ANDHRA PRADESH ELECTRICITY REGULATORY COMMISSION

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Order on Open Access metering and Demand settlement-FSA billing on minimum energy.

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Read the following:

Open Access Metering:

1. As per the CEA (Installation and Operation of Meters) Regulations 2006, the Licensees have to provide class 0.5S (or better accuracy) meters upto 33 kV and 0.2S (or better accuracy) meters for above 33 kV supply voltage. As per the BIS standards, the CT to have accuracy class generally one index better than that of the meter and Voltage Transformer to have accuracy class similar to that of the meter accuracy.

The CEA provision is furnished below:

Consumer meters

Voltage level	Accuracy		
Up to 650 volts	1.0 or better		
Above 650 volts and up to 33 kilo volts	0.5S or better		
Above 33 kilo volts	0.2S or better		

- 2. The APTRANSCO and DISCOMs are insisting the consumers to install 0.5S or better accuracy (upto 33 kV) and 0.2S or better accuracy (above 33 kV) accuracy class meters and allied PT and CT sets who wants to avail power supply through open access.
- 3. Regarding installation of meters, the Clause 7.2 of Central Electricity Authority (Installation and operation of meters) Regulations, 2006 as amended by Regulations, 2010, reads as follows:

"7. Location of meters:

- (1). Interface Meter:
- (2) Consumer meter: (a) The consumer meter shall be installed by the licensee either at the consumer premises or outside the consumer premises:



Provided that where the licensee installs the consumer meter outside the premises of the consumer then the licensee on a request from consumer shall provide real time display unit at the premises of the consumer for his information to indicate the electricity consumed by the consumer:

4. As per the above mentioned CEA Regulations, the responsibility of providing the meter and allied metering equipment for all Consumers lies with the Licensees, irrespective of DISCOM native Consumer (power supply by DISCOM) or Open Access Consumer. Therefore, the APTRANSCO/DISCOMs cannot insist the consumers to install meters by them.

In this connection, it is to inform, that the responsibility of installing the metes and allied metering equipment lies with the APTRANSCO/DISCOMs and the Licensees are directed to install the meters for all HT consumers as per CEA regulations and test the meters or get tested the meters and allied metering equipment by NABL accredited laboratories.

All these days, the DISCOMs are supplying power to the HT Consumers with out installing high accuracy CT and PT sets. In the case of open access, the DISCOMs are insisting the consumers to provide high accuracy CT and PT sets. The CEA regulations are applicable for all consumers, irrespective of DISCOM native consumer or Open Access consumer.

In view of the prevailing power shortage scenario and to avoid inconvenience to the Open Access consumers, the APTRANSCO/ DISCOMs shall permit open access to all consumers with out insisting for high accuracy CT and PT sets. However, the APTRANSCO/DISCOMs may install high accuracy CT/PT sets as and when this equipment is available.

Demand settlement for open access consumers:

- 5. It was brought to the notice of the Commission that the DISCOMs are not considering the Demand component availed through open access for billing purpose. The DISCOMs are charging for the entire recorded demand without deducting the demand component of open access power/energy from the recorded demand.
- 6. As per the Interim Balancing and Settlement (IB & SC) Code, the DISCOMs have to consider both energy and demand availed through open access while preparing bill.



7. The procedure to consider **Open Access (OA)** demand component for billing is explained below:

For each time block, total recorded energy and total recorded demand is available in the meter. Similarly, for each time block, power availed through open access for both energy and demand is also available from Energy Balancing Centre (EBC).

Detailed method of arriving Maximum Demand (MD) consumed from DISCOM in a month is explained with the help of table shown below for nine time blocks:

To get Demand consumed from DISCOM shown in column (8), deduct the OA Recorded Demand (shown in Column 7) from total Recorded Demand (RD) (shown in column 5).

i.e., Demand consumed from DISCOM = (Total Recorded Demand - OA Recorded Demand)

Sl.	DISCOM	OA	Total	Total	Total	OA	OA	DISCOM
No	Contracted	Contracted	Demand	recorded	Recorded	Units in	Recorded	Recorded
	Demand	Demand	from all	Units in	Demand	15	Demand	Demand
			sources	15	(RD)	minutes	(kVA)	(kVA)
1	1717			minutes				Col (5) - Col (7)
	4 Col (1)	Col (2)	Col (3)	Col (4)	Col (5)	Col (6)	Col (7)	Col (8)
1	600	400	1000	200.0	800	98	392	408
2	600	400	1000	200.0	800	88	352	448
3	600	400	1000	197.5	. 790	98	392	398
4	600	400	1000	197.5	790	98	392	398
5	600	400	1000	202.5	810	78	312	498
6	600	400	1000	195.0	780	75	300	480
7	600	400	1000	194.5	778	69	276	502
8	600	400	1000	195.0	780	93	372	408
9	600	400	1000	205.0	820	84	336	484

Of all the nine demands of column (8), the Maximum Demand is 502 kVA mentioned in row (7). The same logic can be extended for 2880 time blocks (15 minutes) in a month.

8. The APTRANSCO/DISCOMs (Energy Billing Centre) are directed to take into account the Demand component from open access while issuing the bills. To arrive at the Recorded Maximum Demand (RMD) of DISCOM, the Licensees shall follow the method shown in the above example.

The DISCOMs are directed to arrive at 15 minutes block wise demands by deducting OA demand from Recorded Demand for all the 2880 time blocks in a month. The result would be 2880 demand readings of 15 minute blocks consumed from the DISCOM. Of all the 2880 fifteen minute block demand readings, the Maximum Demand (MD) reading should be billed as per the tariff order rate.



FSA Billing based on minimum consumption(notional consumption):

9. The Commission has received representations from consumers requesting to consider actual consumption for levying FSA against the minimum billed units.

As per the GTCS, the billing would be done for a minimum of 50 units per kVA or for actual consumption which ever is higher.

The Commission's view is that the FSA should be levied on actual consumption and not on minimum billed energy which is notional consumption. Accordingly, the Commission directs the DISCOMs to levy FSA on actual consumption, in case actual consumption is less than billed consumption (notional consumption).

This order is signed by the Commission on this 4th day of May, 2013.

(BY ORDER OF THE COMMISSION)

SECRETARY

SECRETARY

A.P. Electricity Regulatory Commission

Hyderabad.