## **IIT/EE/SMART CITY/SMART METERS/2015/01**

No	Header	Description		Genus Remark	IIT KANPUR CLARIFICATIONS	
1	Supply item	Smart meter (Three phase, 10 -100 A, CT operated)		We are understanding that whole current meter of current range 10-100 is required which does not need any external CT for installation.	Yes. IIT Kanpur will accept three phase smart meter's in range of 10- 100 A working without CT's.	
1	1. Smart Meters(Specification)	Detect and resolve abnormal and tamper events for a required period.		Pl. clarify the term of " resolve" . Meter can detect the tampers & on some tamper (preconfigured in meter ) occurrence load will be disconnected .	'Resolve' means meter tampering will be acknowledged by the server and suitable action (disconnection/re-connection) can be planned as per configuration.	
1		Option for both prepaid and postpaid metering.		We are understanding that prepayment functionality will be governed through HES (Head End System ) & that will be token less system . Key pad Token type meter is not required .	Yes. The meter will be governed through Head End System.	
1		Interface to a Home display unit/tablet.		PL clarify, RS 485 port on meter to interface is sufficient.	Interface to home display unit will through wi-fi & zig-bee	
integration, sh disconnect/red		The smart meter compatible for AMI sy integration, shall support only remote disconnect/reconnect of consumer supsupply contactor with 1 relay, 2 relay a outputs.	oply via the	Pl. elaborate this .We are understanding that inbuilt latching relays are required for load connection disconnection. In single phase meter relay will be on phase & neutral and in three phase relay will be on all phases. In both type of meters relays will work simultaneously.	Yes. Meter shall support disconnection/connection via supply contactors with relays.	
	Table 1.5					
	Communicati on Options	RS232 Compatibility for SCADA,AMI integration Modems(PSTN/GPRS/GSM) Master/Slave Arrangement Wi-Fi, Zigbee TCP/IP Internal Modem Power Supply	any two is suffici	ty thisall communication options are required or (one for local & other for remote communication ) ent .  understanding that one ANSI optical port & GPRS for two way communication is sufficient .	TCP/IP, Wi-Fi & Zigbee are compulsorily required. For other options bidder's may quote as per their availability.	
		ANSI type 2 optical port	As data	can be stored on server side, there is no need to	The bidder's may quote as per their availability.	

4	Billing Data  IIT / EE / SMA	Billing type - Import / Export/Net metering RT CITY/SMART METERS/2015	PI. clarify the meaning of billing type . At billing time all parameters will be captured .Pl. define the billing parameters.	Billing parameters are given in Table No.1 under subhead "Billing Data at the time of billing parameters to be logged".
4	Measurement Data Reporting	10 sec	Pl. elaborate this.	This is time interval (10 sec) after which the meter shall transfer the data to the server.
9	2. Bid Price		We are understanding that —  A. Setup of data centre (Servers ,Work monitor , Firewall , Router , Network switch , Antivirus , data base etc.) is not in our scope .  B. Setup of VPN for remote communication (SIM for meters, suitable bandwidth Link at server, internet connectivity at server etc.) is not in our scope.  C. Meter installation is not in our scope.	These are not covered under the supply of meters. IIT Kanpur will invite separate tender for these items.
			D. Head End software's for data acquisition, view & reporting purpose is in our scope but no supply item is defined for	