

Clarifications 2					Date: 04.01.2019
S.N	Clause & page No	Technical Specifications as per RFP/Amendments issued	Vendor's Queries/ Changes/ Modification Suggested	Comments by RECPDCL	Clarifications/amendment
1	3, Page 2/48	Engineering, design, supply, replacement, commissioning, Integration along with warranty and O&M/FMS for 5 years of Back-end IT infrastructure for 2.0 Lakh scalable upto 20 Lakhs consumers including Unified-HES, upgradation of existing MDMS and all necessary hardware and applications along with interoperability and integration with all existing applications of JKPDD.	1. More clarification and current configurations of existing MDMS and all necessary hardware and all existing applications of JKPDD requires to be defined to understand it better. 2. All given 16 nos. applications requires to integrate or any specific application requires 3. Assurance requires that all existing software/applications are update to date and working fine	The detailed IT Scope is enclosed separately in Amendment 2.	Amendment
2	Page 2/48	The contractor shall also do filed survey on the basis of data/list provided by RECPDCL and prepare the BOQ/BOM and get it approved from RECPDCL	As the work shall be executed on turnkey basis than why additional Survey and BOQ/BOM is asked to prepare and approved by RECPDCL. The same is asked in clause 1), xiii, page 5.48 –Any other material and services mentioned elsewhere in the bid document)	The contractor shall also do filed survey on the basis of data/list provided by RECPDCL and prepare the BOQ/BOM of the RF network and get it approved from RECPDCL.	clarification
3	1), I & ii, Page 4/48	Single Phase and three phase whole current Smart Meter with prepaid functionalities	More elaboration is required to understand Recharge methods & mechanism, prepaid calculation, tariff architecture, relevant parameters for configuration in display etc.	The meters should have functional capability to record export and import of energy to enable prepaid functionality. The meters shall be postpaid by default and converted to prepaid through OTA command. The prepaid calculation etc. shall be carried out at server end and bidder to provide all integration support in this regard.	Amendment
4	1), xi, Page 5/48	Planning, deployment, tuning the communication system including RF and GPRS to meet performance requirements	No tuning mechanism is available for RF and GPRS communication. So pls. delete the clause	All RF network related engineering need to be done by the bidder.	clarification
5	3, Page 5/48	Further, 100% of meters shall be covered through RF Communication network, however considering the hilly terrain area, upto a total of 10% meters may be allowed on GPRS/3G/4G subject to approval from RECPDCL/JKPDD.	We all are well aware about J&K area and conditions. So deployment qty of RF & GPRS should not restrict. It should be selected by bidder to make the project successful for 05 years tenure as desired in bid where the overall project cost shall be considered to award contract.	No Change	clarification
6	4, Page 5/48	The bidder shall supply and commission one HES that shall have the capability of supporting APIs from minimum 5 meter manufacturers thereby allowing data exchange with minimum 5 meter manufacturers	Meter are supplied as per IS16444 where communication complies to IS15959 part-2 that is open protocol. So no need of API requires to integrate. So pls. delete the clause	No Change	clarification
7	13, Page 6/48	The bidder shall confirm that, the bandwidth made available by the Ministry of communications for this purpose, shall not in any way limit or hamper the performance of AMI.	It shall be confirmed as per present bandwidth allotted by MoC. If it is changed/modified in future, the techno-commercial impact of new deployment shall be born by Utility JKPDD	Accepted	clarification
8	28, Page 7/48	Prepaid Functionality: All the Smart meters should be ready to be used as any type of configuration i.e. Prepaid, Postpaid & Net Metering as mentioned in relevant standard.	Clarification required for switching mechanism from Prepaid/Post paid (Uni-directional metering) to Net metering (Bi-directional Metering) conversion to take care few types of tamper conditions	Factory setting would be postpaid for all meters by default which may be changed to Pre-paid/net metering based on the requirements of JKPDD. Bidder shall be required to configure the change through remote communication.	clarification
9	38, Page 8/48	JKPDD shall engage and facilitates GPRS/3G/4G Communication provider separately through tendering process and shall be paying for the Sim, wherever installed (i.e. for DCU backhaul communication and GPRS/3G/4G enabled meters).	Clarify how network uptime SLA can be ensured by bidder, when 1. JKPDD is engage and facilitates GPRS/3G/4G Communication provider separately through tendering process and paying for the SIM. 2. If by any reason, SIM payments could not be made within due date and SIM services barred by the internet service provider	SLA shall be measured as per CEA guidelines for uptime duration of SIMs. However, the bidder has to regularly monitor and inform JKPDD	Amendment
10	A, Page 17/48	Single phase two Wire, 5-60 A static smart meters of accuracy class 1.0	Single phase two Wire, 5-30A or 10-60A static smart meters of accuracy class 1.0	Single phase two Wire, 5-30A (20% of total 1-ph meter quantity as mentioned in BoQ) & 10-60A (80% of total 1-ph meter quantity as mentioned in BoQ) static smart meters of accuracy class 1.0. Please refer to revised Financial Bid	Amendment
11	B, Page 17/48	Three phase four Wire, 3x 240 voltage, 20-100A, whole current static smart meters of accuracy class 1.0	Three phase four Wire, 3x 240 voltage, 3x10-60A, whole current static smart meters of accuracy class 1.0	No Change. Bidder shall provide the BIS certification at the time of deployment.	clarification
12	2, IV, Page 19/48	Meter Data Management System (MDM)(existing to be upgraded	It is very difficult to upgrade existing Meter Data Management System (MDM). So request to process with new MDM to make the project successful.	The details IT Scope is enclosed separately in Amendment 2.	Amendment
13	1.01. ii, Page 1/8	Lead bidder of this consortium (if any) needs to be either a System Integrator or a meter manufacturer and should meet their respective Eligibility criteria.	Lead bidder of this consortium (if any) needs to be a meter manufacturer and should meet their Eligibility criteria.	No Change	clarification

14	1.01. iv, Page 1/8	In case Lead Bidder is a Meter Manufacturer, they must meet the eligibility criteria for Meter Manufacturer and must bring the System Integrator as consortium partner provided System Integrator to meet their respective Eligibility criteria.	Here Eligibility criteria of Meter Manufacturer and System Integrator is defined but what about Eligibility Criteria for Communication Service Provider as it is not defined here. Who will comply not clear here	No Change	clarification
15	4, Page 4/8	Meter Manufacturer must have successfully Supplied Meters (Smart or with Cellular/RF Modem) in AMR/ AMI projects in Indian/ Global Power Distribution Utility last 7 years ending last day of month previous to the one in which bids are invited, meeting any of the following criteria a) one project each of minimum 1,60,000 AMR/AMI meters or b) two project each of minimum 1,00,000 AMR/AMI meters or c) three project each of minimum 80,000 AMR/AMI meters.	A very handful qty of Smart metering projects executed in India. So request to relook on minimum projects qty and meter qty defined in clause a, b and c; so that Indian meter manufacturers can participate the bid in line with PM make in India schemes.	No Change	clarification
16	1.02.1 QR for meter manufacturer	Single Completed Project having scope of but not limited to complete Detailed Engineering, Project Management, Erection, Installation, Testing, Commissioning of AMI/AMR project including integration with Utility IT systems (Billing and CRM) costing not less than the amount equal to Rs. 105.00 Cr.	Please amend the clause as "Single Completed Project having scope of but not limited to complete Detailed Engineering, Project Management, Erection, Installation, Testing, Commissioning of AMI/AMR project including integration with Utility IT systems (Billing and CRM) costing not less than the amount equal to Rs. 80 Cr. against single tender"	No Change	
17	5, Page 4/8	One (1) Project of minimum 1000 smart meters with RF/Inbuilt Communication/GPRS/3G/4G modem.	One (1) Project of minimum 20000 smart meters with RF/inbuilt Communication/GPRS/3G/4G modem. The Smart meters deployment qty shall be minimum 10% of bid quantity. Also Meter manufacturer must have CMMI Level 3 or higher Quality Certifications.	No Change	clarification
18	1.02.3, Page 6/8	Minimum Average Annual Turnover (MAAT) for best three years out of last five financial years of the bidder should not be less than INR 88.50 Cr.	MAAT of last five financial years of the bidder asked should not be less than INR 88.50 Cr. Whereas as per clause 1.02.1, i), one project costing asked should not be less than the amount equal to Rs. 105.00 Cr. So pls. modify MAAT @ Rs 1.05 Cr. to avoid further confusion.	No Change	clarification
19	3.01.1.2, Page 7/8	> 1ph. - 2 nos. from each of 3 meter OEM = 6 Nos. (1 nos. on GPRS and 01 nos. on RF mesh) > 3ph. - 2 nos. from each of 3 meter OEM = 6 Nos. (1 nos. on GPRS and 01 nos. on RF mesh)	01 nos. of each 1Ph and 3Ph smart meters sample with RF mesh by 3 meter OEM is understood. But more elaboration is required on GPRS communication by 3 meter OEM. It would remain same (No different RF NIC is available in meter)	No Change	clarification
20	1.0 Pre-qualification criteria – Part A: 1.01 Technical:	vi. In case Lead Bidder is a Meter Manufacturer, they must meet the eligibility criteria for Meter Manufacturer and must bring the System Integrator as consortium partner provided System Integrator to meet their respective Eligibility criteria.	We hereby suggest that System Integrator should be treated as a OEM and Meter manufacturer should be lead bidder only.	No Change	clarification
21	ITB 24.1 (c)	The Time for implementation shall be 18 (Eighteen Months)	By viewing the quantity of the meters, the implementation time should be 24 months. Also define the commencement period.	No Change	clarification
22	Volume-I : Section-II, invitation For Bids (IFB), Page-5	Performance Bank Guarantee i.e. 10% of the Contract Value.	We would like to suggest that all BG & PBG should be on the EX-WORKS cost, because GST component goes to Govt and Board will not be benefitted in any case. This is unnecessary financial implication on the bidder. Also will request to kindly reduce PBG values from 10% to 5%.	No change	
23	1.4.29, Page 412/478	In case solution is given on RF, RF enabled portable device should be provided which will communicate with meter on RF and will communicate with DCU / HES on RF / GPRS	CMRI/ portable device communication should be by Optical port & For remotely we can provide 3G/RF Mesh please accept the same.	No Change	clarification
24	1.4.31, Page 412/478	Meter should have provision of communication module compatible with both the variant mentioned in IS 16444 (with latest amendment). This module should be able to get connected to the NAN / WAN network of service provider (GPRS/3G/4G/RF Mesh).	Meter should have provision of communication module compatible with both the variant mentioned in IS 16444 (Any one variant at a time). This module should be able to get connected to the NAN / WAN network of service provider (RF/ 3G)	No Change, however any one variant at a time is acceptable	clarification
25	1.4.36, a, Page 413/478	The meter shall have facilities for data transfer locally through CMRI (Using optical port/NIC card) and remotely by GPRS/3G/4G/RF Mesh with proper security via Plug in type NIC.	The meter shall have facilities for data transfer locally through CMRI (Using optical port) and remotely by GPRS/3G/ RF Mesh with proper security	No change	clarification

26	1.4.36, f, Page 413/478	Bidder should also provide base computer software (BCS) for viewing the data downloaded through HES/CMRI/laptop/HHU in separate PC/laptop. Android/windows/linux based HHU shall be preferred. API required for converting raw file to XML	Smart meter complies to IS15959 part 1/2 that is open protocol. So no any local software/BCS/API/HHU etc. software is required to supply	No change	clarification
27	1.4.36, n, Page 414/478	Communication network should be immune with any external Magnetic field/ESD/Jammer/HV voltage influence such that it shall not affect the normal overall functionality.	Communication network should be immune with external influence as per relevant IS	No change	clarification
28	1.4.38, Page 415/478	Abnormal and Tamper conditions: All tamper logging thresholds values shall be configurable from remotes. Note: "Meter shall have neutral CT for tamper identification and analysis.	Tamper Threshold should be factory programmable due to security & as per IS16444. Field configurability of tamper can cause loss to utility. Meter will be Neutral Shunt for tamper indication and analysis.	Tamper thresholds will be finalized during detailed engineering	clarification
29	1.4.39, Table 4, Page 417/478	> ESD/JAMMER : Immunity up to 8 KV with NIC and logging of value from 1 KV to 50 KV > Single wire > Current mismatch > Temperature Rise Tamper	This tamper not applicable as per IS16444. So pls deleted the same. In single wire tamper Meter will be in disconnect condition to prevent this tamper. Please accept the same.	ESD/ Jammer specifications shall be as per CBIP 325. In single wire tamper Meter will be in disconnect condition to prevent this tamper---- Accepted	Amendment
30	1.5.1, d), Page 420/478	d) Meter cover shall be transparent with polycarbonate LEXAN 143R/943A or equivalent on prior approval from the JKPD	Meter Cover should be Opaque with transparent viewing window. Pls accept the same	Meter cover can be opaque/ transparent with transparent viewing window.	Amendment
31	1.5.1, e), Page 420/478	Meter cover & base shall be provided with continuous and seamless Ultrasonic welding such that it is not opened without breaking the enclosure	Meter cover & base shall be provided with continuous and seamless Ultrasonic welding/ Chemical welding such that it is not opened without breaking the enclosure	Accepted, although meter should have proper visible evidence in case of breaking	Amendment
32	1.5.2, e), Page 420/478	To get the desired temp rise & avoid hot spots the design of each terminal screw, preferred terminal screw shall be with hex head screw / allen head screw & shall be operated with allen key or special key. The preferred Size of the allen screw shall be 6mm dia	Terminal screw should be as per IS16444. It can be Hex head/ Allen head / Minus head . Minus head should prefer due to indian electrical conditions. Pls delete requirement of allen screw.	Terminal screw should be as per IS16444. It can be Hex head/ Minus head . Minus head should prefer due to indian electrical conditions.	Amendment
33	1.5.3, Page 421/478	Terminal cover shall be transparent with polycarbonate LEXAN 143R/943A or equivalent on prior approval from the JKPD	Terminal cover will be opaque . Pls accept the same	Terminal cover can be opaque/ transparent.	Amendment
34	1.6, Page 421/478	The meter shall be capable of measuring Cumulative Energy (KWh), and MD (KW) with time of day (TOD) registers having 8 zones & 02 seasons (no. of zones & time slot shall be programmable by CMRI with adequate security level and in one to one /broadcast mode over the air).	Seasonal TOD is not applicable in IS16444.	Tariff would be as per JKPD tariff structure and will be communcated during detailed engineering	clarification
35	1.8, Page 421/478	PARAMETERS IN BCS	1. Smart meter complies to IS15959 part 1/2 that is open protocol. So no any local software/BCS required to supply additionally. 2. Few tamper not applicable to IS16444. So pls. delete the clause	no change	clarification
36	1.8.7, Page 423/478	Phase Indication should be Green LED only.	Phase Indication should be accepted as LCD display indication	Phase Indication should be Green-LED/LCD display only.	Amendment
37	1.8.12, Page 425/478	u). Communication Technology is IHD supported (with carrier frequency) v). Firmware version for meter	u). Pls. delete the clause as NO IHD asked to supply v). Firmware version should not be mentioned on name plate as it can be changed remotod as and when required So pls. delete both requirements	IHD is not in tender scope. FW version should be mentioned in meter display parameters/name plate.	Amendment
38	1.11, Page 428/478	Bidder shall further be responsible for 'free replacement at site' for another period of THREE years from the end of the guarantee period for any 'Latent Defects' if noticed and reported by the purchaser	Requested to delete the clause. The same shall be considers under Guarantee period only.	no change	clarification

39	2.4.32, Page 436/478	Meter should have provision of communication module compatible with both the variant mentioned in IS 16444 (with latest amendment). This module should be able to get connected to the NAN / WAN network of service provider (RF/ 3G) of JKPDD.	Meter should have provision of communication module compatible with both the variant mentioned in IS 16444 (Any one variant at a time). This module should be able to get connected to the NAN / WAN network of service provider (RF/ 3G)	No Change, however any one variant at a time is acceptable	clarification
40	2.4.36, Page 436/478	The meter shall have the facility of disconnecting and re-connecting the load of the meter from the remote and by authenticated command through Laptop/HHU at site by means of a built-in contactor. This operation shall be conducted with the help of a third party software which is owned by JKPDD and in addition to the manufacturer's own software.	Local command through Laptop/HHU at site as facility of disconnecting and re-connecting the load of the meter should not be allowed to avoid any misuse. Also it should not be through any third party software. So the clause shall be deleted.	Meter should have proper log of connect/ disconnect events with snap shots. Meter should not accept any command without proper authentication from any Software or device.	clarification
41	2.5, a, Page 437/478	The meter shall have facilities for data transfer locally through CMRI (Using optical port/NIC card) and remotely by RF / RF Mesh with proper security via Plug in type NIC.	The meter shall have facilities for data transfer locally through CMRI (Using optical port) and remotely by 3G/ RF Mesh with proper security	no change	clarification
42	2.5, f, Page 437/478	Bidder should also provide base computer software (BCS) for viewing the data downloaded through HES/CMRI/laptop/HHU in separate PC/laptop. Android/windows/linux based HHU shall be preferred. API required for converting raw file to XML.	Smart meter complies to IS15959 part 1/2 that is open protocol. So no any local software/BCS/API/HHU etc. software is required to supply	no change	clarification
43	2.5, o, Page 438/478	Communication network should be immune with any external Magnetic field/ESD/Jammer/HV voltage influence such that it shall not affect the normal overall functionality.	Communication network should be immune with external influence as per relevant IS	no change	clarification
44	2.8, Page 440/478	Abnormal and Tamper conditions: All tamper logging thresholds values shall be configurable from remotes. Note: "Meter shall have neutral CT for tamper identification and analysis.	Tamper Threshold should be factory programmable due to security & as per IS16444. Field configurability of tamper can cause loss to utility. Meter will be Neutral Shunt for tamper indication and analysis.	Tamper thresholds will be finalized during detailed engineering	clarification
45	2.8, Table 15, Page 440/478	> ESD/JAMMER : Immunity up to 8 KV with NIC and logging of value from 1 KV to 50 KV > High Neutral Current Tamper > Temperature Rise Tamper	This tamper not applicable as per IS16444. So pls delete the same	ESD/ Jammer specifications shall be as per CBIP 325.	Amendment
46	2.9.1, e), Page 443/478	Meter cover & base shall be provided with continuous and seamless Ultrasonic welding such that it is not opened without breaking the enclosure.	Meter cover & base shall be provided with continuous and seamless Ultrasonic welding/ Chemical welding such that it is not opened without breaking the enclosure.	Accepted, although meter should have proper visible evidence in case of breaking	
47	2.9.2, d), Page 444/478	To get the desired temp rise & avoid hot spots the design of each terminal screw, preferred terminal screw shall be with hex head screw / allen head screw & shall be operated with allen key or special key. The preferred Size of the allen screw shall be 6mm dia.	Terminal screw should be as per IS16444. It can be Hex head/ Allen head / Minus head . Minus head should prefer due to indian electrical conditions. Pls delete requirement of allen screw.	Terminal screw should be as per IS16444. It can be Hex head/ Minus head . Minus head should prefer due to indian electrical conditions.	
48	2.10, Page 445/478	The meter shall be capable of measuring Cumulative Energy (KWh), and MD (KW) with time of day (TOD) registers having 8 zones & Q2 seasons (no. of zones & time slot shall be programmable by CMRI with adequate security level and in one to one /broadcast mode over the air).	Seasonal TOD is not applicable in IS16444.	Tariff would be as per JKPDD tariff structure and will be communicated during detailed engineering	
49	2.12, Page 445/478	PARAMETERS IN BCS	1. Smart meter complies to IS15959 part 1/2 that is open protocol. So no any local software/BCS required to supply additionally. 2. Few tamper not applicable to IS16444. So pls delete the clause	no change	
50	2.12.7, Page 448/478	The KWh & KVAh register shall have minimum 8 digits LCD display and size of the digits shall be minimum 10mmx5mm.	The KWh & KVAh register shall have minimum 7 digits LCD display and size of the digits shall be minimum 10mmx5mm.	Accepted	Amendment
51	2.12.10, b), Page 452/478	Communication LCD indicator- The meter shall be provided with suitable LCD indication RxD and orange TxD communication in progress.	Communication LCD indicator- The meter shall be provided with suitable LCD indication to know communication status. LCD color can not be changed, so pls. delete "RxD and orange TxD communication in progress".	Accepted, communication status symbols can be on LCD/ LED	Amendment

52	2.13, Page 453/478	21. Communication Technology is IHD supported (with carrier frequency) 22. Firmware version for meter	21. Pls. delete the clause as NO IHD asked to supply 22. Firmware version should not be mentioned on name plate as it can be changed remotely as and when required So pls. delete both requirements	IHD is not in tender scope. FW version should be mentioned in meter display parameters/name plate.	Amendment
53	2.14.3, Page 454/478	Table 22. Various current rating defined in table as per meter rating	Defined current rating should be modified in table as per suggested rating. So pls. take care accordingly.	The acceptance test for 1-ph and 3-ph meters shall be conducted as per IS 16444.	Amendment
54	2.14.4, Page 448/478	a). The bidder shall ensure that API (Application protocol interface) is compatible with JKPD's CFW. b) Temperature rise of terminal block with 150% I _{max} for 6 hours	a). API not required as meter complies to IS15959 part 1-2 B). Temperature rise of terminal block with 105% I _{max} as per IS16444	No change	clarification
55	2.18, Page 456/478	Bidder shall further be responsible for 'free replacement at site' for another period of THREE years from the end of the guarantee period for any 'Latent Defects' if noticed and reported by the purchaser	Requested to delete the clause. The same shall be considered under Guarantee period only.	no change	clarification
56	VOLUME-I: SECTION – VII	33. All the meters are proposed to be installed on Poles. There will be 3 combinations of Meter boxes used to install the single phase meters i.e Meter Box with One Meter, Meter Box with two Meters & Meter Box with 4 meters. All three phase meters will be installed in single box. The specification of single phase & three phase meter box are provided along with indicative drawing for 2/4 meter box. Subsequent specs & technical details for 2/4 Meter boxes will be submitted by bidder for approval for Project execution	We have PC box for 1P meter where only one meter can install in the box. Pls accept the same.	No change	clarification
57	1.4, ii), Page 2/3 and 4.0.2, page 334/478	Degree of protection: IP 55	The Meter box shall have IP 54 degree of protection for affording protection against dust and water.	No change	clarification
58	5.2, Page 335/478	The meter box shall have a taper roof for easy flow of rain water and shall have degree of IP55 for protection against dust and water	The meter box shall have a taper roof for easy flow of rain water and shall have degree of IP54 for protection against dust and water.	No change	clarification
59	5.3 & 5.4, Page 335/478	The box shall be provided with meter mounting arrangement along with MS plate on top for mounting the meter from different manufacturers, having different mounting dimensions	We have PC Box with only Genus make Meter Mounting arrangement facility. Pls delete the requirement	Should be suitable for installation in J&K field conditions	Amendment
60	7.1, 8, Page 336/478	Flammability test (IS : 11731 (Part II)-1986)/UL :94) : The sample shall comply to flammability requirements of category FV0/V0 as per respective standards	It should be FV2 category. Pls accept the same.	Flammability requirement as per IS	Amendment
61	7.1, 11, Page 339/478	Bidder shall further be responsible for 'free replacement at site' for another period of THREE years from the end of the guarantee period for any 'Latent Defects' if noticed and reported by the purchaser	Requested to delete the clause. The same shall be considered under Guarantee period only.	no change	clarification
62	31 Table 2	Service Level Agreement: Applicable Penalty The following operational penalties shall be applicable on the basis of SLA Parameters on the Bidder and shall be calculated as here under: ≥99 %: No Penalty	The monthly SLA criteria of 99% is too stringent considering the uncertainties involved in the complex project area . We request you to reduce the SLA requirement to 95% on a quarterly basis.	no change	clarification
63	147 Clause 2.5	Final Installment (10%): a. The balance ten percent (10%) of payment shall be done reimbursable on Completion of 1 year warranty + 5 years FMS period. The payment may be released earlier provided the supplier submits the Bank Guarantee (BG) for an amount equivalent to 10% of contract value. This BG shall remain in force up to and including 6 months after FMS period. b. On submission of the certificate by the Project Manager that the item(s) have been received, erected, tested and commissioned.	The payment terms for the project is protracted and the final payment is realisable only after the end of the project i.e. (6 years). The complex project area along with this protracted payment terms makes the project unattractive. We request you to amend the payment terms suitably so that supply portion is realised on delivery.	No Change. There is provision of release of last installment by submission of BG.	clarification
64	Volume-I : Annexure-A of Section-III QUALIFICATION OF THE BIDDER v2.0 Page 5 1.01.3 Eligibility Criteria for Communication Service Provider	Client's PO/ WO/ LOA/ Contract Agreement and Completion Certification/Go-live certificate on client Letter head and satisfactory Performance certificate of 01 year with contact details of clients for verification.	Client's PO/ WO/ LOA/ Contract Agreement Or Completion Certification/Go-live certificate with satisfactory Performance details of 01 year on client Letter head with contact details of clients for verification.	No change	amendment
65	Approach and Methodology	C. Functional Requirements for Advanced Metering Infrastructure (AMI) 4. Communication infrastructure 5. General Requirement	We feel that a robust ,scalable, secure and self healing mesh is at the heart of a strong network solution and for that the network specs can be further refined to reflect that. We would like RECPDCL to consider revisiting and enhancing the specs for the communications infrastructure and network related general requirements . RECPDCL can take vendor inputs and we are willing to provide our inputs on the same	Specification should be inline with CEA and IS16444 guidelines.	clarification

66	Bid Evaluation Volume-I : Section-II Instruction to Bidders (ITB) Pg. 16	(E). Bid Opening and Evaluation	We would request to follow the QCBS based norm for evaluation	No Change	clarification
67	Volume-I : Section-VII Scope of Works v2.0 Page 9 of 43 Clause No. 43.c Applicable Standards, Frequency and Statutory Approvals	The RF Mesh Communication Devices shall comply to the following standards: IEEE 802.15.4 – IEEE standard for Information Technology – Telecommunications and Information Exchange between Systems – Local and Metropolitan Area Networks – Specific Requirements Part 15.4: Wireless Medium Access Control (MAC) and Physical layer (PHY); IEEE 802.15.4g – IEEE Standard for Smart Utility Networks or any other equivalent standard /alliance.	IEEE 802.15.4g – IEEE Standard for Smart Utility Networks or any other equivalent standard /IEEE 802.15.4u-2016 - IEEE Standard for Low-Rate Wireless Networks--Amendment 3: Use of the 865 MHz to 867 MHz Band in India: A physical (PHY) layer enabling the use of the 865 MHz to 867 MHz band in India .	As per IS 16444, No change	clarification
68	Volume-I : Section-VII Scope of Works v2.0 Page 18 of 43 Clause No. 2. General AMI System Requirement	Bidder shall adhere with the appropriate security algorithm for encryption and decryption. For smooth functioning of the entire system, it is essential that the details of such algorithm including the mechanism of security key generation be kept in a secured escrow account which shall be used by the utility only in case of termination of the contract for reasons whatsoever.	We Recommend the following for the Robust Security Mechanism: AES-128/256 Encryption. Standards based Public Key Infrastructure (PKI) for authentication and establishing a chain of trust in the network. Key Generation & Storage to ensure that cryptographic material is securely generated and stored.Key Exchange & Rotation to ensure unique, time-limited keys for each device pair. Firmware Code Signing to prevent injection or use of altered firmware images on devices. Critical Operations Rate Limiting to prevent accidental or intentional misuse.	Bidder shall provide Security algorithm as per IS 16444	clarification
69	Technical Eligibility Criteria Version 22832 Page No. 1 and Clause no. 1.01	v. In case, Lead Bidder is a System Integrator, they must meet the eligibility criteria of System Integrator and must bring meter manufacturer as consortium partner provided Meter manufacturer to meet their respective Eligibility criteria. vi. In case Lead Bidder is a Meter Manufacturer, they must meet the eligibility criteria for Meter Manufacturer and must bring the System Integrator as consortium partner provided System Integrator to meet their respective Eligibility criteria.	We would like to request you to keep the consortium open to ensure maximum no. of participations. For example, a system integrator may not like to be part of consortium due to joint and several liability for complete scope of work. We request to delete these two clauses SI or Meter Manufacturer should be allowed to Lead and bring others either as consortium/ Sub-contartor provided each partner meet their respective Qualification Requirement.	No change	clarification
70	Revised Scope Of Work 2832 Page No. 5 and Clause no. 4	The bidder shall provide the HES suitable to support the collection and storage of data as per performance level for 11.25 Lakh smart meters scalable up to 20 Lakh smart meters.	We understand that RECPDCL is asking for RF canopy of 11.25 Lakh which will include NIC+Field Communication Devices+HES.	The bidder shall provide the HES suitable to support the collection and storage of data as per performance level for 2.0 Lakh smart meters scalable up to 20 Lakh smart meters.	Amendment

71	Revised Scope Of Work 2832 Page No. 5 and Clause no. 10	Study of existing Oracle Utilities MDMS for required functionality as specified in RFP document and upgrade the same to latest applicable version 2.2.0.3.0 (latest Sep 18 release) including installation, commissioning and Data Migration from existing MDM to Upgraded MDM suitably for Smart Meter Integration for JKPDD and its integration with existing IT system (as per SRS documentation prepared after award of contract).	To meet this point, bidder has to be dependent on your existing SI. We would like to request you to keep this point out of the scope of this project and can be identified as a separate project.	The details IT Scope is enclosed separately in Amendment 2.	Amendment
72	Revised Scope Of Work 2832 Page No. 6 and Clause no. 13	The bidder must provide network redundancy (50% of Full load capacity) for each element other than nodes, while designing the system for self-healing features.	Every solution is unique in nature and will be driven by the committed SLA. Keeping so much redundancy will increase the total cost of the project.	No change	clarification
73	Revised Scope Of Work 2832 Page No. 6 and Clause no. 15	In future, it would be bidders' responsibility to extend the support to integrate new meters or any other application/equipment as decided by JKPDD in the project area without any additional cost burden on JKPDD during the contract period.	We would like to request you to keep the no. of meters to be integrated to maximum 5 and describe what are the probable equipment's to be integrated with this solution. This is an open point will cause unnecessarily extra cost.	no change	clarification
74	Revised Scope Of Work 2832 Page No. 6 and Clause no. 17	The bidder shall also ensure incorporation of new hardware (communication devices, meter, NIC etc.), if required, in future.	Kindly elaborate this clause.	Any new hardware incorporation within the scope of work of this tender has to be carried out by the bidder.	clarification
75	Revised Scope Of Work 2832 Page No. 9 and Clause No. 41	The network solution provider shall ensure two-way communication success rate, for both AMI & operational applications and response time within 6 seconds for operations of demand response and switching of electrical devices with a success rate of 99%-, consistently.	SLA already mentioned in this RFP. Please delete clause as it is a duplication.	As per SLA mentioned in Revised Scope of Work uploaded in Amendment 1	clarification
76	Volume-1 : Annexure-A of Section-III QUALIFICATION OF THE BIDDER v2.0	1.0 Pre-qualification criteria – Part A: 1.01 Technical: v. In case, Lead Bidder is a System Integrator, they must meet the eligibility criteria of System Integrator and must bring meter manufacturer as consortium partner provided Meter manufacturer to meet their respective Eligibility criteria. vi. In case Lead Bidder is a Meter Manufacturer, they must meet the eligibility criteria for Meter Manufacturer and must bring the System Integrator as consortium partner provided System Integrator to meet their respective Eligibility criteria.	As per the clause it is clear that Meter manufacturer and System integrator can come in the consortium to bid in the tender if they meet the respective Qualification criteria. Qualification criteria for communication service provider is also specified in the tender document. If the communication service provider is not a part of the consortium then the who will meet the QR of the communication service provider as: 1- QR of Communication service provider as subcontractor is not acceptable as per tender document. 2-QR of Communication service provider is not met by Meter manufacturer. 3-QR of Communication service provider is neither met by the system integrator nor required from System integrator as Sr.No.2 of 1.01.1 Eligibility criteria for system integrator.	QR for communication provider is mentioned and shall be met by the network communication provider coming as OEM /consortium partner. The individual bidder/consortium shall minimum meet QR for 1.01.1 and 1.01.2.	amendment
77	Volume-1 : Annexure-A of Section-III QUALIFICATION OF THE BIDDER v2.1	1.01.2 Eligibility Criteria for Meter Manufacturer: 3. Document to be provided Client's PO/ WO/ LOA/ Contract Agreement and Completion Certification/Go- live certificate on client Letter head and satisfactory Performance certificate of 01 year with contact details of clients for verification. In case of client is not the utility, the bidder should submit the required documents of the order issued by Lead Bidder to which the main work order has been issued. In addition, employee can ask supporting documents of main work order. JKPDD reserves the right to contact / visit such client before award of contract	We have/are executed/executing numerous similar nature project globally since we are in Non-Disclosure Agreement with our client under which the contract details like PO/WO/LOI/Contract Agreement can not be shared with the outside world.	No change	Amendment

78	Volume-I : Annexure-A of Section-III QUALIFICATION OF THE BIDDER v2.1	1.01.2 Eligibility Criteria for Meter Manufacturer: 4. Document to be provided Client's PO/ WO/ LOA/ Contract Agreement and Completion Certification/Go-live certificate on client Letter head and satisfactory Performance certificate of 01 year with contact details of clients for verification. In case of client is not the utility, the bidder should submit the required documents of the order issued by Lead Bidder to which the main work order has been issued. In addition, employee can ask supporting documents of main work order. JKPDD reserves the right to contact / visit such client before award of contract	We have/are executed/executing numerous similar nature project globally since we are in Non-Disclosure Agreement with our client under which the contract details like PO/WO/LOI/Contract Agreement can not be shared with the outside world.	No change	Amendment
79	Volume-I : Annexure-A of Section-III QUALIFICATION OF THE BIDDER v2.1	1.01.2 Eligibility Criteria for Meter Manufacturer: 5. Document to be provided Client's PO/ WO/ LOA/ Contract Agreement and Completion Certification/Go-live certificate on client Letter head and satisfactory Performance certificate of 01 year with contact details of clients for verification. In case of client is not the utility, the bidder should submit the required documents of the order issued by Lead Bidder to which the main work order has been issued. In addition, employee can ask supporting documents of main work order. JKPDD reserves the right to contact / visit such client before award of contract	We have/are executed/executing numerous similar nature project globally since we are in Non-Disclosure Agreement with our client under which the contract details like PO/WO/LOI/Contract Agreement can not be shared with the outside world.	No change	Amendment
80	Volume-I : Annexure-A of Section-III QUALIFICATION OF THE BIDDER v2.3	1.01.3 Eligibility Criteria for Communication Service Provider Client's PO/ WO/ LOA/ Contract Agreement and Completion Certification/Go-live certificate on client Letter head and satisfactory Performance certificate of 01 year with contact details of clients for verification. In case of client is not the utility, the bidder should submit the required documents of the order issued by Lead Bidder to which the main work order has been issued. In addition, employee can ask supporting documents of main work order. JKPDD reserves the right to contact / visit such client before award of contract	We have/are executed/executing numerous similar nature project globally since we are in Non-Disclosure Agreement with our client under which the contract details like PO/WO/LOI/Contract Agreement can not be shared with the outside world.	No change	Amendment
81	Volume-I : Annexure-A of Section-III QUALIFICATION OF THE BIDDER v2.4	3.0 Pre-qualifying criteria Part-C 3.01.1.1 Bidders qualifying PART A and PART B shall be allowed to participate in Part- C. The bidders shall be required to carry out the Proof Of concept based on the criteria mentioned in SBD will be required to do a proof of concept for 12 meters of OEMs meeting criteria as mentioned in clause 1.01.2 above, each in Jammu & Srinagar region (total 24 meters of OEMs)	In the recent past smart meter has been deployed in several parts of India, RECPDCL is requested to visit those sites to judge the best communication network (RF/GPRS) & solution.	no change	clarification'
82	Appendix-1: TERMS AND PROCEDURES OF PAYMENT	2. Progressive payments 2.1. First Installment (60%) : Sixty percent (60%) payments against various items of price schedule including 100% Excise Duty, Taxes etc shall be paid on Sign off of SRS, design document and Data model and Factory Acceptance test (FAT) and Delivery of 2,00,000 Smart Meters along with related Hardware, Software and equipments at Project site (Payment will be made on Prorata basis considering lots of 10,000 each.) and receipt and acceptance of Materials on submission of documents	Since Delivery and installation of network elements are part of SoW and BoQ so there should be provision for the payment against the delivery and installation of the network elements	no change	Amendment
83	Appendix-1: TERMS AND PROCEDURES OF PAYMENT	2.2. Second Installment (10%): Ten percent (10%) payments against various items of price schedule shall be paid on Installation, commissioning and integration of all Hardware, Software, field material in Project Area and Site Acceptance test (SAT) and meeting following conditions:	Installation payment should be done on lot basis	no change	Amendment
84	Scope of Work,1. About The Project	The contractor shall also do filed survey on the basis of data/list provided by RECPDCL and prepare the BOQ/BOM and get it approved from RECPDCL	The BoM prepared shall only have impact on the RF elements (Field devices except smart meters) and will not cover any other changes on the basis of Survey.	The contractor shall also do filed survey on the basis of data/list provided by RECPDCL and prepare the BOQ/BOM of the RF network and get it approved from RECPDCL.	clarification'

85	Scope of Work ,3. Existing IT Systems in JKPDD	JKPDD is having 2 Software Applications for Consumer Metering, Billing and Collection management. The one is Oracle Utility Software application implemented by M/s Wipro under RAPDRP scheme for 30 Towns and the other one is NIC developed (Front End – Visual Basic and Data Base is SQL) Application. Both the system having a 13-digit unique customer account code across both the application. JKPDD is also facilitating WEB page and mobile application for Consumers for tracking Consumption and payment	Scope of integration is requested to be specified , whether the AMI system is to integrate with a) Oracle Utility software or b) NIC developed application c) both	The details IT Scope is enclosed separately in Amendment 2.	Amendment
86	Scope of Work ,3. Existing IT Systems in JKPDD	FIGURE 1 -JKPDD- EXISTING SERVERS ARCHITECTURE- IT INFRA	We would like to request a clear and legible figure of the existing architecture	The details IT Scope is enclosed separately in Amendment 2. IT architecture already mentioend in Amendment 1.	Amendment
87	4. Scope of works	4. The bidder shall provide the HES suitable to support the collection and storage of data as per performance level for 11.25 Lakh smart meters scalable up to 20 Lakh smart meters.	We would request you to clarify whether the IT infra to support 2 lakh meters or 11.25 Lakh meters. Additionally the sizing is contradicting with clause hardware sizing on page number 24	The bidder shall provide the HES suitable to support the collection and storage of data as per performance level for 2.0 Lakh smart meters scalable up to 20 Lakh smart meters.	Amendment
88	4. Scope of works	The bidder shall supply and commission one HES that shall have the capability of supporting APIs from minimum 5 meter manufacturers thereby allowing data exchange with minimum 5 meter manufacturers.	As per IS 16444 , the smart meter conforms to DLMS protocol therefore meter integration with the RF NIC card will be required.Furthermore we would request you to restrict it to 2 meter manufacturer.	No change	clarification'
89	4. Scope of works	The designed solution must have provision of automatic switchover in case of failure with RTO <= 1 hour & RPO <= 30 minutes.	Automatic Switchover is contradicting the RTO <=1 hour. Moreover the RPO requirement for such system shall 6 hours as per the industry practice.	The designed solution must have provision of sswitchover in case of failure with RTO <= 6 hour & RPO <= 30 minutes.	Amendment
90	4. Scope of works	In future, it would be bidders' responsibility to extend the support to integrate new meters or any other application/equipment as decided by JKPDD in the project area without any additional cost burden on JKPDD during the contract period.	We would like to request to delete the clause or limit the number of manufacturer to 2 nos.	no change	clarification'
91	4. Scope of works	26. For all devices which are proposed to be installed in open should have IP 55 class or higher.	Outdoor equipment requires minimum IP 65 or equivalent protection	No change	clarification'
92	4. Scope of works	27. Offered solution to comply with the existing applicable BIS standards and guidelines issued by MoP/NSGM/CEA etc. for applications as mentioned in RFP & its Feasibility to change / modify the offered solution based on changes happened in standards in future.	We would like to submit that the products conform to relevant standards at the time of manufacturing/supply. Any changes in the meter will require it to be type tested again which is not possible for field deployed devices.	Technology upgradation without harware change, shall comply to changes based on amendments in standard in future.	clarification'
93	4. Scope of works	Proposed equipment should have 7-10 years future roadmap (A copy of the same shall be shared during bid submission)	Proposed IT equipment or third party equipment Roadmap is not shared by the OEM(s)	deleted	Amendment

94	38. Maintenance of the Network during Rollout	Transition period for end Point will be considered as 1-month post installation. i.e. if a meter is installed on day 0, by 30th day it will be considered for all SLA as per this RFP.	SLA are applicable after Go Live only	No change	clarification'
95	38. Maintenance of the Network during Rollout	It will be the responsibility of bidder to maintain SLA after 1 month of installation of any end point.	SLA are applicable after Go Live only	No change	clarification'
96	48. Business Continuity and Disaster Recovery	In case if primary site / DC (Srinagar) fails, the business shall continue from DR (Jammu)site. Connectivity between primary site and DR site shall be redundant.	We would request for exact locations of the DC and DR for feasibility study of service provider alternatively names of the services provider providing similar service to these DC DR locations.	DC in Srinagar Town DR in Jammu Town	clarification'
97	4. Scope of work ,53. Scalability	The sizing of AMI solution shall be done for 2 Lakh smart meters, with complete Backend IT infra for 11.25 Lakh consumers with scalability for the offered solution, i.e. upto 20 Lakh smart meters.	We would request for exact locations of the DC and DR for feasibility study of service provider alternatively names of the services provider providing similar service to these DC DR locations. Additionally the sizing is contradicting with clause hardware sizing on page number 24	The detailed IT Scope is enclosed separately in Amendment 2.	Amendment
98	II. Configuration, Functionality & Interface of DCU	g) The equipment shall be weatherproof, dustproof and constructed for outdoor installation on poles (minimum rating: IP-55). A suitable mounting provision shall be made for the equipment.	Outdoor equipment requires minimum IP 65 or equivalent protection(considering special conditions in J&K)	No change	clarification'
99	ii) Router based RF Mesh Network	j) The equipment shall be weatherproof, dustproof and constructed for outdoor installation on poles (minimum rating: IP-55). A suitable mounting provision shall be made for the equipment.	Outdoor equipment requires minimum IP 65 or equivalent protection(considering special conditions in J&K)	No change	clarification'
100	1.2. APPLICABLE STANDARDS	The equipment covered by this specification shall conform to the requirements stated in latest editions & amendments of relevant Indian/ IEC Standards and shall conform to the regulations of local statutory authorities	Offered Meter is complied to IS 16444 part1, CBIP -325 and IS 15959- Part 2 with latest amendments.	accepted	clarification'
101	1.4.25. Alternate mode of supply to the meters	In case of meter damage, reading/data should be retrieved with the help of battery or other power source. (Bidder to be provide free of cost 04 nos of jig for retrieving data from memory of meter. Jig should be such that NVM can be push fit on this jig and data can be retrieve from this NVM).	Offered meter will pushed all data to HES in every 4 hours. Hence latest meter data available to Data center and Data recovery center. Hence use of Jigs not foreseen we request you to remove the requirement of the Jig	No change	clarification'
102	1.4.35. Disconnecter	The meter shall have the facility of disconnecting and re-connecting the load of the meter from the remote and by authenticated command through Laptop/HHU at site by means of a built-in contactor. This operation shall be conducted with the help of a third party software which is owned by JKPDD and in addition to the manufacturer's own software.	Connect disconnect of integrated load switch in the meter will be done by following method: i. Remotely through HES ii. Locally through RF device through software provided by the RF canopy vendor. Kindly accept the same, please remove the requirement of 3rd party software for the same.	Meter should have proper log of connect/ disconnect events with snap shots. Meter should not accept any commend with out proper authentication from any Software or device.	clarification'
103	1.4.35. Disconnecter	Table 3 - Disconnecter Specification S.No. DESCRIPTION Requirement 1 Operating Voltage range 120 V to 470 V 2 Operating Current range 20 mA to 72 A 3 Maximum switching power 22 kVA per phase/ per IS 15884 Annex G 4 No. of poles 2 nos (one in phase and one in neutral) 5 Operation of switches Simultaneous 6 Utilization Categories UC2 or better 7 Min. number of operation 3000 (close, open each)	1. Operating Voltage Range of the load switch shall be inline with operating range of the meter i.e. -60% to + 20% of Vref i.e. 144V to 288V.	No change	clarification
104	1.4.36. Communication capabilities and software feasibilities	c) It shall be possible to reconfigure the meters for RTC, TOD Tariff, DIP (Demand Integration period), billing date, display parameters etc. through proper authentication process locally through CMRI and remotely Over the Air (OTA). Necessary keys if required for performing this reconfiguration operation should also be provided along with supply of meter lot & training to RECPDCL/JKPDD staff on how to use it free of cost. Bidder to provide this support on a later stage also on the request of RECPDCL/JKPDD without any cost implication.	All the programming parameter will as per IS 15959-Part 2 and programming will be done only through HES remotely. Programming of the meter locally through HHU is not possible due to security reason. Kindly accept the same.	No Change	clarification
105		e) The bidder shall supply software required for local (CMRI) & remote (AMI) connectivity including required training to use the software free of cost. Bidder shall provide the communication protocol / APIs for communication with meter through local (CMRI) / remote (AMI) as and when required by RECPDCL/JKPDD free of cost during life time of meter. The bidder should provide DLMS compliance for Communication with the meter at Optical port and at HES.	As meter is DLMS compliant, API shall not be required at HES level. We request you to delete the requirement of API.	No change	clarification

106		f) Bidder should also provide software for changing firmware of meters in mass and should support integration of this software with HES. Bidder should also provide base computer software (BCS) for viewing the data downloaded through HES/CMRI/laptop/HHU in separate PC/laptop. Android based/windows/linux based HHU shall be preferred. API required for converting raw file to XML. (DLMS/OBIS) should also be provided if applicable.	Firmware uploading will be done through HES, no separate software required for the same. No API required for converting the file into xml. So, kindly remove the API requirement and accept the same.	No change	clarification
107	1.5.1. Meter Body	e) Meter cover & base shall be provided with continuous and seamless Ultrasonic welding such that it is not opened without breaking the enclosure. Front cover & base shall be such that it is not possible to cut & open the meter without certainly damaging the meter body and by no means shall an attempt to reassemble would not leave physical evidence.	Meter body will be break to open design, kindly accept the same.	Ultrasonic welding/ Chemical welding is required with proper visible evidence in case of breaking.	Amendment

108	1.8.7. Display Units	The display unit shall be Pin type built-in liquid crystal display (Permanently backlit type LCD). The LCD shall be of STN (Super Twisted Nematic) construction suitable for maximum temperature withstands 650C and minimum temperature withstands -250C during normal operating condition. The LCD display shall have a wide viewing angle of 120 degrees. When the meter is not energized the electronic display need not be visible. The display shall not be affected by electrical, magnetic disturbances and ESD. The display should be readable in direct sunlight. Phase Indication should be Green LED only.	LCD will be HTN type with very wide viewing angle	No change	clarification
109	2.2. APPLICABLE STANDARDS	The equipment covered by this specification shall conform to the requirements stated in latest editions & amendments of relevant Indian/ IEC Standards and shall conform to the regulations of local statutory authorities.	Offered Meter is complied to IS 16444 part1, CBIP -325 and IS 15959- Part 2.All with latest amendments.	accepted	Amendment
110	2.4.31. Calibration	Meters shall be software calibrated at factory and modifications in calibration shall not be possible at site by any means. However, parameters like RTC, TOD tariff, DIP (billing & load survey), billing date, display parameters etc. shall be reconfigure through CMRI and remotely over the air (OTA).	Programming parameter will be as per IS 15959-Part -2. Programming of the meter will be done through HES over the air. Programming through local port is not recommended due to security concerns.	Meter should have proper log of events with snap shots. Meter should not accept any commend with out proper authentication from any Software or device.	clarification
111	2.4.32. Communication module of meter for AMI	As per clause no 1.2 (b) of IS 16444 (with latest amendment). Meter should have provision of communication module compatible with both the variant mentioned in IS 16444 (with latest amendment). This module should be able to get connected to the NAN / WAN network of service provider (RF/ 4G) of JKPDD. Meter should be able to provide required power supply to NIC card provided by communication provider recommended/approved by JKPDD. Size /form	Offer meter will compatible only NAN with RF communication technology. Kindly accept the same.	Communication technology as per IS16444	clarification
112	2.4.36. Disconnecter	The meter shall have the facility of disconnecting and re-connecting the load of the meter from the remote and by authenticated command through Laptop/HHU at site by means of a built-in contactor. This operation shall be conducted with the help of a third party software which is owned by JKPDD and in addition to the manufacturer's own software, both in RF / RF Mesh with fall back provision on Cellular (GPRS/ 3G / 4G / LTE) which can be given through optical port	Connect disconnect of integrated load switch in the meter will be done by following method: i. Remotely through HES ii. Locally through RF device through software provided by the RF canopy vendor.	Meter should have proper log of events with snap shots. Meter should not accept any commend with out proper authentication from any Software or device.	clarification
113		Table 14 - Disconnecter Specifications S.No. DESCRIPTION Requirement 1 Operating Voltage range 130 V to 470 V 2 Operating Current range 20 mA to 120 A 3 Maximum switching power 25 kVA per phase/ per IS 15884 Annex G 4 No. of poles Min. 3 nos (one in each phase R Y B) 5 Operation of switches Simultaneous 6 Utilization Categories UC1 or better 7 Min. number of operation 3000 (close, open each)	1. Operating Voltage Range of the load switch shall be inline with operating range of the meter i.e. -60% to + 20% of Vref i.e. 144V to 288V.	No change	clarification

114	2.5. Communication capabilities and software feasibilities	(c) It shall be possible to reconfigure the meters for RTC, TOD Tariff, DIP (Demand Integration period), billing date, display parameters etc. through proper authentication process locally through CMRI and remotely over the air (OTA). Necessary keys if required for performing this reconfiguration operation should also be provided along with supply of meter lot & training to JKPDD staff on how to use it free of cost. Bidder to provide this support on a later stage also on the request of JKPDD without any cost implication.	Programming parameter will be as per IS 15959-Part -2. Programming of the meter will be done through HES over the air. Programming not available locally through HHU	No change	clarification
115	2.5. Communication capabilities and software feasibilities	e) The bidder shall supply software required for local (CMRI) & remote (AMI) connectivity including required training to use the software free of cost. Bidder shall provide the communication protocol / APIs for communication with meter through local (CMRI) / remote (AMI) as and when required by JKPDD free of cost during life time of meter. The bidder should provide DLMS compliance for Communication with the meter at Optical port and at HES.	As meter is DLMS compliant, API shall not be required at HES level. We request you to delete the requirement of API.	No change	clarification
116	2.5. Communication capabilities and software feasibilities	(f) Bidder should also provide software for changing firmware of meters in mass and should support integration of this software with HES. Bidder should also provide base computer software (BCS) for viewing the data downloaded through HES/CMRI/laptop/HHU in separate PC/laptop. Android/windows/linux based HHU shall be preferred. API required for converting raw file to XML. (DLMS/OBIS) should also be provided if applicable.	Firmware uploading will be done through HES, no separate software required for the same. No API required for converting the file into xml. So, kindly remove the API requirement and accept the same.	No change	clarification
117	2.9.1. Meter Body	e) Meter cover & base shall be provided with continuous and seamless Ultrasonic welding such that it is not opened without breaking the enclosure. Front cover & base shall be such that it is not possible to cut & open the meter without certainly damaging the meter body and by no means shall an attempt to reassemble would not leave physical evidence.	Meter body will be break to open design, kindly accept the same.	Ultrasonic welding/ Chemical welding is required with proper visible evidence in case of breaking.	Amendment
118	2.12.7. Display Units	The display unit shall be Pin type built-in liquid crystal display (Permanently backlit type LCD). The LCD shall be of STN (Super Twisted Nematic) construction suitable for maximum temperature withstands 65 C degree and minimum temperature withstands 0degree C during normal operating condition. The LCD display shall have a wide viewing angle of 120 degrees. When the meter is not energized the electronic display need not be visible. The display shall not be affected by electrical, magnetic disturbances and ESD. The display should be readable in direct sunlight.	LCD will be HTN type with very wide viewing angle	No change	clarification
119	2.18. GUARANTEE	Bidder shall stand guarantee towards design, materials, workmanship & quality of process / manufacturing of items under this contract for due and intended performance of the same, as an integrated product delivered under this contract. In the event any defect is found by the purchaser up to a period of at least 60 months from the date of commissioning or 66 months from the date of last supplies made under the contract whichever is earlier, Bidder shall be liable to undertake to replace/rectify such defects at its own costs, within mutually agreed time frame, and to the entire satisfaction of the Company, failing which the purchaser will be at liberty to get it replaced/rectified at bidder's risks and costs and recover all such expenses plus the Company's own charges (@ 20% of expenses incurred), from the bidder or from the " Security cum Performance Deposit" as the case may be. Bidder shall further be responsible for 'free replacement at site' for another period of THREE years from the end of the guarantee period for any 'Latent Defects' if noticed and reported by the purchaser.	Guarantee up to a period of at least 60 months from the date of commissioning or 66 months from the date of last supplies will be provided. We request you to delete the clause of latent defect and 20% additional expenses.	No change	clarification

120	1.01.1	general	Having the required expertise of having enabled AMR / AMI functionality. The term AMR refers to automatic meter reading which can be understood to represent the extraction of data from a given meter in an automated fashion and reaching the same to a remote server through technologies like GPRS..... Hence the definition may be added as "AMR: Extraction of meter data in an automated fashion and making the data available on the Central server through GPRS / Internet or any other communication mode"	No Change. AMR definition as per industry standards.	clarification
121	1.01.2		1.01.2 The integration with existing MDMS (Oracle) has to be clearly defined as to the nature and format of the integration required and the responsibility of maintaining the oracle MDMS should not be with the system integrator The deliberation for the MDM integration and its scope is under process with ORACLE and JKPPD. A meeting on the same has been held on 27.11.2018 and the same shall be incorporated in the tender after receiving input from JKPPD.	The detailed IT Scope is enclosed separately in Amendment 2.	clarification
122			In case the System integrator is a Lead Bidder they must meet the Qualifying requirements of the System Integrator and will ensure that they are in a position to demonstrate the ability to supply the required Meters by presenting the "Manufacturers Authorisation Form" from Meter Manufacturers..... A System Integrator may supply multiple MAF from different Meter Manufacturers."	No change	clarification
123			Where running projects also should be considered along with completed projects in order to evaluate the experience of the bidder. Hence Single completed project should be changed to "Completed / running projects	Only completed projects shall be considered.	clarification
124	Page No: 21, Clause 7.ii		Page No: 21, Clause 7.ii Along with Router based RF Mesh Network, request to allow LoRa (Long Range) RF based Star Network communication.	Communication technologies as per IS 16444	clarification
125	Page No: 21, Clause 7.ii.i		a. It shall also support Uniqueid / IP based addressing	Network addressing as per IS 16444	clarification
126	Clause 1.15 Scope of Work		Request to correct 2nd row of Availability of central system/quarter to <95% instead of <99.5% and its subsequent details.	No Change.	clarification
127	clause No. 2.1 (j),	Material Dispatch Clearance Certificate (MDCC) / Dispatch Instructions (DI) for dispatch of materials from the manufacturer's works. MDCC/DI shall be issued by authorized officer of Employer.	We understand, after material inspection at Factory MDCC/DI along with consignee details will issued in the name of JKPPD's Stores and not directly to contractor's stores. We request you to kindly clarify and confirm the same.	DI will be issued by RECPDCL, while stores has to be maintained by bidder only.	clarification
128	SLA table no. 2	No payment towards non-reporting consumer Meters. Additionally, penalty at the rate of percentage by which the SLA falls below 99% shall be deducted from the monthly invoice of the vendor.	Sir, considering field practical difficulties / Network issues getting 99% of readings from total installed base is highly difficult. We request you to kindly amend clause as „Below 80% to 85% - No payment shall be made".	No change	clarification
129	clause no. 2, 2.4.31	Meters shall be software calibrated at factory and modifications in calibration shall not be possible at site by any means. However, parameters like RTC, TOD tariff, DIP (billing & load survey), billing date, display parameters etc. shall be reconfigure through CMRI and remotely over the air (OTA).	Our submission: OBIS code is not defined for display programming in IS 15959. We will provide the programming as per IS 15959 (Part-2).	OBIS codes which are not defined in IS15959 part 2 will be provided during detailed engineering design. Bidders are requested to provide separate list of such parameters.	clarification
130	clause no. 2, 2.4.32	This module should be able to get connected to the NAN / WAN network of service provider (RF/ 4G) of JKPPD. Meter should be able to provide required power supply to NIC card provided by communication provider Recommended / approved by JKPPD. Size /form factor of NIC card should be approved by JKPPD and bidder should make necessary arrangement for integration of the same.	Our submission: We understand there are no Tender Sample Meters to be submitted. In case if Tender Sample Meters are required to be submitted along with the Bid in that case we request you kindly accept tender sample as per manufacture specific RF communication card. Please confirm.	Already clarified in previous prebid query.	clarification
131	clause no. 2, 2.4.36	Each operation of the switches shall be logged by the meter as an event with date and time stamp and reading parameters. This operation should be in line with clause 11 of IS 16444 (with latest amendment), however over current tripping should be disabled by default . The cumulative no. of such operations shall also be made available	OBIS code is not defined for over current relay tripping enable/disable in IS 15959. We request you kindly provide the OBIS code or accept in line with IS 16444 clause 11.	OBIS codes which are not available in IS15959 part 2 will be provided during detailed engineering design. Bidders are requested to provide separate list of such parameters.	clarification
132	clause no. 2, 2.6	Magnetic Field	Our submission: Meter shall be either immune or run at Imax. as per magnetic field specified in CBIP 325/IS 16444.	As per CBIP TR no 325 is acceptable	clarification
133	clause no. 2, 2.6 (b)	Electrostatic Discharge (ESD).	Our submission: Meter shall be either immune or shall log the events. We understood this meets your requirements. We request you to kindly amend the clause accordingly.	As per CBIP TR no 325 is acceptable	clarification
134	clause no. 2, 2.7	Neutral Disturbance & other tampers (Page No. 439 of 478) vide which it is mentioned that: The meter shall not saturate on passage of direct current, which can cause the meter either to stop recording/ record inaccurately. DC injection shall be tested both in phase and neutral .	Our submission: DC injection test is applicable only for all the Phases for three phase meter not at Neutral. We request you kindly delete the DC injection requirement from neutral.	NO change	clarification

135	clause no. 2, 2.8	Abnormal and Tamper conditions (Page No. 440 of 478) vide which it is mentioned that: Tamper event logging along with values of intensity & snapshot of occurrences & restorations Table 15 - Tamper event details for 3 phase meters.	Our submission: Kindly note that no such device shall be used for intensity measurement. Hence we request you to kindly accept the Tamper logging in line with IS 15959	No Change	clarification
136	clause no. 2, 2.8	vide which it is mentioned that: All tamper logging thresholds values shall be configurable from remotes.	As per IS 15959 OBIS code are not defined for tamper threshold configuration. We request you kindly delete the same.	Tamper thresholds will be finalized during detailed engineering	clarification
137	clause no. 2, 2.8	vide which it is mentioned that: The meter shall record in export registers in case of reversal of all CT terminals.	Our submission: We understand that the only separate export KWH register is required when all CTs are reverse. Kindly confirm.	In normal mode cumulative energy register should increase.	clarification
138	Table-15 (Page No. 440 of 478)	Persistence time for occurrence - ESD/JAMMER = 0 Hr. 02 Min. 0 Sec (ESD).	Our submission: Meter shall be either immune or shall log the events. We understood this meets your requirements. Kindly accept the same.	As per CBIP TR no 325 is acceptable	clarification
139	Table-15	Persistence time for occurrence - Magnet = 0Hr. 10 Min. 0 Sec (MAG).	Our submission: We request you kindly accept Magnet tamper occurrences time as 1 minute instead of 10 minute.	Tamper thresholds will be finalized during detailed engineering	clarification
140	Table-15 Neutral Disturbance	Threshold value for occurrence of events - Voltage <115% of Vref Current >10% Ib AND Frequency > 47Hz OR Frequency < 52Hz.	Our submission: Kindly change 'OR' to 'AND' Since for restoration ND tamper frequency should be >47 Hz. & Less than 52 Hz.	Tamper thresholds will be finalized during detailed engineering	clarification
141	Table-15	Persistence time for restoration - Power On Off = 0 Hr. 10 Min. 0 Sec.	Our submission: Kindly note that restoration time for Power On Off should be immediate instead of 10 Minutes. Kindly amend it accordingly.	Tamper thresholds will be finalized during detailed engineering	clarification
142	clause no. 2.12.2	Instantaneous Parameters (Page No. 446 of 478) vide which it is mentioned that: Active Current – R : 00.000A Active Current – Y : 00.000A Active Current – B : 00.000A	Our submission: OBIS codes are not provided for Active Current. Hence we request you kindly delete the same from requirement.	OBIS codes which are not defined in IS15959 part 2 will be provided during detailed engineering design. Bidders are requested to provide separate list of such parameters.	clarification
143	clause no. 2.12.2	vide which it is mentioned that: Reactive Current – R : 00.000A Reactive Current – Y : 00.000A Reactive Current – B : 00.000A.	Our submission: OBIS codes are not provided for Reactive Current. Hence we request you kindly delete the same from requirement.	OBIS codes which are not defined in IS15959 part 2 will be provided during detailed engineering design. Bidders are requested to provide separate list of such parameters.	clarification
144	clause no. 2.12.2	Average Power Factor – 0.000.	Our submission: From word Average Power Factor we understand this is Three Phase Power Instant Power Factor. Kindly confirm	Avg Power factor is required	clarification
145	clause no. 2.12.2	Meter Serial No. – Instantaneous Frequency – 00.000Hz	Our submission: We request you to kindly accept with 2 decimal digits.	NO change	clarification
146	clause no. 2.12.4 Billing Parameters	In addition, Reactive MDs under different combinations will be required.	Our submission: Active (KW) & Apparent (KVA) are defined in IS 15959, we request you kindly delete the reactive MD requirement.	No change	clarification

147	clause no. 2.12.4 (g)	Mode of operation of dis-connector switch Last ten modes with date & time of switching with energy parameters (kwh, KVAh, TOD1 Kwh, TOD2 Kwh, TOD3 Kwh, TOD1 KVAh, TOD2 KVAh, TOD3 KVAh).	Our submission: Kindly note that relay connection / disconnection snapshots shall be available in line with IS 15959 Part 2.	No change	clarification
148	clause no. 2.12.5	Meter should do billing if any transaction is done.	Our submission: Kindly note as per IS 15959 Billing is required only for TOD changing. For other transaction billing is not required, We request you kindly accept inline of IS 15959.	No change	clarification
149	clause no.2.12.10 (a)	The test output device shall have constant pulse rate of (preferred value- 3200) pulse / kWh. Meter constant shall be indelibly printed on the name plate as (preferred value- 3200) imp / kWh.	Our submission: The Pulse rate shall be as per manufacture type test report. Hence we request you kindly accept the pulse rate as per manufacture specific.	Already clarified	clarification
150	clause no.2.12.10 (b)	The meter shall be provided with suitable LCD indication Rx and orange Tx communication in progress.	Our submission: We will provide suitable communication icon instead of individual Rx and Tx communication icons. Kindly accept the same.	symbols at LCD/LED, both are acceptable	clarification
151	Meter Box	indicative drawing of meter box	Our submission: We could not find any indicative drawing in your given Specs for Meter Box. We request you to kindly arrange to provide the Polycarbonate Box drawings of 2:1 and 4:1 for better understanding. If mounting the meter from different manufacturers is required in the same box then, please provide the Drawing of those meters	Indicative drawings are available.	clarification
152	Meter Box	Between Sides of the meter body and meter box (Excluding the flanges on the meter body for sealing screws)	We request you to kindly clarify and confirm whether 30 mm clearance is acceptable or not in Meter Box.	Acceptable	clarification
153	Volume-III: Section-I, Clause No.5.4	the mm meter shall be mounted with the help of MS plate such that there is clearance of 50 between the meter box and top of the cover. A minimum clearance of 50 mm shall be maintained on both sides, between meter and box.	Our submission: We shall comply the minimum 50 mm clearance in Meter Box w r t our own Meter. However to comply with other make Meters we request you kindly arrange to provide the Overall Dimensions of other make Meters for our compliance to your requirement.	Meter box suitable to bidders own meter only.	clarification
154	Amendments of Technical Specifications for Meter Box clause no. 1.1	The Meter box shall be pole-mounted. Whereas in clause no. 1.4 (ix) of Amendments of Technical Specifications for Meter Box (Page No. 3 of 3) where it is mentioned that: 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.	Our submission: Both are contradictory requirements; we request you to kindly delete the requirement clause no.1.4 (ix). Since the Meter box is to be mounted on pole. Kindly confirm.	Meter box installation would be as needed in field conditions.	clarification
155	clause no. 1.4 (xi)	A provision in form of depression should be provided on the meter box cover to download the meter data from the meter using the CMRI probe without opening the meter box cover. This shall be provided in such a way that the optical probe of the CMRI cable can be placed on top of the meter box cover in a suitable depression in the meter box cover, which is aligned suitably with the meter optical port. The meter box cover shall have provision of sealing this depression. The depression so provided should be covered so that there is no physical access to the meter optical port while using this depression.	Our submission: Please delete the above clause. Since, as per your requirement of mounting the different make of Meters with different mounting dimensions, it will be very difficult to fix the Meter box depression alignment with Meter. Kindly confirm.	RF based CMRI shall be provided by the bidder to download meter data remotely without physical connection with meter.	clarification
156	clause no. 24.1 (k) of Vol. I, Section II, NIT	Technically qualified bidders shall carry out PoC for 20 single phase consumers in areas of JKPDD for any location within the city as specified by JKPDD for showcasing their GPRS & RF network, HES and MDMS solution. Checklist for the same is attached below	Proof of Concept: Technically qualified bidders shall carry out PoC for 20 single phase consumers in areas of JKPDD for any location within the city as specified by JKPDD for showcasing their RF network and HES solution. Checklist for the same is attached below:	No change	clarification
157	Specification of DCU/Router/gateway			Router/ Access Points/gateway/DCU shall have RF Mesh Communication for NAN and 4G (with fall back on 3G/2G) & Ethernet port (MPLS/ Optic Fibre) for WAN connectivity.	Amendment
158	Appendix-1: TERMS AND PROCEDURES OF PAYMENT			Method of payment: All invoices/claims shall be raised by the bidder in the name of J&K Power Development Department (JKPDD)(owner) C/O RECPDCL. All the payment shall be released directly to the bidder by RECPDCL within 30 days of submission of	Amendment
159	1.4.5. Operating Voltage(mentioned vide Amendment 1)	Meter shall be operational with required accuracy from 0.4 Vref to 1.2 Vref. However, meter shall withstand the maximum system Voltage of 440V (for minimum 5 min)		The voltage rating of the meters to be considered as per IS standard. However, the communication of DCU and meter NIC modules to be operational at voltage of 0.4 Vref considering technical feasibility of the same.	Amendment