

**Pre-Bid Clarification-1**

**Dated:31.03.2017**

S. No.	Vendor	Item	Page No. / Clause No.	Technical Specifications as per RFP	Queries / Modifications / Changes Suggested	Clarification
1	M/s Siemens	C. Scope of work	Page no. 11	C. Scope of work Development of communication interface module for other field equipment's including Smart meter data flows from meter to MDMS as per frequency defined in SLA.	Please elaborate this requirements. We understand that HES will be interfaced with MDMS system and provide the data in MDM specific CIM XML format. Please confirm.	Data will have seamless flow from End point to HES then MDMS will be intrgrated, So data flow has to take place from End Point to MDMS.
2	M/s Siemens	C. Scope of work	Page no. 11	C. Scope of work Selected bidder will propose & establish the solution initially for approx. 30,000 consumers but it should be horizontally & vertically scalable to cover the entire utility consumers i.e. approx. 2.0 Lakhs.	We understand that the CED will procure MDM license for 30,000 nos. consumers and the system to be sized for 30,000 nos. only.	As per Scope of work Selected bidder will propose & establish the solution initially for approx. 30,000 consumers but it should be horizontally & vertically scalable to cover the entire utility consumers i.e. approx. 2.0 Lakhs to be complied strictly by Vendor . Vendor to provide cost of additional4 buckets of 5000 licences along with cost of current 30000 customers
2	M/s Siemens	3.7. Functional Requirements	Page no. 92	3.7. Functional Requirements Bidder to provide the sizing of necessary hardware and software required to implement AMI for 30,000 meters scalable to 2,00,000 meters. Front end devices should be sized for 30,000 meters which is scalable to 2,00,000 meters and backend IT systems should be sized to 2,00,000 meters so that in future no additional cost to be incurred for backend IT Infra.	Please confirm our understandin wether the bidder has to provide the IT HW & SW for 2,00,000 meters or 30,000 meters.	Front end devices should be sized for 30,000 meters which is scalable to 2,00,000 meters and backend IT systems should be sized to 2,00,000 meters so that in future no additional cost to be incurred for backend IT Infra
3	M/s Siemens	3.7.2. List of preferable hardware / software is listed below for reference.	Page no. 92	3.7.2. List of preferable hardware / software is listed below for reference.	We request you to please replace MDAS to HES.	May be read as MDAS/HES
3	M/s Siemens	3.7. Functional Requirements Meter data management (MDM)	Page no. 92	3.7. Functional Requirements Meter data management (MDM) capable of processing raw data, building of desired analytics like giving demand response signal, taking control / programming actions based on pre-set logic, interface with billing software being used by utility.	MDM process, store and provide process data to various systems such as analytics solution. Please advise whether bidder has to provide the separate analytics solution along with MDM or it is only integration with 3rd party proposed analytics solution. Analytics is separate application which integrate with MDMS system	Bidder to provide Meter data analytical tool as a part of MDMS solution.
4	M/s Siemens	HES	Page no. 93	3.7.18. The HES shall be flexible and on open standard so that it can communicate with third party communication devices. The HES shall support web based multiple data base support software and also support standard integration Multi-also support standard integration Multi-speak and CIM IEC 61968 for third party MDMS.	Please elaborate this requirements.	Clause is self-explanatory

4	M/s Siemens	4. METER DATA MANAGEMENT SYSTEM (MDMS) 4.1. Functional Modules Revenue protection module.	Page no. 96	4. METER DATA MANAGEMENT SYSTEM (MDMS) 4.1. Functional Modules Revenue protection module.	Please elaborate the requirement in details. The bidder has to provide standard Revenue protection module /application or MDM integration with existing or 3rd party revenue protection module of utility. Bidder is not expected to submit revenue protection module.Please confirm	Bidder has to provide revenue protection module.
5	M/s Siemens	4. METER DATA MANAGEMENT SYSTEM (MDMS) 4.1. Functional Modules	Page no. 96	4. METER DATA MANAGEMENT SYSTEM (MDMS) 4.1. Functional Modules Analytical module to handle logics for handling data from different sources to device business logics.	Please elaborate the requirement in details. Bidder has to provide the analytical module or MDM meter data to be provided to utility's existing or 3rd party Analytics? Bidder is not expected to submit analytics module.Please confirm	Bidder has to provide revenue protection module.
5	M/s Siemens	4. METER DATA MANAGEMENT SYSTEM (MDMS) 4.1. Functional Modules Pre-payment Module / Support - Shall have the ability to properly account for prepaid metering when calculating billing determinants and sending those to billing and other systems.	Page no. 96	Bidder's understanding is that MDM will provide Meter reads data to an existing Prepayment application or to be procured 3rd party Pre-Payment solution by utility. Bidder is not expected to submit Pre-payment features as part of the MDM RFP. Kindly confirm? Please also confirm what will be the expected frequency of pinging the Prepayment accounts? Our recommendation is to collect data for 30k or 2 lakhs meters 4 to 6 times a day in batches instead of Once at midnight or even at too often intervals. Exceptional cases like Move-in/Move-out of disconnection requests and the like can be handled at real-time.		Bidder has to provide Pre-payment Module or Shall have the ability to properly account for prepaid metering
6	M/s Siemens	4. METER DATA MANAGEMENT SYSTEM (MDMS) 4.1. Functional Modules E VCHARGING MODULE	Page no. 96	Bidder's understanding is that MDM will provide Meter reads data to an existing EV charging module software application or to be procured 3rd party EV charging solution by utility. Bidder is not expected to submit EV charging module/application as part of the MDM RFP. Kindly confirm?		MDM should Support E VCHARGING MODULE
6	M/s Siemens	4. METER DATA MANAGEMENT SYSTEM (MDMS) 4.1. Functional Modules Universal Calculation Engine with Mathematical, Logical and Statical Operators	Page no. 96	Please elaborate the requirement in details. MDM should provide meter data to analytics or ETL tools for this requirement? We understand that bidder is not expected to submit analytics solution as part of the MDM RFP.		MDMS should support Universal Calculation Engine with Mathematical, Logical and Statical Operators ex-the details of the data received and
7	M/s Siemens	Integration for Real time BI system & Standard ETL Process / Tools	Page no. 96	We understand that MDM to provide the meter data to utilities BI & ETL tools. Please confirm		MDM to generate reports

7	M/s Siemens		Page no.	This RFP will include supply of all above mentioned modules along with technical specification of required hardware capable to run the supplied software for 50,000 (Pilot Phase) and scalable to 2,00,000 endpoints with a data storage of 2 years for maximum of 16 channels 15/30 Minute of interval data along with other type of all meter data.	<p>Please confirm whether 30000 or 50000 endpoints to be considered.</p> <p>Please provide following information for 50000 and 2 lakhs endpoints for preparation server &amp; storage sizing of MDM system</p> <p>1. Breakup of number of channels / How many register and /or interval channels (15/30/60 min) will be required for smart meters, legacy meters (manual reads) and MDAS/AMR meters.</p> <p>2. Number of meters (non AMR/AMR/AMI) 3. Provide the roll-out of schedule/how many smart meters will be rolled out each year.</p> <p>4. Register Read Frequency /How often are we going to receive register data through HES for smart meters/legacy meters/AMR meters, (i.e. once/day midnight read or multiple times)?</p> <p>5. Interval Read Frequency / How often are we going to receive Interval data through HES for smart meters/legacy meters/AMR meters i.e. once/day or multiple times (i.e. how many batch of meter data per day i.e. 4 hours/6 hours/12 hours?)</p> <p>6. Processing Window / How many hours do we have to process the data from the time it is sent to us until it needs to be ready for billing</p> <p>7. Data Retention / How long do we need to keep the data available, on-line or offline ? (E.g. Generic Assumption: 2 Years</p> <p>8. Percentage of daily SDPs Changes / What</p>	<p>30000 End Points to be considered in field.</p> <p>1. 16 channels for 30 min interval to be considered for Smart Meters. ( However 5% metes should be considered at Net Meters)</p> <p>2. No non AMI customer will be there.</p> <p>3. Vendor has to roll out all 30000 meters in first year of PO.</p> <p>4. Initially once per day, however system should be capable to download data once every 4 hours and once in 2hours for pre-paid meters.</p> <p>5. There will be only Smart Meters and has to be read at 4 hours interval (Incremental Data).</p> <p>6. Any data received at HES should be sent to MDMS with in 60 min of receiving and MDMS should be able to process and forward required data to other systems with in 1 hours.</p> <p>7. Two year recent data should be retained in MDMS and previous 3 years data should be kept on SAN storage.</p> <p>8. Point to be clarified by Bidder</p>
8	M/s Siemens		Page no. 96	Bidder to complete 100% installation and integration of MDMS within one year from date of PO. Bidder has to provide perpetual license along with warranty from the date of project acceptance to 12 months after Go-Live (CED Acceptance). On expiry of Warranty bidder to provide FMS for 36 months.	<p>Please confirm our understanding whether bidder has to offer 12 months of warranty as maintenance support other than 36 months.</p> <p>OEM doesn't offer 12 months of warranty.</p>	As per RFP (12 Month Post Go Live warranty + 36 Month AMC Support)
8	M/s Siemens		Page no. 97	4.2.18. The MDMS shall have the ability to process the meter register read data / Interval data for calculating the billing determinant within one hour of receiving the data from HES. Same should be uploaded in Billing Engine with in this one hour.	Please elaborate the requirement in detail	Any data received at HES should be sent to MDMS with in 60 min of receiving and MDMS should be able to process and forward required data to other systems with in 1 hours.
9	M/s Siemens		Page no. 97	4.2.20. MDMS should have capability to retain data of 2 million endpoints for last 2 years (All type meter data).	<p>Please confirm whether data retention for 30000 or 50,000 or 2,00,000 or 2 million endpoints for 2 years.</p> <p>Kindly suggest if the data for 2 years has to be kept in Online/fast access state or Offline/less active/archived state?</p>	2 Lacs
9	M/s Siemens		Page no. 99	4.2.44. The MDMS shall be capable of running under a virtualized environment.	We understand that apart from TEST/DEV/QA environment, can bidder proposed MDM running under virtualised Production /disaster recovery environment.	<p>As per Scope of work Selected bidder will propose &amp; establish the solution initially for approx. 30,000 consumers but it should be horizontally &amp; vertically scalable to cover the entire utility consumers i.e. approx. 2.0 Lakhs to be complied strictly by Vendor .</p> <p>Vendor to provide cost of additional4 buckets of 5000 licences along with cost of current 30000 customers</p>

10	M/s Siemens		Page no. 100	4.2.46. The MDMS shall align to Indian Guidelines for Smart Grid Cyber Security.	Please elaborate the requirement in detail. MDMS should support global guidelines for cyber security	Solution Provider has to ensure compliance as per Indian Guidelines for Smart Grid Cyber Security and must be adhere with BIS-16335 standard and section 72(A) of Indian IT Act
10	M/s Siemens		Page no. 100	4.2.50. The MDMS shall provide a customer portal offering which provides the following functions: toggle between interval, hourly, daily and monthly usage consumers, i.e. neighbourhoods or with the entire utility population totals and bills for past 2 years based bill inserts. keep customers aware of real time energy use and outages, and alert them to relevant rebates and other programs that can help lower their bill. insights based on building square footage property use type's age of HVAC and water heating appliances. Details of appliance can be captured. messaging to customers based on property profiles and integrates with existing marketing automation platforms.	Bidder should provide the standard consumer portal along with MDM or MDM to be integrated with utilites existing consumer portal by providing the meter data through web services? Please confirm.	Standard Consumer Portal to be provided, However it should also be integrable with Existing Portal if CED in future.
11	M/s Siemens	4.3. Additional feature: Prepaid Functionality -	Page no. 100	4.3. Additional feature: Prepaid Functionality -	Is there any existing Prepayment system? If yes, what make? We understand that MDM should interfaced with utility prepayment system	MDMS should be capable of integrating with third party pre-paid module in future.
11	M/s Cyanconnode	Page 12, Scope	-	17. The bidder shall confirm that offered RF canopy solution and associated network elements including NIC should be tuneable over a frequency range from kHz to GHz so that in future if allocated bandwidth is increased or if new frequency band is allocated to Power Utilities by statutory authorities, then the offered communication hardware which will be installed at site or inside the Smart meter in the form of a NIC, would not become obsolete and shall be capable to interoperate with any new environment	The offered is as per present requirement of RFP as per Indian standard and if any new technology comes in futures this cannot be made compatible with the new technology.	Fixed frequency to be used.
12	M/s Cyanconnode	Page 11, scope of work	-	4. Development of communication interface module for other field equipment's including Smart meter data flows from meter to MDMS as per frequency defined in SLA.	Which type of other field equipment's are here referred? Please clarify/confirm.	Other field equipment Ex DA points ,Solar
12	M/s Cyanconnode	Page 11, scope of work	-	13. The bidder shall confirm that, the bandwidth made available by the Ministry of communications for this purpose .....	Here it is assumed,bandwidth means RF Mesh ISM band 865-867 MHz	865-867 MHz with +/- 2 MHz ot Licence Band with 15 years of licnece as per RFP
13	M/s Cyanconnode	Page 12, scope of work	-	16. Bidder to also indicate timeframe for developing solution with meter and other application equipment's / OEM's. As per CED, the desired timeline shall not exceed 4 months	We understand it is only for meter integration as per IS 16444. Please confirm.	Bidder to follow IS 16444, if any parameters is not available in IS16444 then same to be taken from IEC relevent standard. If still any paramter is not mapped then please refer back. Same will be decided during detailed engineering.
13	M/s Cyanconnode	Page 12, scope of work	-	17. The bidder shall confirm that offered RF canopy solution and associated network elements including NIC should be tunable over a frequency range from kHz to GHz so that in future if allocated bandwidth is increased or if new frequency band is allocated to Power Utilities by statutory authorities, then the offered communication hardware which will be installed at site or inside the Smart meter in the form of a NIC	Exisiting RF NIC will be as per available ISM license free frequency bandwidth only. Kindly amend/delete this clause.	Fixed frequency to be used.

14	M/s Cyanconnode	Page 12, scope of work	-	18. The bidder shall also ensure that there is adequate provision for communicating with "In Home Display Units (IHD)" as per IS16444 & subsequent standards.	We understand "IHD" is representing the consumer interface may be through mobile apps or consumer portal via MDMS. If RECPDCL/CED looking for hardware IHD, please add in the BOQ/Price schedule.	IHD should not be considered.
14	M/s Cyanconnode	Page 92, 3. Head End System	-	3.7.9. Revenue Integrity Monitoring The head end system shall support revenue integrity monitoring across the entire meter/customer population including, but not limited to, meter tamper, energy diversion, site diagnostics, and load diagnostics.	Kindly explain the meaning of Revenue Integrity Monitoring.	It refers to Revenue Protection Module.
15	M/s Cyanconnode	Page 93, 3. Head End System	-	3.7.14. Pre-Payment/Prepaid Functions The head end system should support pre-payment capabilities.	Prepayment function shall be managed via MDMS system, price signals can be sent via HES communication network to meter/consumer.	Agreed
15	M/s Cyanconnode	Page 93, 3. Head End System	-	3.7.15. The HES system should comply with the communication protocol as defined in IS standard 16444 and IS 15959 (for data exchange for electricity meter reading tariff and load control) including latest amendments.	We understand communication network as per IS16444 and IEEE 802.15.4g and Data exchange protocol as per IS15959-Part 1 and Part2. Please confirm.	HES should comply both IS Standard 16444 and IS15959
16	M/s Cyanconnode	Page 93, 3. Head End System	-	3.7.19. Data Validation and Exception Handling	Data Validation and Exception handling shall be part of MDMS and not of HES. Please amend.	Noted, however HES to ensure that data is coming from authentic source.
16	M/s L&T	Technical Specifications Section 2.1 Single Phase Whole Current Meters	2.1.4.32. Communication module of meter for AMI	As per clause no 1.2 (b) of IS 16444 PART-1. Meter should have provision of communication module compatible with both the variant mentioned in IS 16444 PART-1.	IS 16444 defines 2 variants - RF/PLC and GPRS/Ethernet. The smart meter can support either technology based on the requirement frozen by the utility. Clarity is required on the type of communication required for development of product.	RF mode of Communication.
17	M/s L&T	Technical Specifications Section 2.1 Single Phase Whole Current Meters	2.1.4.36. Disconnecter	Each operation of the switches shall be logged by the meter as an event with date and time stamp and reading parameters.	Reading parameters to be defined.	C KWH, C KVAh, TOD wise KWh and KVAh for all time slots as per TOD tariff.
17	M/s L&T	Technical Specifications Section 2.1 Single Phase Whole Current Meters	2.1.4.37. 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.	Please provide clarity on firmware to be changed.	Pre paid to post paid, Net Meter and vice-versa
18	M/s L&T	Technical Specifications Section 2.1 Single Phase Whole Current Meters	2.1.4.37. Communication capabilities and software feasibilities	g) For purpose of exercising control, like outage management, the meter should send abnormalities at the consumers' end like Power failure (Last Gasp), Power Restoration (First Breath). Additional exceptional events should also be communicated to HES by meter immediately after the occurrence through RF / RF Mesh.	Please clarify on immediate requirement - network latency should be taken into account.	Clause is self-explanatory
18	M/s L&T	Technical Specifications Section 2.1 Single Phase Whole Current Meters	2.1.19. Name Plate and Marking	(u) Communication Technology is IHD supported (with carrier frequency)	IHD is not in scope - request to delete the same	IHD should not be considered.
19	M/s L&T	Technical Specifications Section 2.1 Single Phase Whole Current Meters	2.1.20.1. Type Test	(a) All tests as defined in IS 16444 Part-1: 2015 /IS 13779:1999 / IS15959 Part-2: 2016.	IS 16444 and IS 15959 Part 2 do not have Govt. approved labs for type testing yet, which please note.	Smart meters shall be type tested as per IS 16444 (latest version) in a third party independent lab (as per AMI functionality document of CEA Aug'2016)
19	M/s L&T	Technical Specifications Section 2.2 Three Phase Whole Current Meters	2.2.4.32. Communication module of meter for AMI	As per clause no 1.2 (b) of IS 16444 PART-1. Meter should have provision of communication module compatible with both the variant mentioned in IS 16444 PART-1.	IS 16444 defines 2 variants - RF/PLC and GPRS/Ethernet. The smart meter can support either technology based on the requirement frozen by the utility. Clarity is required on the type of communication required for development of product.	RF mode of Communication.
20	M/s L&T	Technical Specifications Section 2.2 Three Phase Whole Current Meters	2.2.4.36. Disconnecter	Each operation of the switches shall be logged by the meter as an event with date and time stamp and reading parameters.	Reading parameters to be defined.	C KWH, C KVAh, TOD wise KWh and KVAh for all time slots as per TOD tariff.
20	M/s L&T	Technical Specifications Section 2.2 Three Phase Whole Current Meters	2.2.5. 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.	Please provide clarity on firmware to be changed.	Pre paid to post paid, Net Meter and vice-versa

21	M/s L&T	Technical Specifications Section 2.2 Three Phase Whole Current Meters	2.2.5. Communication capabilities and software feasibilities	g) For purpose of exercising control, like outage management, the meter should send abnormalities at the consumers' end like Power failure (Last Gasp), Power Restoration (First Breath). Additional exceptional events should also be communicated to HES by meter immediately after the occurrence through RF / RF Mesh.	Please clarify on immediate requirement - network latency should be taken into account.	Additional Events will be decided during detailed engineering.
21	M/s L&T	Technical Specifications Section 2.2 Three Phase Whole Current Meters	2.2.5. Communication capabilities and software feasibilities	n) There should not be any reservation of bidder on a particular frequency band to be used for communication.	The bidder will be able to provide a solution based on a specific frequency; hence, the frequency will not be able to be changed.	865-867 MHz with +/- 2 MHz of Licence Band with 15 years of licenece as per RFP
22	M/s L&T	Technical Specifications Section 2.2 Three Phase Whole Current Meters	2.2.25. NAME PLATE AND MARKING	21. Communication Technology is IHD supported (with carrier frequency)	IHD is not in scope - request to delete the same	IHD should not be considered.
22	M/s L&T	Technical Specifications Section 2.3. Three Phase CT Operated Smart Meters	2.3.6. ABNORMAL AND TAMPER CONDITIONS	2.3.6.6. Minimum 08 DI & 02 DO required (Extendable up to 12 each type for future requirement) to communicate with DT/Breaker/Isolators/FPI, sensors etc.	DI and DO are not provided.	5DI and 1 DO are required.
23	M/s L&T	Technical Specifications Section 2.3. Three Phase CT Operated Smart Meters	2.3.16.2. Communication LED	The meter shall be provided with Green color LED for RxD and orange color LED for TxD communication in progress.	LCD indication will be provided.	agreed
23	M/s L&T	Technical Specifications Section 2.3. Three Phase CT Operated Smart Meters	2.3.18. Name plate and Marking	xx. Communication Technology is IHD supported (with carrier frequency)	IHD is not in scope - request to delete the same	IHD should not be considered.
24	M/s L&T	Generic Technical Queries	Page 12 Point 17	NIC shall be tuneable over a frequency range from kHz to GHz	Its not possible since the antenna design is linked with frequency.	865-867 MHz with +/- 2 MHz of Licence Band with 15 years of licenece as per RFP
24	M/s L&T	Generic Technical Queries	Page 96, Function Module 4.1	The Demand Response Management.	Whether the MDM shall support Demand Response?? If yes who will initiate the DR events	This is Futuristic requiremet, System should be able to cater to it in future.
25	M/s L&T	Generic Technical Queries	Page 96, Function Module 4.1	EV Charging Module	What is expected from this module at MDM level???	This is Futuristic requiremet, System should be able to cater to it in future.
25	M/s L&T	Generic Technical Queries	4.2.20	MDMS should have capability to retain data of 2 million endpoints for last 2 years (All type meter data).	Its is 2 Million or 2 Lacs please clarify??	2 Lacs
26	M/s L&T	Generic Technical Queries	Page 146	BOQ	Licensed RF based solution is mentioned in the tender, but only DCU is in the BOQ, Please clarify????	RF network components BOQ to be provided as per solution proposed for 30000 customers ( including no of DCUs)
26	M/s L&T	Generic Technical Queries	Page 147	BOQ	BOQ has SAN for MDMS, SCADA & DTMU. Please provide the estai,mate of storage & storage duration is applicable for MDMS	Any data received at HES should be sent to MDMS with in 60 min of receiving and MDMS should be able to process and forward required data to other systems with in 1 hours.
27	M/s Landis+Gyr	General Query	C. Scope of work	17. The bidder shall confirm that offered RF canopy solution and associated network elements including NIC should be tuneable over a frequency range from kHz to GHz so that in future if allocated bandwidth is increased or if new frequency band is allocated to Power Utilities by statutory authorities, then the offered communication hardware which will be installed at site or inside the Smart meter in the form of a NIC, would not become obsolete and shall be capable to interoperate with any new environment.	Offered NIC card/ Router/ Collector is not tune-able to any other frequency except 865-867 MHz	865-867 MHz with +/- 2 MHz of Licence Band with 15 years of licenece as per RFP

27	M/s Landis+Gyr	General Query	C. Scope of work	41. It shall be the responsibility of solution provider to resolve any communication and IT Infrastructure related issues of meters and IT Infra of different OEMs. Failure Rate: Less than 0.75% failure rate per annum for all network communications equipment over the required operating life (i.e. 15 years) of the system. (Failure is defined as any occurrence when the equipment is not functioning per design specification.)	Operating life cannot be 15 years	Life of system should be 10 years, however bidder should provide support to replace the equipment with compatible equipment till 15 years from the date of post go live of project.
28	M/s Landis+Gyr	General Query	C. Scope of work	42. Less than 1.5% failure rate per annum for all network communications equipment over the extended operating life of the system. (Operating life and extended life of the equipment is typically defined by contract between the utility and the communication equipment supplier.	What is extended operating life?	Operating life beyond warranty period
28	M/s Landis+Gyr	General Query	C. Scope of work	46 e. If the proposed solution operates in licensed frequency band, bidder to attain the required license on behalf of CED for entire geographical area of CED for 15 years. Cost of procuring license and license fee for next 15 years will be in the scope of bidder.	Will the cost be a part of BoQ?	Yes
29	M/s Landis+Gyr	General Query	2.3.6. ABNORMAL AND TAMPER CONDITIONS	2.3.6.6. Minimum 08 DI & 02 DO required (Extendable up to 12 each type for future requirement) to communicate with DT/Breaker/Isolators/FPI, sensors etc.	Please delete requirement of DI/DO	5DI and 1 DO is required
29	M/s Landis+Gyr	General Query	F. General scope of work	10. Selected Bidder to setup a Project Management Office in CED, Chandigarh within 30 days from the date of award of contract....	Will the Office space be provided by CED?	No
30	M/s Landis+Gyr	General Query	GCC	12. RECPDCL reserves the right to increase or decrease the RC quantity (on same rate and terms and conditions) by another $\pm 20\%$ if required	How it can be correlated with NIC requirements for 200k consumers?	Here it is specific to 30000 $\pm 20\%$ .
30	M/s Landis+Gyr	1 Phase Meter	Calibration, 2.1.4.31.	However, parameters like RTC, TOD.....configure through CMRI or remote through OTA	Details of Field configurable parameters and its workflow need to be clarified	Will be defined during detailed engineering
31	M/s Landis+Gyr	1 Phase Meter	Communication capabilities and software feasibilities, 2.1.4.37.	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.	Standalone meter will be immune to known 35kV ESD/Jammer/HV voltage influence devices. Need to decide the acceptability criteria	Noted, Please specify limit in your bid. Meter should log after which it is not immune.
31	M/s Landis+Gyr	1 Phase Meter	Communication capabilities and software feasibilities, 2.1.4.37.	Meter once powered up with NIC card should be self detected by RF network and its basic name plate details, instantaneous & billing parameters are transferred to HES automatically.	As per the functionality of AMI system, Meter registers itself at HES, once it is installed in field. After successful registration, it starts sending data (different profiles) to HES based on defined frequency of data push. This will be discussed and be developed as per the agreement with Utility	Agreed
32	M/s Landis+Gyr	1 Phase Meter	Neutral disturbance and other tampers, 2.1.4.39.	Current Mismatch tamper	Need clarity on tamper logic for Current mismatch tamper	Already provided under Annexure-1
32	M/s Landis+Gyr	1 Phase Meter	Billing parameters, 2.1.11.4	Status flags	Please delete status flag from billing parameters	Status flag from billing parameters to be considered under General Parameter
33	M/s Landis+Gyr	1 Phase Meter	Output Device, 2.1.17	(d) Load switch LCD indicator	Please add the option of LED/LCD indicator for disconnection	(d) Load switch LCD indicator(LED/LCD)
33	M/s Landis+Gyr	3 Phase Meter	Billing parameters, 2.2.16.4.	(e)-x- Net Active energy	Please share the computation logic for Net Active Energy	Algebraic Sum of Import and Export with export as - sign.
34	M/s Landis+Gyr	3 Phase Meter	Packing, 2.2.31	(c) On back of RTC....know about meter	Need further details of utility expectation with this clause	Routine Test Certificate (RTC) document will be handed over to consumer and in that case a document to educate the consumer will help consumer.
34	M/s Landis+Gyr	3 Phase Meter	General Technical Requirements, 2.3.4.	Terminal Hole dia- 25mm	Please amend it to 15mm as it is sufficient for LTCT current carrying capacity requirements	Noted for LTCT, however for Whole current Please refer RFP

35	M/s Landis+Gyr	3 Phase Meter	2.3.5.15.3, 2.3.5	Meter and IHD through RF	Please provide clarificaion on use case expectation from this clause	IHD should not be considered.
35	M/s Landis+Gyr	3 Phase Meter	2.3.6.6, 2.3.6	DI/DO- 8 DI and 2 DO	Please provide the utility expectation for the said clause. Also please accept 5DI and 1 DO	5DI and 1 DO are required.
36	M/s Genus	-	SECTION-I TENDER INFORMATION Name of the assignment Page no 3	Rate Contract for Supply, Implementation and Maintenance of smart meters and AMI communication system for smart grid pilot project at CED as per NSGM guide lines.	Kindly specify rate contract time period or is it only for this particular Tender? Please clarify whether communication module cost should quoted separately. As per price schedule it is for 1 Year from the date of issued of P O, confirm please.	Price Validity should be One year from the Date of Award of Contract.
36	M/s Genus	-	SECTION IV INSTRUCTIONS TO BIDDERS Scope of work (35) Page no 13	CED reserve the right to review integration mechanism along with prices of NIC card With Smart meters after every 2 years.		This clause stands good for this tender only, However if the NIC card is purchased in future during AMC, same will be negotiated as per market conditions prevailing that time. Since NIC card is network component so its warranty will be for 10 years.
37	M/s Genus	-	Form-III Financial Bid (To be submitted through online mode only) PROFORMA OF SCHEDULE OF RATES Page no 146	The rates are invited for entering into an RC valid for 1 year from the date of issue of contract		Price Validity should be One year from the Date of Award of Contract.
37	M/s Genus	-	SECTION-I TENDER INFORMATION Name of the assignment	The EMD (Earnest Money Deposit) is to be submitted by all the participating bidders in the form of demand draft.	We understand EMD in the form of BG is also acceptable. Kindly confirm once.	Bidder can submit EMD either in DD or in BG form.
38	M/s Genus	-	SECTION-III INSTRUCTIONS TO BIDDERS (13)	EMD of Rs. 6,93,800/- in form of DD or Bank Guarantee may be drawn from ....		Bidder can submit EMD either in DD or in BG form.
38	M/s Genus	-	C. Scope of work (15) page no. 12	It would be the responsibility of the bidder to integrate their NIC module with various meter OEM's in India working with CED (like Genus, Secure, L+G, L&T, Elster).	Subject requirement clause is not understood, kindly elaborate the requirement with example.	Since bidder is providing end to end solution so integration of meter with NIC will be in scope of bidder. If in future any new meter vendor comes, bidder will have to integrate NIC card with new meter vendors ( maximum up to 3 vendors other than who have supplied meters in begining) without any cost implecation up to a period of 15 years from the date of Award of contract.
39	M/s Genus	-	SECTION-III INSTRUCTIONS TO BIDDERS Cl. no. 16 page no. 12	As per CED, the desired timeline shall not exceed 4 months.		12 Month from the date of Award of contract
39	M/s Genus	-	F. General scope of work (1) page no. 117	Selected Bidder to establish proposed Advanced Metering Infrastructure System in Project Area i.e. operation subdivision no. 5 of CED within 6 months from the award of contract.	These clauses are contradictory. Considering practical field difficulties we request time lines should be minimum 6 months, request you to extend time lines accordingly	12 Month from the date of Award of contract



40	M/s Genus	-	TIMELINES FOR DELIVERY AND INSTALLATION page no. 128	The bidder is expected to complete the Enterprise Wide - implementation of AMI system on all connections within 6 months from the date of award of contract by the RECPDCL.		12 Month from the date of Award of contract
40	M/s Genus	-	SECTION IV SCOPE OF WORK (19) page no. 12	Interoperability for AMI shall be achieved through incorporation of the communication modules (NICs) of the technology service provider inside the Smart meters of various	Kindly clarify whether Bidder can use their own communication interface / device? We propose our own 6LoWPAN communication	It should be interoperable.
41	M/s Genus	-	SECTION-IV Scope of work 46 .a Page no. 15	Equipment Type Approval (ETA) is to be obtained for communication modules as per Department of Telecom, Government of India requirements.	There is no authority in India to give such approval. Hence this clause should be deleted.	WPC is the Competent Authority
41	M/s Genus	-	Single phase – 2.1.4.4 Page no . 22	Vref = 230 V □ 1 %	Please amend as 230/240V.	PI. Refer Amendment
42	M/s Genus	-	Single phase – 2.1.4.26 Page no . 24	Sleep Mode Meter shall not go in sleep mode. Display should not be 'off' at any point of time	We understand that this clause is for Power ON condition. In power off condition display can be enable by pressing push button. Kindly confirm.	Agreed
42	M/s Genus	-	Single phase – 2.1.4.37-d Page no . 25	Optical Communication port - The complete data shall be downloaded within 2 minutes.	The complete data depends on data size. Hence the time should be minimum 5 minutes. Kindly amend the clause.	PI. Refer Amendment
43	M/s Genus	-	Single phase – 2.1.4.39 Page no . 27	Neutral Disturbance & other tampers	We here by suggest to add below condition in temper events. This will remove most of tamper condition like singe wire operation, input /output side interchange etc. If any of phase & neutral from input side is missing , meter should be in power off condition & both relay should be in disconnected mode .	Agreed provided complying with listed temper conditions in NIT
43	M/s Genus	-	Three phase 20-100A – 2.2.4.4 Page no . 45	Vref = 230 V □ 1 %	Please amend as 230/240V.	PI. Refer Amendment
44	M/s Genus	-	Three phase 20-100A – 2.2.4.26 Page no . 47	Sleep Mode Meter shall not go in sleep mode. Display should not be 'off' at any point of time	We understand that this clause is for Power ON condition. In power off condition display can be enable by pressing push button. Kindly confirm.	noted
44	M/s Genus	-	Three phase 20- 100A – 2.2.5-d Page no . 48	Optical Communication port - The complete data shall be downloaded within 2 minutes.	The complete data depends on data size. Hence the time should be minimum 5 minutes. Kindly amend the clause.	PI. Refer Amendment
45	M/s Genus	-	Three phase 20- 100A – 2.2.5-f Page no . 48	Android based or windows based HHU shall be preferred.	Request to add Linux based also.	Noted
45	M/s Genus	-	Three phase 20-100A – 2.2.22 Page no . 62	Push button :- Note: These Display parameters should have provision for inserting 24 additional parameters in display for future requirement.	Please confirm the details of 24 parameters.	These will be TOD readings for future use, if TOD tariff is implemented.
46	M/s Genus	-	Three phase 20-100A – 2.2.23 Page no . 62	Communication LCD indicator The meter shall be provided with suitable LCD indication RxD and orange TxD communication in progress.	Please amend as "The meter shall be provided with suitable LCD indication for communication in progress". The same is mentioned in single phase specification.	Agreed
46	M/s Genus	-	Three phase DT meter- 2.3.4 Page no. 71	Vref = 230 V □ 1 %	Please amend as 230/240V.	PI. Refer Amendment
47	M/s Genus	-	Three phase DT meter- 4.35 Page no. 74	Harmonics – The meter should record & display THDV and THDI as percentage. It should also indicate individual harmonic minimum up to 11 Harmonics for 15 days. Integration period should be 15 minutes.	Request to delete the same.	THDV and THDI should be removed from Load Survey, but should be shown in Billing parametes.
47	M/s Genus	-	Three phase DT meter- 2.3.5.8 Page no. 74	Optical Communication port - The complete data shall be downloaded within 2 minutes.	The complete data depends on data size. Hence the time should be minimum 5 minutes. Kindly amend the clause.	PI. Refer Amendment
48	M/s Genus	-	Three phase DT meter- 2.3.6.6 Page no. 77	Minimum 08 DI & 02 DO required (Extendable up to 12 each type for future requirement) to communicate with DT/Breaker/Isolators/FPI, sensors etc	Request to delete the same.	5DI and 1 DO are required.

48	M/s Genus	-	SECTION-III INSTRUCTIONS TO BIDDERS Cl. no. 29 page no. 13	Bidder shall provide 3rd party security audit certification after go live.	Kindly elaborate the requirement.	Security features to prevent unauthorized access to the AMI including Smart meter & meter data etc. and to ensure authentication of all AMI elements by third party.
49	M/s Genus	-	SECTION-III INSTRUCTIONS TO BIDDERS (39) page no. 14	There are other administrative expectations such as maintenance of local warehouse(s) at Delhi for storage of communication devices, checking by CED & subsequent distribution to end users.	Please clarify whether this warehouse is required only for NIC card supplier?	Any Warehouse for this project will be in Chandigarh
49	M/s Genus	-	D. Approach and Methodology 1. COMMUNICATION CANOPY page no. 16	Control Centers is as shown below Figure 2	Please clarify whether CED will provide Control Center infrastructure like Civil structures, Power Supply, AC etc....?	Civil Infra will be provided by CED
50	M/s Genus	-	2. SMART METERS AND AMI IMPLEMENTATION page no. 21	4. Three phase CT operated Smart Meter 5. Three phase CT operated Smart Meter (for DT) 6. Feeder Meter	Three phase CT operated consumer Meter and Feeder Meter specifications are not available in Tender document, kindly arrange to provide the same.	Three Phase CT operated meter shall comply IS 14697 till the relevant IS for CT operated smart meters is available. The supplier / manufacturer would furnish valid BIS certification before supply of meters.
50	M/s Genus	-	Form-III Financial Bid (To be submitted through online mode only) PROFORMA OF SCHEDULE OF RATES page no. 146	1.4 Three phase CT operated Smart Meter: Nos. 906 1.6 Feeder Meter Nos. 61		Three Phase CT operated meter shall comply IS 14697 till the relevant IS for CT operated smart meters is available. The supplier / manufacturer would furnish valid BIS certification before supply of meters.
51	M/s Genus	-	2.1.24. GUARANTEE page no. 39	In the event any defect is found by the purchaser up to a period of at least 12 months from the date of commissioning made under the contract whichever is earlier	Please clarify guarantee period.	Gaurantee Period is 60 months from the date of installation of meter or 66 months from the date of last supply of the material under this RFP which ever is later. This is followed by Latent Defect clause as mentioned in caluse no 2.1.24.
51	M/s Genus	-	B. Read Performance & Penalty clause: Table 37 page no.105	Note: Replacement of faulty NIC card in meters will be in scope of bidder, however installation of meter will not be in scope of bidder.		Replacement of faulty NIC cards is in the scope of bidder, however Meter will be installed by Utility. Installation of all other hardware except meter will be inscope of bidder.
52	M/s Genus	-	31. INSTALLATION & IMPLEMENTATION page no.119	i The bidder shall be responsible for installation of all identified hardware and associated equipments at Data Centre, DR centre, Control Centre, Substations, DT locations, HT and selected LT Consumers and Communication network covered under the specification.	These 2 clauses are contradictory w r t installation part. Meter installation is not in the scope of Bidder, pleas confirm once. Pl. clarify location / site details for DC, DR and CC.	
52	M/s Genus	-	2.12. Spares inventory Page no 109	The Contractor shall maintain a spares inventory at his own cost to meet the spare		
53	M/s Genus	-		availability requirements of the system. A Servers : 1* B Work Station Lot 1* C Routers & Switches Lot 1* D Communication Equip. Lot 1* E Field Devices Lot 1* F Meters DCU and other Field Devices Lot 1*	We understand Bidders has to consider spare items costing also in their offer	Yes
53	M/s Genus	-	F. General scope of work (17) page no.118	Maintain the mandatory and recommended (a minimum of 5%) spares during warranty and FMS period and provide the list of the same.		

54	M/s Genus	-	SECTION-VI ELIGIBILITY CRITERIA Page no 136 & 138	QR for Bidder(2) Experience (b) B. QR for AMI Solution Provider / Original Equipment Manufacturer (OEM) D. QR for Network Bandwidth Service Provider	Please clarify whether individual Bidder has to meet these QRs separately or together can meet? Kindly clarify / confirm.	Each member of JV/consortium will meet his respective QR individually.
54	M/s Genus	-				
55	M/s Genus	-				
55	M/s Genus	-	QR for Bidder(2) Experience (b) Page no 136	Successfully executed 02 AMR/AMI project covering implementation of minimum 15,000 nos. of Meters with required hardware, software and other associated accessories	We understand 15K is cumulative quantitative of any 2 Projects executed and not the individual P Os. Request your good Office to confirm once.	Successfully executed 02 AMR/AMI project <b>each</b> covering implementation of minimum 15,000 nos. of Meters with required hardware, software and other associated accessories
56	M/s Genus	-	B. QR for AMI Solution Provider / Original Equipment Manufacturer (OEM) Page no 136	QR for Bidder(2) Experience (b): Experience - AMI solution provider should have successfully executed at least 2 AMI/AMR projects involving an installation of at least 10,000 meters per project in the last 5 years (i.e. FY 2011-12 to .....	We understand this 10K nos. is cumulative quantity of 2 AMI/AMR Projects and not the individual Projects? Kindly clarify once.	Already mentioned per project.
56	M/s Tata Consultancy Services	-	Section 2, Subsection C Clause 2	Selected Bidder shall propose and establish the solution for 30000 meters but it should be horizontally and vertically scalable to cover the entire consumer base of 2 Lakhs.	Does this imply that we have to size the software licenses and the hardware at the DC for the entire customer base of 2.0 lakhs. RECPTCL may please confirm/clarify	Front end devices should be sized for 30,000 meters which is scalable to 2,00,000 meters and backend IT systems should be sized to 2,00,000 meters so that in future no additional cost to be incurred for backend IT Infra
57	M/s Tata Consultancy Services	-	Section 2, clause 11	99% of Communication NIC cards in the network should be accessible from HES at any point of time. Bidder should design the system accordingly.	CED/RECPDCL may kindly clarify the meaning of this statement. Does this mean that CED desires that 99% communication at meter end point is desired?	99% of the installed End points ( Meters) should be communicating, however Other network components like router and DCU should be 100% available.
57	M/s Tata Consultancy Services	-	Section 2, clause 12	The bidder shall confirm that, the HES has sufficient logic driven smoothening built in features, for example: reliably determining current status of a meter once an outage alert is received from the meter, as well as, ability to suppress or filter false positives from outage and restoration notifications. There should be provision for deploying more such user defined logics.	CED/RECPDCL may kindly clarify the meaning of this statement. Does this mean that there should be a separate workflow for outage/event handling within the HES itself?	Outage event logics will be on MDMS rather on HES. HES should pass all events to MDMS.
58	M/s Tata Consultancy Services	-	Section 2, clause 13	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 both the AMI & other applications running concurrently on the same communication canopy as well as supporting other Smart grid applications.	We would like to state that the AMI performance may be dependent on the GPRS network which may be deployed from the DCU/Router to the DC. The SLA's for this network is not under the control of the implementation agency. Request RECPDCL to kindly reconsider.	<b>System Availability - 99.5% to be met.</b>

58	M/s Tata Consultancy Services	-	Section 2, clause 14	The bidder shall confirm that offered RF canopy solution and associated network elements including NIC should be tuneable over a frequency range from kHz to GHz so that in future if allocated bandwidth is increased or if new frequency band is allocated to Power Utilities by statutory authorities, then the offered communication hardware which will be installed at site or inside the Smart meter in the form of a NIC, would not become obsolete and shall be capable to interoperate with any new environment.	We would like to state here that the communication hardware will have a dependency on the frequency of communication and to the best of our knowledge tuning an existing end point for such a wide variation in frequency may not be possible. CED/RECPTCL may please clarify.	865-867 MHz with +/- 2 MHz of Licence Band with 10 years of licenece as per RFP
59	M/s Tata Consultancy Services	-	Section D - Approach and Methodology	RF canopy network should be designed to cater data requirements of 2,00,000 Smart meters.	Does the bidder need to deploy the RF Canopy in the field for 2,00,000 end points or for 30000 end points? RECPDCL may please clarify.	Front end devices should be sized for 30,000 meters which is scalable to 2,00,000 meters and backend IT systems should be sized to 2,00,000 meters so that in future no additional cost to be incurred for backend IT Infra
59	M/s Tata Consultancy Services	-	Section 2.2.5 - Specifications of 3 Phase meters Pg 48	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 or windows based HHU shall be preferred.	How many CMRI instruments need to be provided?	Quantity wold be based on communication Failure rate as 0 .1% Failure as per clause. Please consider it as per failure rate envisaged during implementation period.
60	M/s Tata Consultancy Services	-	Section 3.7.1 - HES Functional Requirements	Application Server suitable for MDAS, MDM, along with operating system	We understand all Application servers and DC LAN should be in redundant mode. CED/RECPDCL may please confirm/Clarify	NO, It is single LAN at DC level
60	M/s Tata Consultancy Services	-	Section 3.7.4 - HES Functional Requirements	The head-end system shall support self-discovery and self-registry functionality to detect and register meters within 60 minutes of meter connection and establishment of communication. The system shall allow inputs via manual data entry or data files for the necessary meter provisioning data.	We recommend that Manual Entry of Meter Data be allowed only at the MDM level. RECPDCL may please clarify.	MDM level changes to be done
61	M/s Tata Consultancy Services	-	Section 4.1 MDMS Functional Requirements	Demand Response Management E VCHARGING MODULE	To the best of our knowledge these two modules are not part of a standard MDMS package. RECPDCL/CED may please confirm/clarify?	MDM should Support E VCHARGING MODULE
61	M/s Tata Consultancy Services	-	Section 4.1 MDMS Functional Requirements	Prepayment Module/Support	To the best of our knowledge Prepayment modules are not part of a standard MDMS package. Does the bidder need to integrate with any centralised Prepayment system? RECPDCL/CED may please confirm/clarify?	Bidder has to provide Pre-payment Module or Shall have the ability to properly account for prepaid metering
62	M/s Tata Consultancy Services	-	Section 4.1 MDMS Functional Requirements	This RFP will include supply of all above mentioned modules along with technical specification of required hardware capable to run the supplied software for 50,000 (Pilot Phase) and scalable to 2,00,000 endpoints with a data storage of 2 years for maximum of 16 channels 15/30 Minute of interval data along with other type of all meter data.	CED/RECPDCL may please clarify if software licenses need to be purchased for 30,000 or 50,000, or 2,00,000 metering points. Correspondingly please clarify if the Hardware needs to be sized for for 30,000 or 50,000, or 2,00,000 metering points?	As per Scope of work Selected bidder will propose & establish the solution initially for approx. 30,000 consumers but it should be horizontally & vertically scalable to cover the entire utility consumers i.e. approx. 2.0 Lakhs to be complied strictly by Vendor . Vendor to provide cost of additional4 buckets of 5000 licences along with cost of current 30000 customers
62	M/s Tata Consultancy Services	-	Section 4.1 MDMS Functional Requirements	Bidder has to provide perpetual license along with warranty from the date of project acceptance to 12 months after Go-Live (CED Acceptance)	CED/RECPDCL may please clarify what is meant by perpetual licenses.	It is life time licence for meter and there will be one time payment for entire life of meter.

63	M/s Tata Consultancy Services	-	Section 4.2.19 MDMS Functional Requirements	We will create Reading Quality Checks which system should follow while uploading reading in Billing Engine and should generate exception log. Reports which authorised user can check and process on case to case and bulk basis.	CED/RECPDCL may please clarify what is meant by "Reading Quality Checks" ?	Reading Quality check is type of meter related exception handling for correct billing of consumer
63	M/s Tata Consultancy Services	-	Section 4.3.1 Additional Prepaid Functionality	The MDM should support pre-payment metering and capability to interface (Web and Mobile App) with pre-payment application.	CED/RECPDCL may please clarify if Prepayment needs to be implemented? If so where will the pre-payment logic will reside? Please also clarify how two way data shall be exchanged with the existing Billing system (along with its details)?	Bidder has to provide Pre-payment Module or Shall have the ability to properly account for prepaid metering
64	M/s Tata Consultancy Services	-	Section 2 - Maintenance and Support services	Table 38 - Advanced Metering Infrastructure System (AMI System) -99.5%	Please clarify if this availability denotes the availability of the DC Equipment only	it is componenet concern to Advanced Metering Infrastructure System (AMI System)
64	M/s Tata Consultancy Services	-	Section 37 - Integration scope	The integration may use a continuous integration middleware layer as specified by the vendor. This integration middleware layer could then be used to undertake any future integration between applications. The integration middleware shall be based on Service Oriented Architecture (SOA) and shall use publish / subscribe mechanism. Purchaser does not want to build and maintain point to point integration.	Please clarify in whose scope will the implementation of thr integration layer be. If this is in the AMI Implementation agency's scope then it will have dependency on the implementation schedule of other Smart Grid Technologies at CED and the existing systems at CED. CED/RECPDCL may please clarify.	Since DTMU and SCADA implementation are also in parallel deployment at CED, Bidder may required to integrate with same. However , final integration points would be decided after final design document submitted by various vendors.
65	M/s Cyanconnode	Page 133 Point 19		All the licenses shall be procured in the name of "Chandigarh Electricity Department"	For licenses, we can give right to use option to customer and for enterprise license requirement with capping to number of users upto maximum 30K endpoint is acceptable. Kindly amend suitably.	It will be shared later once tender will be awarded.
65	M/s Cyanconnode	Page 133 Point 20		1. The source code of the customized part of the application software will remain the exclusive property of the CED, even after the termination or expiry of the contract. The ownership shall also remain with the CED in case the selected vendor fails to execute tasks to the satisfaction of the CED.	We would like to inform you that, source code can't be shared in any form to you at any stage of customization. Kindly amend the clause suitably.	Any customization logics specific to the project area shall be shared with Utility.