to be submitted at the time of Bid Submission. However, as per clause 3.3.4.1.1, either of the meter type BIS is required to be submitted at the time of Bidding and rest all before commencement of supply. Please clarify.	Please refer Amendment No. 2 to RfP.
136.			As IS16444 is a new standard, not many Meter variants have BIS Licenses. Accordingly, it is requested to accept the available Smart Meter variant (i.e. NAN / WAN) BIS Licence as per IS16444 at the time of Bid submission and accept the remaining offered Smart Meter variant's BIS Licence before commencement of Supply.	
137.			Please accept submission of BIS certificate before commencement of supply.	
138.			It is requested to allow bidders to furnish valid BIS certification at the time of bid submission or submit an undertaking at the time of bid submission that they would produce the BIS certificates before award of contract, if that bidder is the successful bidder.	
139.	Volume-II Clause 3.3(e) (Smart Meters)	Power event alarms such as loss of supply, low/ high voltage, out of band frequency	Please remove the phrase “out of frequency events alarm” as meter communicates in Free band and would never go out of band.	The provisions of the RfP shall prevail.
140.	Volume-II Clause 3.3(m) (Smart Meters)	Integration with other existing systems like IVRS, billing & collection software, GIS mapping, consumer indexing, new	Meter does not integrate with any 3 rd party tool/ system. It sends the data to HES. HES sends the data to MDMS and all 3rd party tool/ systems integrate with MDMS/ Please make suitable	The provisions of the RfP shall prevail.

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
		connections & disconnections, analysis software, Outage Management System etc.	amendments.	
141.	Volume-II Clause 3.3.1.2 (Smart Meters)	The single phase whole current Smart Meter shall conform to the standards and specification as specified in Annexure A	Technical Specifications of only 5-30 A Single Phase Smart Meter have been given in the RfP. Technical Specifications of 10-60A Single Phase Smart Meter are given. Please confirm that Technical Specifications of 5-30 A Single Phase Smart Meter would also be applicable for 10-60A Single Phase Smart Meter.	The understanding of the bidder is correct.
142.	Volume-II Clause 3.3.4.1.1 (Smart Meters – Tests - Type Tests and Test Certificates)	Single phase and three phase whole current Smart meter shall be type tested for all the type tests as per IS: 16444 (latest version) and three phase CT operated Smart Meter shall be type tested for all the type tests as per IS: 16444 Part-2 (latest version) in a government approved laboratory. The number of sampling for testing of meters and criteria for conformity would be as per IS 16444 and IS 16444 Part-2. The supplier shall have to submit Type Test Reports of either Single Phase or Three Phase Smart Whole Current Meter (of the required current rating as per the RfP) along with the Bid and the Type Test Reports of other variant meters before commencement of supply in line with the specifications mentioned under Volume II, Clause 3.3	It is requested to allow bidders to furnish valid type test reports at the time of bid submission or submit an undertaking at the time of bid submission that they would produce the type test reports before award of contract, if that bidder is the successful bidder. Please accept submission of Type Test reports before commencement of supply.	Bidder shall have to submit Type Test Reports of either <u>Single Phase or Three Phase Smart Whole Current Meter (of any of the required current rating as mentioned in the RfP)</u> along with the Bid and the Type Test Reports of other variant meters before commencement of supply
143.				
144.			We understand that any one i.e. either Single Phase Whole Current 5-30 / 10-60 A Smart Meter's OR Three Phase Whole Current 20-100A / LT CT Operated / HT CT-PT Operated Smart Meter's Type Test Report is to be submitted along with the Bid.	
145.	Volume-II	Type test should not be older than 3	Type Testing is, generally, done on design of the	Please refer Amendment

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
	Clause 3.3.4.1.2 (Smart Meters – Tests - Type Tests and Test Certificates)	years. Without above type test certificate the offer shall not be considered. At least 15 days before the scheduled date of supply, SGIA shall offer for inspection of each lot, 10 random samples for every 10000 numbers of meter to be selected for type testing, to the officials of WESCO and any other party(ies) as decided by WESCO and if meter during type test is found failed then either the order placed shall be cancelled with Contractor to collect all meters at its cost for the supplied meters or Contractor shall have to replace all supplied meters at their cost after manufactured and successful type test within time frame given by the Employer	Meter once in 5 years. Since, Smart Meters are recent development, it is requested to accept Type Test Reports of not more than '5 years' instead of '3 years'. Further, as Type Testing is already done and Reports would be submitted to PFCCCL/OPTCL, repeating Type Testing on Supply lot(s) (i.e. 10 random samples for every 10000 numbers of meter) shall put additional cost burden on the Supplier and it is a time taking process to obtain the same from any external Lab. Hence, it is requested to remove this clause	No.2 to RfP
146.	Volume-II Clause 3.3.5.12.1 (Smart Meters - General and Constructional Requirements for Meters - Testing and Manufacturing Facilities)	The manufacturer shall have NABL accredited laboratory to ensure accurate testing calibration as per IS 16444/ IS 13779/ 16444 Part-2 for acceptance test.	The clause may be amended as per the following: <i>"The manufacturer shall have NABL accredited laboratory or a tie up with a NABL accredited laboratory to ensure accurate testing calibration as per IS 16444/ IS 13779/ 16444 Part-2 for acceptance test"</i>	The provisions of the RfP shall prevail.
147.	Volume-II Clause 3.4.3 (Data Concentrator Unit	The Bidder may either use Data Concentrator Unit (DCU) based Communication Network or Router based RF Mesh Network	NB-IoT based communication should be used instead of RF/ GPRS	The provisions of the RfP shall prevail.

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
	(DCU) based Communication Network)			
148.	Volume-II Clause 3.4.3.1.3 (Data Concentrator Unit (DCU) based Communication Network - DCU Communication)	...The DCU shall ensure the appropriate backhaul for secure transfer of data to HES either via latest cellular communication technology (GPRS 3G/4G etc.) or Fiber Optic communication. In case of GPRS/3G/4G backhaul, it shall support SIM card with dynamic IP from any service provider. It shall have Wide Area Network (WAN) connectivity to the HES through suitable means...	The clause may be modified as per the following: <i>"The DCU shall ensure the appropriate backhaul for secure transfer of data to HES either via latest cellular communication technology (GPRS 3G/4G etc.) or Fiber Optic communication or any other means of communication. In case of GPRS/3G/4G backhaul, it shall support SIM card with dynamic IP from any service provider. It shall have Wide Area Network (WAN) connectivity to the HES through suitable means..."</i>	The provisions of the RfP shall prevail.
149.	Volume-II Clause 3.4.3.1.3 (Data Concentrator Unit (DCU) based Communication Network - DCU Communication)	... DCU shall be able to communicate with meters either on RF mesh (Unlicensed or Licensed frequency band as permitted by WPC) or PLC...	The clause may be modified as per the following: <i>"... DCU shall be able to communicate with meters either on RF mesh (Unlicensed or Licensed frequency band as permitted by WPC) or PLC..."</i>	Please refer Amendment No.2 to RfP
150.	Volume-II Clause 3.4.3.2.1.1(b) (Router based RF Mesh Network - General Requirement of Router based RF Mesh Network)	It shall support IPv4 and IPv6 network addressing	As IPv4 and IPv6 cannot be at the same time, the clause may be modified as per the following: <i>"It shall support IPv4 or and IPv6 network addressing"</i>	The provisions of the RfP shall prevail.
151.	Volume-II	Routers / Access Points shall have	The present requirement of battery backup of 8	The provisions of the RfP

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
	Clause 3.4.3.2.1.1(m) (Router based RF Mesh Network - General Requirement of Router based RF Mesh Network)	suitable power supply arrangements. Provision of battery backup for at least 8 hour shall be there to continue operation in case of power supply failure. The life expectancy of battery shall be 5 years or more.	hour will increase the battery size and associated charging circuitry. As per CEA's AMI functional requirement, battery backup is recommended for only 1 hour. Accordingly, please amend the clause as per the following: <i>"Routers / Access Points shall have suitable power supply arrangements. Provision of battery backup for at least 8 2 hours shall be there to continue operation in case of power supply failure. The life expectancy of battery shall be 5 years or more."</i>	shall prevail.
152.	Volume-II Clause 3.5(d) (Head End System (HES))	HES shall be developed on open platform based on distributed architecture for scalability without degradation of the performance using additional hardware. HES shall support storage of raw meter data, alarms and alerts for minimum 45 days. Adequate data base and security features for storage of data at HES need to be ensured	Our HES is Windows based Platform, which is extensively used. Accordingly, it is requested to have a window based platform instead of open platform.	The provisions of the RfP shall prevail.
153.	Volume-II Clause 3.5(e)(xvii) (Head End System (HES))	Signal Strength monitoring of devices on which GPRS SIMs are installed	As cellular is a third party system and monitored by specific tools by cellular service provider, this clause may be deleted.	The provisions of the RfP shall prevail.
154.	Volume-II Clause 3.5(e)(xii) (Head End System (HES))	Network information in case more than one technology is deployed in field between the two devices. Technology provider to provide all network information	HES can support network information of other technology only if the technology provider shares the network information. Please confirm that the technology provide will provide all network information.	The provisions of the RfP shall prevail.
155.	Volume-II Clause 3.5(e)(xiii)	HES shall export all meter data (as per IS 15959) to MDM via CIM/XML. In addition, it should conform to IEC	Please keep the technology open for integration of HES with MDM. Even in RFP's issued by other utilities the integration preference has been kept	The export of all data would be as per Clause 6.2 of CEA's "Functional

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
	(Head End System (HES))	61968-9 as well as MultiSpeak v3.0 standards to interface with pre-existing MDM solution. In case, Discom has implemented any SOA/ESB architecture, the data exchange to and from HES shall be through this ESB. The export of all data would be as per Clause 6.2 of CEA's "Functional Requirements of Advanced Metering Infrastructure (AMI) In India"	open as per CEA Guidelines (Section 6.2). HES should preferably interface with MDM on standard interfaces and the data exchange models and interfaces shall comply with CIM / XML / IEC 61968 or any other open standard. The solution should be Service Oriented Architecture (SOA) enabled.	Requirements of Advanced Metering Infrastructure (AMI) In India"
156.	Volume-II Clause 3.5.4.1 (Head End System (HES) - Integration)		Please provide the details of IEC 61968-9 as well as MultiSpeak v3.0 standards	
157.				
158.	Volume-II Clause 3.5.1.1(p) (Head End System (HES) - Configuration)	HES shall facilitate programming of following meter parameters..... Setting threshold limits for monitored parameters	These Parameters cannot be configured in meter as IS 15959 Part 2 does not support the same. Hence, HES cannot Program these parameters into Meter. Please accept the same.	The provisions of the RfP shall prevail.
159.	Volume-II Clause 3.5.1.1(q) (Head End System (HES) - Configuration)	HES shall facilitate programming of following meter parameters..... Provision for adding more programming features in future (The bidder may suggest more parameters as per the requirement)	Please provide the list of features which may be added in the future. Please accept that adding new feature would be subject to hardware support.	The provisions of the RfP shall prevail.
160.	Volume-II Clause 3.6 (Meter Data Management System (MDMS) – Table (S.No. 1)	Scheduled Meter Read Automatically from Consumer Premises... At scheduled frequency meter sends data to HES. Consumption details including non-critical events will be in 15 min block data, and data could be incremental to what was sent by meter in preceding instance	Interval block data should be 30 mins or more as block data is fetched daily.	The provisions of the RfP shall prevail.
161.	Volume-II	Calculate credit balance for prepaid	Please provide more information on "Prepaid App"	There is no prepaid

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
	Clause 3.6 (Meter Data Management System (MDMS) – Table (S.No. 15.5)	consumer & update prepaid meter	and whether there is any Prepaid Application available in WESCO.	application available in WESCO at present
162.	Volume-II Clause 3.6 (Meter Data Management System (MDMS) – Table (S.No. 16.6)	Payment acknowledgement through email/SMS.	Please specify who will provide the SMS Gateway. It is requested to consider the same in the scope of WESCO.	SMS Gateway would be in the scope of the Bidder.
163.	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.....	Bill efficiency, collection efficiency and transformer failure rates are based on information which is not available in the MDM and, hence, should not be in the scope of MDM.	The provisions of the RfP shall prevail.
164.	Volume-II Clause 3.6.13.3 (Meter Data Management System (MDMS) - Additional Features - Utility User Interface)	User interface for utility shall have ability for at least the following functionality: a. Compare total energy costs on one rate schedule vs. one or many alternative rates. b. Enable the user to see how different options within a rate affect costs.....	Both these points are related to billing system and are not applicable for MDM. Hence, the same may be deleted.	The provisions of the RfP shall prevail.
165.	Volume-II Clause 3.6.14.3	MDM integration with other systems shall include but not be limited to the following:	Multiple applications might have been implemented in WESCO over a period of time. Please consider consolidating the aged applications into proven	The AMI data collection software is to be provided by the SGIA.

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
	(Meter Data Management System (MDMS) - Integration with other Systems)	a. Utility Administration b. HES for data exchange with AMI solutions c. Billing and collection system like Base Computing System (BCS) d. Existing other Data Collection Systems e. Support of interface with HHU or manual reading system etc. f. Consumer Portal g. Existing AMR system with data exchange format. h. SAP & GIS system.	COTS type of applications that will provide CIS, MBC, and MDM in one application like Customer to Meter Solution.	
166.	Volume-II Clause 3.6.14.5 (Meter Data Management System (MDMS) - Integration with other Systems)	Contractor should provide suitable number of HHUs to read and update the data in MDM to meet contingency requirement in case of communication failure between meter and HES/MDM	Based upon the AMI Rollout experience in India and across the world, the probability of communication failure between meters and HES will be the least. Accordingly, it is requested remove this requirement to save investment and reduce cost of the project.	The requirement of HHUs has been specified for meeting contingency requirements in case of communication failure between the meter and HES/ MDM
167.	Volume-II Clause 3.8.10 (Cloud Service Provider (CSP) Requirements - Backup Services)	General	Please specify if WESCO has some specific expectations regarding retention period of backups created.	CSP must provide backup and restore management as per policy & procedures for backup and restore, including performance of daily, weekly, monthly, quarterly and annual backup functions (full volume and incremental) for data and software maintained on the servers and storage

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
				systems.
168.	Volume-II Clause 3.9.8(m) (GIS Implementation - Detailed Scope of Work)	SGIA will have to do GPS survey for incremental changes in Network assets	Periodicity of GPS survey should be specified. Accordingly, the clause may be amended as per the following: <i>“SGIA will have to do GPS survey for incremental changes in Network assets once in three years after the start of the FMS period”</i>	Please refer Amendment No.2 to RfP
169.	Volume-II Clause 4.4 (S.No.12) (Service Level Agreements)	General	Please amend the SLA as per Annex-1	The provisions of the RfP shall prevail.
170.	Volume-II Clause 4.4 (S.No.12) (Service Level Agreements - Remotely altering settings in meter/ firmware upgrade with acknowledgement/ response for selected meters - Remotely altering settings in meter)	<ul style="list-style-type: none"> Action performed at 99% of meters within 30 minutes; and Action performed at 99.9% of meters within 1 hour 	<p>Remote altering settings in meter are achievable for a group of 10% of installed meters. However, remote firmware upgrade depends on size of firmware image which varies with meter type, works on multicasting principle. HES always tries to upgrade the firmware during low traffic of the day, hence, for firmware upgrade it is advisable to follow the CEA guidelines which is globally accepted and implemented across Indian Utilities.</p> <p>As per CEA guidelines the SLA</p> <ul style="list-style-type: none"> Action performed at 99% of meters within 24 hours; Action performed at 99.9% of meters within 36 hours. <p>Please amend the clause as per the above</p>	<p>This SLA parameter is as per the New Model SBDs issued by NSGM.</p> <p>The provisions of the RfP shall prevail.</p>
171.	Volume-II Clause 6.2 (System Hardware Requirements - Hardware)	General	Please confirm that specific requirements in this section refer to Smart Grid Control Room Infrastructure and not for hosting on cloud.	The understanding of the bidder is correct.

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
	Configuration)			
172.	Volume-II Clause 9.3 (Maintenance - Maintenance Support)	Period of maintenance support shall be eight (8) years from Operational Acceptance by WESCO. The period of maintenance support shall include five (5) years Warranty (Defect Liability) period commencing from Operational Acceptance and eight (8) years thereafter. During above period, commencing from Site Acceptance, support for operation of entire system is under scope of contractor.....	Please confirm that for last 3 year no product warranty is required and any defect in the product will be addressed on additional cost	Please refer Amendment No.2 to RfP
173.	Volume-II Clause 9.13.2 (Availability and FMS Charges - Payment of FMS Charges - For Data Performance - Scheduled daily meter readings (as per IS 16444/15959))	Daily collection of the previous day's interval energy data and total accumulated energy <ul style="list-style-type: none"> • From 95% of meters within 8 hours after midnight; and • From 99.5% of meters within 24 hours after midnight. Average availability for the month will be computed 	The clause may be amended as per the following: <i>"Daily collection of the previous day's interval energy data and total accumulated energy</i> <ul style="list-style-type: none"> • From 95% of meters within 8 24 hours after midnight; and • From 99.5% 98% of meters within 24 48 hours after midnight. Average availability for the month will be computed" 	The provisions of the RfP shall prevail.
174.	Volume-II Annexure A (A2) (Whole Current A.C. Single Phase Two Wire Smart Energy Meter Of Accuracy Class 1.0 (with/ without net-metering)	Meter shall have ability to communicate with DCU/Access Point/HES on any one of the technologies mentioned in IS16444 in a secure manner, as per site conditions and as per design requirement of contractor. In case of GPRS/3G/4G based meter, meter shall accommodate SIM card of any	In the RFP, two communication technology has been defined one is with RF and other is GPRS/3G/4G based. Please confirm the required communication technology.	Please refer Volume-II, Clause 1.4.1(v)

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
	- Communication)	service provider. In case of Plug in type communication module, meter shall log communication module removal /non responsive event with snapshot.		
175.	Volume-II Annexure A (A3) (Whole Current A.C. Single Phase Two Wire Smart Energy Meter Of Accuracy Class 1.0 (with/ without net-metering) - Other Specifications - Real Time Clock (RTC))	As per IS 16444/ IS 15884 The clock day/ date setting and synchronization shall only be possible through password/ Key code command from one of the following: <ul style="list-style-type: none"> • From remote server through suitable communication network. • Hand Held Unit (HHU) or Meter testing work bench and this shall need password enabling for meter; The methodology for the synchronization would be as per requirement of Utility	RTC sync up is system requirement. All server, collector, router and meter should have NTP sync up and for that HES will monitor the RTC of each components and RTC sync-up would be done by HES. Hence, due to security reasons, manual RTC sync should not be required as it can be done automatically by HES itself	The provisions of the RfP shall prevail.
176.	Volume-II Annexure A (A3) (Whole Current A.C. Single Phase Two Wire Smart Energy Meter Of Accuracy Class 1.0 (with/ without net-metering) - Other Specifications – Data Display Facility (Manual/ Automatic))	... These parameters should be displayed on the LCD/ LED continuously for a period of 15 seconds on Auto scroll. In case of power failure, the meter should display above parameters with push button....	In case of power-off, meter will display push button display when push button is pressed and after that 1 complete cycle of auto mode display. Please accept the same.	The provisions of the RfP shall prevail.

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
177.	Volume-II Annexure B (B3) (Whole Current A.C. Three Phase Four Wire Smart Energy Meter Of Accuracy Class 1.0 (with/ without net-metering) - Other Specifications - Real Time Clock (RTC))	As per IS 16444/ IS 15884 The clock day/ date setting and synchronization shall only be possible through password/ Key code command from one of the following: <ul style="list-style-type: none"> From remote server through suitable communication network. Hand Held Unit (HHU) or Meter testing work bench and this shall need password enabling for meter; The methodology for the synchronization would be as per requirement of Utility	RTC sync up is system requirement. All server, collector, router and meter should have NTP sync up and for that HES will monitor the RTC of each components and RTC sync-up would be done by HES. Hence, due to security reasons, manual RTC sync should not be required as it can be done automatically by HES itself	The provisions of the RfP shall prevail.
178.	Volume-II Annexure B (B3) (Whole Current A.C. Three Phase Four Wire Smart Energy Meter Of Accuracy Class 1.0 (with/ without net-metering) - Other Specifications – Data Display Facility (Manual/ Automatic))	... These parameters should be displayed on the LCD/ LED continuously for a period of 15 seconds on Auto scroll. In case of power failure, the meter should display above parameters with push button....	In case of power-off, meter will display push button display when push button is pressed and after that 1 complete cycle of auto mode display. Please accept the same.	The provisions of the RfP shall prevail.
179.	Volume-II Annexure A (A3) (Whole Current A.C. Single Phase Two	The meter shall continue recording energy under any tamper condition and would log the event and send alarm at Head End System after detection of the defined theft	Please accept the following features: a. Neutral Missing Tamper - In this condition, relay gets disconnected at power down and it makes the meter immune to this tamper. b. Neutral Disturbance - Meter has relay	The same would be as per prevalent IS.

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S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
	Wire Smart Energy Meter Of Accuracy Class 1.0 (with/without net-metering) - Other Specifications - Anti-Tamper Features)	features as per IS 15959 Part 2.....	disconnect feature at the time of injection of any spurious signal in neutral of the meter. The meter functionality does not get affected because no load will be consumed. c. Current Reversal Tamper - Meter has relay disconnect feature at the time of input line and output load are interchanged. The meter functionality does not get affected because no load be will consumed.	
180.	Volume-II Annexure B (B3) (Whole Current A.C. Three Phase Four Wire Smart Energy Meter Of Accuracy Class 1.0 (with/without net-metering) - Other Specifications - First Breath(power on) and Last gasp (power off) condition detection and communication to HES)	As per IS 16444	Please accept that the same would be provided as per IS on the FIFO basis.	The same would be as per prevalent IS.
181.	Volume-II Annexure B (B3) (Whole Current A.C. Three Phase Four Wire Smart Energy Meter Of Accuracy	... Optional test as per requirement of utility: The Meter shall be immune under external magnetic influences as per CBIP 325. Meter shall be tested for high voltage discharge (Spark) up to 35 KV as per CBIP 325	We shall provide it as per CBIP 325	The provisions of the RfP shall prevail.

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
	Class 1.0 (with/without net-metering) - Other Specifications - Anti-Tamper Features)			
182.	Volume-II Annexure C (C1) (Three phase CT operated alternating current smart meter Of Accuracy Class 0.5S (with/ without net-metering) - General Standards Applicable for Meter)	... For CT-PT operated meter (HT Meters at Feeder Level – 33 KV and 11 KV) Reference Voltage - /110V phase to phase Current Rating - /1A and /5A Meters shall be programmable in primary values at the time of installation	CT & PT Ratios are Factory Programmable only and site Programming for the same is not possible as OBIS Code for the same is not available in Table 13 (Programmable Parameters) of IS 15959 (Part 3). Accordingly, it is requested to remove this Programming requirement from the specification.	The same would be as per prevalent IS.
183.	Volume-II Annexure C (C1) (Three phase CT operated alternating current smart meter Of Accuracy Class 0.5S (with/ without net-metering) - General Standards Applicable for Meter) All CT operated meters have to be supplied by the Bidder. CT for meters at consumer end as well as for HT meters would be provided by WESCO. However, CT for meters at DT level is to be supplied by the Bidder. The CT ratios for meters at DT level have been mentioned in Annexure-17 to the RfP. Further, the Bidder has to supply boxes for all types of CT operated meters of polycarbonate material. For HT Meters, the specifications of Meter Box for Three Phase Meters may be used. For LT CT meters, the Bidder has to	Please provide clarity on the Box and CT requirements as per scope of supply.	The clause is self-explanatory

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S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
		supply Meter Box of polycarbonate material as per its own specifications ensuring proper communication from the meters. However, the specifications of the boxes have to be submitted to WESCO after award of the project to the selected Bidder and before supply of meters.		
184.	Volume-II	Minimum 7 digit backlit white light LCD Display of minimum 10 mm height with legends to identify parameters on meter. For testing purpose, high resolution display having at least 5 decimals digits shall be provided.	We understand that the Green backlight shall also be acceptable, as it fulfils the RFP requirement.	Can be accepted.
185.	Annexure C (C3) (Three phase CT operated alternating current smart meter Of Accuracy Class 0.5S (with/ without net-metering) - Other Specifications - Meter Display)		Please amend to include Green/ Amber backlight as well.	
186.	Volume-II Annexure C (C3) (Three phase CT operated alternating current smart meter Of Accuracy Class 0.5S (with/ without net-metering) - Other Specifications - Time of Use (In case of net-meter both export & import parameters to be	Should support at least eight (8) Time of day tariff registers with programmable time zones and storage of billing parameters (kW, kVA, kWh & kVAh)	As per IS 15959 Part 2 & 3, TOD parameters are defined for import energy and import demand only. The same should be done for Volume-II, Annexure F(F3) Data Requirement Sheet - Three Phase CT Operated Smart Meter - Time of Use (In case of net-meter both export & import parameters to be measured)) Please confirm.	The same would be as per prevalent IS.

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
	measured))			
187.	Volume-II Annexure C (C3) (Three phase CT operated alternating current smart meter Of Accuracy Class 0.5S (with/ without net-metering) - Other Specifications - Power Quality Information)	Logging of quality of supply events like power on/off, over/under voltage, over current (50 events) Setting of Under/ Over Voltage and Over current shall be configurable. OBIS codes provided by the Bidder will be accepted.	Please accept that event logging shall be provided as per the compartments defined in IS 15959 (Part 3) i.e. all the Voltage related Events shall be provided in one compartment and Power On / Off Events shall be provided in a separate compartment.	The same would be as per prevalent IS.
188.	Volume-II Annexure C (C3) (Three phase CT operated alternating current smart meter Of Accuracy Class 0.5S (with/ without net-metering) - Other Specifications – Maximum Demand)	Should have Maximum Demand registers kW and kVA with integration period 30/15 minutes. Resets should be auto-monthly or through communication command.	Please provide the default integration period for the same.	The same would be as per prevalent IS.
189.	Volume-II Annexure C (C3)	35 (Power ON) days data to be recorded with 15 minutes integration period with date & time stamping for Active Energy (kWh), Apparent Energy (kVAh), Reactive Energy (kVARh), Average Voltage, Average Current, Average Power Factor and Average Demand in kW & kVA. In addition cumulative mid	Please accept that Average Power factor, Average demand kW & kVA are derived parameters and shall be available at BCS end.	The same would be as per prevalent IS.
190.	(Three phase CT operated alternating current smart meter Of Accuracy Class 0.5S (with/ without net-metering) - Other		As Load survey is average value of Interval period as per DLMS, average values for block period is captured as per IS15959 part3. Please remove the phrase "instantaneous" as it is misleading. Please also amend the integration period to 30 mins to avoid unnecessary burden on the network due to	The same would be as per prevalent IS.

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
	Specifications – Load Survey/Interval Data)	night kWh, kVAh, kVARh (lag/lead) (00.00 Hrs) with date & time stamp shall also be recorded for 35 (Power ON) days. The register shall automatically rollover the data after 35 days based on first in first out (FIFO). Instantaneous Voltage, Instantaneous Current and Instantaneous Power Factor have to read for every 15 minutes as part of Interval data.	load survey data traffic. Further, average demand KW & KVA are derived parameters that can be calculated at MDMS side. This is also not part of IS15959. The above would also be applicable for Volume-II, Annexure F(F3) Data Requirement Sheet - Three Phase CT Operated Smart Meter - Load Survey/Interval Data) Please confirm.	
191.	Volume-II Annexure C (C3) (Three phase CT operated alternating current smart meter Of Accuracy Class 0.5S (with/ without net-metering) - Other Specifications – Measuring Elements)	Meter should have four measuring elements - three in phases and one in neutral path for sensing	Please accept the following: a. For LTCT Meters, Neutral CT shall be provided which is only for Tamper Event logging purpose. b. HT Meter shall be provided with 3 CTs since Neutral Current Measurement is not applicable for HT Meters.	The same would be as per prevalent IS.
192.	Volume-II Annexure C (C3) (Three phase CT operated alternating current smart meter Of Accuracy Class 0.5S (with/ without net-metering) - Other Specifications – Real Time Clock (RTC))	Meter shall have RTC with 20 years calendar programmed in the memory and provision for time synchronization, The maximum drift shall not exceed +/- 300 Seconds per year. The clock day/date setting and synchronization shall only be possible through password/Key code command from one of the following: • Hand Held Unit (HHU) or Meter	RTC sync up is system requirement. All server, collector, router and meter should have NTP sync up and for that HES will monitor the RTC of each components and RTC sync-up would be done by HES. Hence, due to security reasons, manual RTC sync should not be required as it can be done automatically by HES itself	The provisions of the RfP shall prevail.

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
		testing work bench and this shall need password enabling for meter • From remote server through suitable communication network. Contractor shall submit the methodology for the synchronization of RTC.		
193.	Volume-II Annexure C (C3) (Three phase CT operated alternating current smart meter Of Accuracy Class 0.5S (with/ without net-metering) - Other Specifications – Battery Backup)	Meter shall be supplied with separate battery backup for RTC and for display in case of power failure. The battery shall have a guaranteed life of 10 years from the date of installation of meters.	Since battery is an integral part of the meter, guarantee life should be same as that of meter.	The same would be as per prevalent IS.
194.	Volume-II Annexure C (C3) (Three phase CT operated alternating current smart meter Of Accuracy Class 0.5S (with/ without net-metering) - Other Specifications – Alarm)	Alarm for power on/off (on restoration of power), Under Voltage, Over Voltage, Over Current, malfunctioning of events shall be generated and communicated to the HES immediately	As per IS 15959 part 2 & part 3, diagnostic are not part of any event profile. Accordingly, the "malfunctioning of events" may be deleted. The same may also be done for Volume-II, Annexure F(F3) Data Requirement Sheet - Three Phase CT Operated Smart Meter - Alarm)	The same would be as per prevalent IS.
195.	Volume-II Annexure C (C3) (Three phase CT Meter shall be tested for high voltage discharge (Spark) up to 35 KV as per CBIP 325	We shall provide it as per CBIP 325	The provisions of the RfP shall prevail.

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S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
	operated alternating current smart meter Of Accuracy Class 0.5S (with/ without net-metering) - Other Specifications – Anti-Tamper Feature)			
196.	Volume-II Annexure F(F3) Data Requirement Sheet - Three Phase CT Operated Smart Meter - Power Quality Information)	Logging of quality of supply events like power on/off, over/under voltage, over current (50 events) Setting of Under/ Over Voltage and Over Current shall be configurable. OBIS codes provided by the Bidder shall be accepted.	Please accept that event logging shall be provided as per the compartments defined in IS 15959 (Part 3) i.e. all the Voltage related Events shall be provided in one compartment and Power On / Off Events shall be provided in a separate compartment.	The same would be as per prevalent IS.
197.	Volume-II Annexure F(F3) Data Requirement Sheet - Three Phase CT Operated Smart Meter - Maximum Demand)	Should have Maximum Demand registers kW and kVA with integration period 30/15 minutes. Resets should be auto-monthly or through communication command.	Please provide the default integration period for the same.	The same would be as per prevalent IS.
198.	Volume-II Annexure F(F3) Data Requirement Sheet - Three Phase CT Operated Smart Meter - Load Survey/Interval Data)	35 (Power ON) days data to be recorded with 15 minutes integration period with date & time stamping for Active Energy (kWh), Apparent Energy (kVAh), Reactive Energy (kVARh), Average Voltage, Average Current, Average Power Factor and Average Demand in kW & kVA....	Please accept that Average Power factor, Average demand kW & kVA are derived parameters and shall be available at BCS end.	The same would be as per prevalent IS.
199.	Volume-II	Meter should have four measuring	Please accept the following:	The same would be as

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S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
	Annexure F(F3) Data Requirement Sheet - Three Phase CT Operated Smart Meter - Measuring Elements)	elements - three in phases and one in neutral path.	a. For LTCT Meters, Neutral CT shall be provided which is only for Tamper Event logging purpose. b. HT Meter shall be provided with 3 CTs since Neutral Current Measurement is not applicable for HT Meters.	per prevalent IS.
200.	Volume-II Annexure H (Display Parameters for 3-Phase CT Operated Smart Meters)	Mode 1(Auto), Mode 1(Push), Mode 2 (Push), HR Mode	We will provide Mode 1(AUTO), MODE 2(PUSH) and HR mode. Please accept the same.	The same would be as per prevalent IS.
201.	Volume-II Annexure H (Display Parameters for 3-Phase CT Operated Smart Meters – Mode 1)	General	Auto Scroll mode and manual push mode scroll parameters are not matching in sequence.	The same would be as per prevalent IS.
202.		... Rising demand in KW with elapse time....	Please remove this requirement as it is not applicable in IS15959	The same would be as per prevalent IS.
203.		... 24hrs. total active energy (fundamental + harmonics) 24hrs. total reactive energy 24hrs. apparent energy derived from Vectorial summation of total (fund+ Harm.) active energy and reactive (lag only) energy...	The Parameters are understood to be Total cumulative values instead of last 24 hours values. Please confirm. Please confirm the same for Mode 2 as well.	The same would be as per prevalent IS.
204.		.... Voltage failure count - phase wise Current failure count - phase wise Voltage unbalance Count Current unbalance Count Current reversal count- phase wise Magnet tamper count.....	In smart meters all data is available at MDMS. Hence, instead of individual tamper counts, only total tamper count should be sufficient on meter display. The same should be done for Mode 2 as well.	The same would be as per prevalent IS.
205.	Volume-II	....MD Kvar after last billing – (24	Please remove this requirement as it is not	The same would be as

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
	Annexure H (Display Parameters for 3-Phase CT Operated Smart Meters – Mode 2 - Parameters of this mode should display manually up & down scrolling using push button under Mode-2)	Hrs).... Cumm KVARH-lag for (Zone-1 upto 8)	applicable in IS15959	per prevalent IS.
206.	Volume-II Annexure I (5.4) (Technical Specifications of Meter Box - General Constructions)	The box cover shall be fixed to the base through two number hinges (approx length 30 - 60 mm)....	Please accept 2 Hinges and 18 mm length.	The provisions of the RfP shall prevail.
207.	Volume-II Annexure I (5.6) (Technical Specifications of Meter Box - Technical Specifications for Polycarbonate Meter Box for Single Phase Meter - General Constructions)	For fixing the box to flat wall or wooden board 4Nos. holes (2Nos.key holes at top) of minimum 6 mm dia. shall be provided at the four corners of the meter box. For fixing of Box on flat wall, 4 Nos. 5mm diameter 40mm long pan head self- tapping screws and washers shall be provided by the supplier with every Box. 4 Nos. plastic fixing plugs of 50mm length suitable for self-tapping screws shall also be provided (Fixing clamp and accessories for pole mounting/ wall mounting, shall be in the scope of	The clause may be modified as per the following: <i>“For fixing the box to flat wall or wooden board 4Nos. holes (2Nos.key holes at top) of minimum 6 mm dia. shall be provided at the four corners of the meter box. For fixing of Box on flat wall, 4 Nos. 5mm 4.6 to 4.8mm diameter 40mm long pan head self- tapping screws and washers shall be provided by the supplier with every Box. 4 Nos. plastic fixing plugs of 50mm length suitable for self-tapping screws shall also be provided (Fixing clamp and accessories for pole mounting/ wall mounting, shall be in the scope of Agency, who shall be installing the meters in the field based on the actual site conditions & pole sizes. These are not to be supplied with the boxes).”</i>	The provisions of the RfP shall prevail.

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S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
		Agency, who shall be installing the meters in the field based on the actual site conditions & pole sizes. These are not to be supplied with the boxes)		
208.	Volume-II	The following should be suitably marked /printed on the meter box indelibly. "WESCO" should be written on the top of Meter box Manufacturer Name: Year of manufacturing: WESCO's Logo: Electrical Danger mark as per IE rules (Red in Colour): P.O. No. :	We shall emboss danger mark on top cover with transparent colour. Please accept the same.	The provisions of the RfP shall prevail.
209.	Annexure I (6) (Technical Specifications of Meter Box - Technical Specifications for Polycarbonate Meter Box for Single Phase Meter - Name Plate And Marking)		Please accept that all details would be provided with Engraved/ Embossed on the Meter Box Cover, the Danger mark shall also be Engraved/ Embossed on the Transparent Meter Box Cover and shall be of same colour as of Box Cover.	
210.	Volume-II Annexure I (7.1)(10) (Technical Specifications of Meter Box - Technical Specifications for Polycarbonate Meter Box for Single Phase Meter - Type Test – UV Light Exposure (UL-746C))	General	Please also accept the UV ageing Test for 200 hrs (ASTM D154).	The provisions of the RfP shall prevail.
211.	Volume-II Annexure I (7.3)(10)	<ul style="list-style-type: none"> Marking Visual Examination and Dimensions Protection against electric shock 	Except "Marking & Visual Examination and Dimensions" all tests are covered under type test and should not be part of acceptance test.	The provisions of the RfP shall prevail.

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
	(Technical Specifications of Meter Box - Technical Specifications for Polycarbonate Meter Box for Single Phase Meter - Type Test – Acceptance Test)	<ul style="list-style-type: none"> • Mechanical strength/Impact Resistance Test • Resistance to Abnormal heat and fire/ Glow wire test • Flammability test 		
212.	Volume-II Annexure I (9)(6) (Technical Specifications of Meter Box - Technical Specifications for Polycarbonate Meter Box for Single Phase Meter - Guaranteed Technical Particulars)	Thickness of box Base: 3mm Cover: 2.5 mm	In clause Annexure I (5.4), it has been mentioned that thickness of the box shall not be less than 3mm on the load bearing side and other sides, door and roof shall not be less than 2.5 mm. This is contrary to clause Annexure I (9)(6). Please clarify	Please refer Amendment No.2 to RfP
213.	Volume-II Annexure I (5.1) (Technical Specifications of Meter Box - Technical Specifications for Polycarbonate Meter Box for Three Phase Meter - General	The meter box shall be weather proof, tamper proof and shall be made of Injection moulded polycarbonate material with self-extinguishing, UV stabilized, recyclable and Anti oxidation properties. The box shall be of adequate strength, unbreakable and shall be made in two pieces (base and cover).The base shall be dark grey color whereas the cover shall be completely transparent. The meter Box shall have roof	The requirement for top and side clearance may please be amended to min 20 mm.	The provisions of the RfP shall prevail.

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
	Constructions)	<p>tapering down to both the sides for easy flow of rainwater. The thickness of the box shall not be less than 3mm on the load bearing side and other sides, door and roof shall not be less than 2.5 mm. The box shall be designed in such a way that there should be the following clearances between the meter and the Meter box:</p> <ul style="list-style-type: none"> Between Sides of the meter body and meter box – 30 mm minimum (excluding the flanges on the meter body for sealing screws.) Between the lower edge of the terminal block and the Meter box – 70 mm Minimum Between the back of the meter and the meter box base – 10 mm Minimum Between the top of the meter and the meter box cover – 30 mm Minimum <p>The meter box shall have a taper roof for easy flow of rain water and shall have degree of protection IP 55 for affording protection against dust & water.</p>		
214.	Volume-II	The following should be suitably marked /printed on the meter box indelibly.	We shall emboss danger mark on top cover with transparent colour. Please accept the same.	The provisions of the RfP shall prevail.
215.	Annexure I (6) (Technical Specifications of Meter Box - Technical Specifications for	<p>"WESCO" should be written on the of Meter box Manufacturer Name: Year of manufacturing: WESCO's Logo: Electrical Danger mark as per IE ru</p>	Please accept that all details would be provided with Engraved/ Embossed on the Meter Box Cover, the Danger mark shall also be Engraved/ Embossed on the Transparent Meter Box Cover and shall be of same colour as of Box Cover.	

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
	Polycarbonate Meter Box for Three Phase Meter - Name Plate And Marking)	(Red in Colour): P.O. No. :		
216.	Volume-II Annexure I (7.1)(10) (Technical Specifications of Meter Box - Technical Specifications for Polycarbonate Meter Box for Three Phase Meter - Type Test – UV Light Exposure (UL-746C))	General	Please also accept the UV ageing Test for 200 hrs (ASTM D154).	The provisions of the RfP shall prevail.
217.	Volume-II Annexure I (7.3)(10) (Technical Specifications of Meter Box - Technical Specifications for Polycarbonate Meter Box for Three Phase Meter - Type Test – Acceptance Test)	<ul style="list-style-type: none"> • Marking • Visual Examination and Dimensions • Protection against electric shock • Mechanical strength/Impact Resistance Test • Resistance to Abnormal heat and fire/ Glow wire test • Flammability test 	Except “Marking & Visual Examination and Dimensions” all tests are covered under type test and should not be part of acceptance test.	The provisions of the RfP shall prevail.
218.	Volume-II Annexure I (9)(6)	Thickness of box Base: 3mm Cover: 2.5 mm	In clause Annexure I (5.4), it has been mentioned that thickness of the box shall not be less than 3mm on the load bearing side and other sides, door and	Please refer Amendment No.2 to RfP

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
	(Technical Specifications of Meter Box - Technical Specifications for Polycarbonate Meter Box for Three Phase Meter - Guaranteed Technical Particulars)		roof shall not be less than 2.5 mm. This is contrary to clause Annexure I (9)(6). Please clarify	
219.	Volume-II Annexure I (Technical Specifications of Meter Box for HT Meters)	For HT Meters, the specifications of Meter Box for Three Phase Meters may be used.	Please confirm that Whole Current Meter Box is acceptable to house HT Meters.	As mentioned in this clause, for HT Meters, the specifications of <u>Meter Box for Three Phase Meters</u> may be used. Thickness of box would be as per Amendment No.2 to RfP
220.	Volume-II Annexure I (Technical Specifications of Meter Box for LT CT Meters)	For LT CT meters, the Bidder has to supply Meter Box of polycarbonate material as per its own specifications ensuring proper communication from the meters. However, the specifications of the boxes have to be submitted to WESCO after award of the project to the selected Bidder and before supply of meters	Please confirm that Whole Current Meter Box is acceptable to house Three Phase LT CT Meter.	As mentioned in this clause, for LT CT meters, the Bidder has to supply <u>Meter Box of polycarbonate material as per its own specifications</u> ensuring proper communication from the meters. However, the <u>specifications of the boxes have to be submitted to WESCO</u> after award of the project to the selected Bidder

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
				and before supply of meters. Thickness of box would be as per Amendment No.2 to RfP
221.	Volume-II Annexure K (General requirement for common pluggable communication module for Smart Meters)	General	We understand that these requirements are only recommended and not mandatory requirement as every meter manufacturer has its own mechanical design & location to plug in the module. The specs given here are meant for some specific meter make and it is requested to make requirement optional. Further, the RFP is primarily driven by SLA which shall be adhered to by the SGIA and, accordingly, these specific requirements of placement of Communication Module are not required.	In order to enable different communication modules to be used in the same meter, it is necessary to use a universal interface and a particular size irrespective of the choice of communication technology that defines the dimensions of the communication slot as well as physical placement and location of connectors.
222.		...it is necessary to use a universal interface and a particular size irrespective of the choice of communication technology that defines the dimensions of the communication slot as well as physical placement and location of connectors...	We have a specific interface and size as per our meter. Please accept the same.	Volume-II, Annexure K is as per New Model SBDs issued by NSGM which gives recommendations <u>just as an example</u> to assure interoperability and complying with the provisions of IS 16444 and IS 15959. Accordingly, the above recommendations are optional for Bidders. However, the Bidder,
223.	Volume-II Annexure K (Part I(1)) (General requirement for common pluggable communication module for Smart Meters - Recommended	In order to improve the Radio Performances of any of the wireless technologies encompassing but not limited to Cellular, RF and / or RF mesh, it is recommended to place the communication module anywhere on the accessible part of the meter. This will also enable an easy approach to improve antennae performances	We have internal antenna provision only. Please accept the same.	

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
	Module Placement location)			while using their own designs, has to ensure interoperability of Smart Meters with different communication modules.
224.	Volume-II Annexure K (Part I(3)) (General requirement for common pluggable communication module for Smart Meters - Recommended Module Placement location)	The Module shall be hot swappable and shall fit snugly inside the meter box, so that the same IP class of the meter is maintained	The clause may be modified as per the following: <i>"The Module shall be hot swappable and shall fit snugly inside top side of the meter box, so that the same IP class of the meter is maintained"</i>	
225.	Volume-II Annexure K (Part I(4)) (General requirement for common pluggable communication module for Smart Meters - Recommended Module Placement location)	A transparent cover may be used for the purpose, a. To have a sealing arrangement with the meter body as well as b. For easy viewing of LED indicators and antenna assembly without having to open the cover.	Please accept the following: a. Non-transparent cover. b. LED indicators at front body of module cover. c. Antenna inside the module cover which will be visible after opening the module and cap	The provisions of the RfP shall prevail.
226.	Volume-II Annexure K (Part II) (General requirement for common pluggable communication	In the event of PLC communication being chosen as the only or one of the choices, the following arrangement of connector and pinouts need to be provisioned on the communication module	In our module no provision of PLC communication and connector is there. Please accept the same.	Accepted

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
	module for Smart Meters - AC power interface)			
227.	Volume-II Annexure K (Part II) (General requirement for common pluggable communication module for Smart Meters - Communication interface)	The meter shall have a slot of an appropriate size to allow for the pluggable communication module (such as but not limited to NAN /WAN, dual mode RF, Dual Technology, cellular etc.) to be fit in to the meter. The meter shall provide a 14-pins Female socket connector (2*7pin, 2.54mm). The socket shall be selected and positioned to ensure that the male pins on the communication module can connect reliably and easily connect with the female contactors on the meter	Please accept that the meter shall provide a 12-pins Female socket connector (2*6pin, 2.54mm). The socket position will be as per our module.	The provisions of the RfP shall prevail.
228.	Volume-II Annexure K (Part II) (General requirement for common pluggable communication module for Smart Meters – Female Connector)	Connector Dimensions required (14 Pins) Length 18.18mm Width 5mm Height 8.5mm Pitch 2.54mm Soldering pin height 3.2mm	Please accept the following: Connector Dimensions (12 Pins) Length 15.64mm Width 5mm Height 7.1mm Pitch 2.54mm	The provisions of the RfP shall prevail.
229.	Volume-II Annexure K (Part III(A)) (General requirement for	General	Please accept Module as per Meter Manufacturer design as every Meter Manufacturer has different design.	The provisions of the RfP shall prevail.

Clarifications to Queries against the Request for Proposal (RfP) for Selection of Smart Grid Implementation Agency (SGIA) for implementation of Smart Grid in Rourkela Smart City, Odisha

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
	common pluggable communication module for Smart Meters – Module 3-D views (For Representational Purpose Only))			
230.	Volume-II Annexure K (Part III(B)) (General requirement for common pluggable communication module for Smart Meters – Module Dimensions)	Overall view of the module: Length 119.6 width 35 Height 61	Please accept the following: Length 122.3 \pm 2mm width 55 \pm 2mm Height 55 \pm 2mm	The provisions of the RfP shall prevail.
231.	Volume-II Annexure K (Part III(B)) (General requirement for common pluggable communication module for Smart Meters – Module Dimensions - Overall view of the module's PCBA)	Length 114mm Width 55.95	Please accept the following: Length 78 Minimum Width 50 Minimum	The provisions of the RfP shall prevail.
232.	General	-	Please confirm if there is any existing data that needs to be migrated to cloud site. If yes, please share data size with format.	There would be some existing data that may be required to be migrated to cloud. The same would

Clarifications to Queries against the Request for Proposal (RfP) for Selection of Smart Grid Implementation Agency (SGIA) for implementation of Smart Grid in Rourkela Smart City, Odisha

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
				be finalized by the selected SGIA in consultation with WESCO.
233.			Please confirm if bidder needs to establish any connectivity between cloud site (DC, DR on cloud) and Smart Grid Control Room.	Bidder is required to provide cloud services and undertake all actions to comply with the SLA requirements during the entire contract period
234.	General	-	-	In case of any discrepancy or any issue related to interpretation of any technical aspects with respect to Smart Meters, the requirements as per relevant IS will prevail

Clarifications to Queries against the Request for Proposal (RfP) for Selection of Smart Grid Implementation Agency (SGIA) for implementation of Smart Grid in Rourkela Smart City, Odisha

Annex-I

Data Type	Bidder's recommendation	Performance Requirement	Bidder's recommendation
1. Scheduled Interval data readings at a fixed periodicity during the day as decided by utility			
Periodic collection of the 15/30 minute interval load profile data after every 15/30/60/120 minutes	Periodic collection of the 30 minute interval load profile data daily	From 95% of meters within 8 hours	From 95% of meters within 24 hours
		From 98% of meters within 12 hours	From 98% of meters within 48 hours
2. Scheduled daily meter readings (as per IS 16444/15959)			
Daily collection of the previous day's interval energy data and total accumulated energy		From 98% of meters within 24 hours after midnight	From 95% of meters within 24 hours after midnight
3. Scheduled billing/ load profile data for bill period			
Collection of billing/load profile data for the bill period for entire installed population		Collection of Billing Data for bill period	
		From 99.9% of meters before the next periodic collection is scheduled.	From 99% of meters before the next periodic collection is scheduled.
		One-month block load profile for installed meters	
		From 98% of the meters in 12 hours after the midnight	From 95% of meters within 24 hours
		Billing profile data for installed meters	
	From 98% of the meters in 12 hours after the midnight	From 95% of meters within 24 hours after midnight	
4. On-Demand Remote reads of meters			
Collection of 7 days of interval energy data and the current total accumulated energy from a group of 10% of installed meters	Collection of 7 days of interval energy data and the current total accumulated energy from 1000 nos of installed meters	Action performed within 2 hours	from 95% of meters within 6 hours
Collection of 7 days of interval energy data & current total accumulated energy from a selected individual meter		Action performed within 30 seconds	Action performed within 5 mins
5. Updating of data on consumer portal/ app			
Updating of individual consumer data on portal/ app after receiving the data in MDM		Action performed for active on portal consumers within 5 minutes after receiving the data in MDM	
6. Ping Response with acknowledgement/ response for selected meters			
For a installed meters	For a group of 100 installed meters	Action performed at 99.9% of meters within 1 minute; and	Action performed at 99 % of meters within 1 minute; and
For an individual meter		Action performed within 3 seconds	
7. Remote load control commands for selected meters with acknowledgement/ response for selected meters			
For a group of 10% of installed meters	For a group of 1000 of installed meters	Action performed at 95% of meters within 5 minutes; and	
		Action performed at 99% of meters within 10 Minutes	
For an individual meter		Action performed within 5 seconds	
8. For remote connect/disconnect with acknowledgement/ response for selected meters			
For a group of 10% of installed meters	For a group of 1000 of installed meters	Action performed at 90% of meters within 15 minutes	Action performed at 90% of meters within 2 hours
		Action performed 99.9% of meters within 6 hours.	Action performed 99% of meters within 6 hours.
For an individual meter		Action performed in less than 3 minutes	

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9. Meter loss and restoration of supply			
Receiving of alert for all affected AMI meters		Alert to be received within 3 minutes for 60% of meters	
10. Meter Tamper Alerts			
Receiving of alert for an individual meter		Alert to be received within 3 minutes	
11. Power Quality Alerts			
Receiving of alert for an individual meter		Alert to be received within 5 minutes	
12. Remotely altering settings in meter/ firmware upgrade with acknowledgement/ response for selected meters			
For a group of 10% of installed meters	For a group of 1000 of installed meters	Remotely altering settings in meter	
		· Action performed at 99% of meters within 30 minutes; and	· Action performed at 90% of meters within 2 hours; and
		· Action performed at 99.9% of meters within 1 hour	· Action performed at 99 % of meters within 6 hour
		Firmware upgrade with acknowledgement/ response for selected meters	
		· Action performed at 99% of meters within 1 hour; and	· Action performed at 90% of meters within 48 hour; and
		· Action performed at 99.9%of meters within 2 hours	· Action performed at 95% of meters within 72 hours
13. Remotely read events logs			
For reading the full event log for a group of 10% of installed meters	For a group of 1000 of installed meters	Action performed at 90% of meters within 30 minutes; and	Action performed at 90% of meters within 60 minutes; and
		Action performed at 99% of meters within 1 hour; and	Action performed at 95% of meters within 2 hour; and
		Action performed at 99% of meters within 6 hour; and	Action performed at 99% of meters within 6 hour; and
14. AMI Network (all hardware, software, smart meters, Cloud Infrastructure and field equipment) Uptime		≥99.5% on Monthly basis	
15. Cloud Infrastructure uptime		99%	
16. Recovery Point Objective for AMI MDM and HES system		RPO and RTO requirements shall strictly be as per MEITY Guidelines i.e. RPO should be less than or equal to 2 hours and RTO shall be less than or equal to 4 hours. The key transaction data shall have RPO of 15 minutes.	RPO and RTO requirements shall strictly be as per MEITY Guidelines i.e. RPO should be less than or equal to 2 hours and RTO shall be less than or equal to 4 hours.
17. Recovery Time Objective for AMI MDM and HES System			
18. SLA in respect of Pre-Paid recharge, Pre-Paid meter disconnection, Pre- Paid balance updation etc		To be decided mutually between WESCO and the Contractor after Award of Contract	