



सत्यमेव जयते

भारत सरकार

Government of India

विद्युत मंत्रालय

Ministry of Power

केन्द्रीय विद्युत प्राधिकरण

Central Electricity Authority

वितरण आयोजन एवं विकास प्रभाग

Distribution Planning & Development Division

No. CEA/DPD/AT&C losses/2017 / 758-818

Dated 02.06.2017

To

1. Principal Secretary(Energy) of all States
2. CMD/MDs of all Discoms

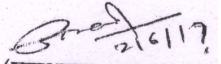
Subject: **Guidelines for computation of AT&C Losses**

Sir/Madam,

It had been observed that there are variations in the methodology for calculation of AT&C losses being adopted by various organizations. In order to finalize a single applicable methodology for calculation of AT&C losses, a committee consisting of representatives from CEA, REC and PFC was constituted by Ministry of Power in April, 2016.

Based on the deliberations held during the meetings, the revised methodology for calculation of AT&C losses has been finalized. Guidelines on the revised methodology is enclosed, which needs to be adopted by all the stakeholders from FY 2016-17 onwards.

भवदीय,

  
26/6/17

(घनश्याम प्रसाद)

मुख्य अभियंता

### **Guidelines for computation of AT&C Losses:**

It had been observed that there are variations in the methodology for calculation of AT&C losses being adopted by various organizations. In order to finalize a single applicable methodology for calculation of AT&C losses, a committee consisting of representatives from CEA, REC and PFC was constituted by Ministry of Power in April, 2016.

Three meetings of the Committee were held and after detailed deliberations, the committee unanimously opined that:

1. Revenue/ Tariff Subsidy” should form part of ‘Revenue from sale of Power’ for calculating Collection Efficiency;
2. To reflect the true position of Collection Efficiency, **Subsidy Received** figure shall form part of ‘Revenue from Sale of Energy’ in the Numerator and **Subsidy Booked** in the denominator instead of **Subsidy Booked** in both numerator and denominator.
3. Unbilled Revenue shall not form part of Debtors.

With the above proposed changes, the **Revised Methodology of AT&C loss calculation** was finalized and is given in Table 1 of enclosed Annexure. All the Stakeholders under MoP, States/DISCOMs shall henceforth use the revised methodology for calculation of AT&C losses.

## Annexure

### Revised Methodology for computation of AT&C Losses:

**Table 1**

A	Input Energy (MkWh)	Energy Generated - Auxiliary Consumption + Energy Purchased (Gross)* - Energy Traded/ Inter State Sales.
B	Transmission Losses(MkWh)	
C	Net Input Energy (MkWh)	A-B
D	Energy Sold(MkWh)	Energy Sold to all categories of consumers excluding units of Energy Traded/Inter-State Sales.
E	Revenue from Sale of Energy (Rs. Cr.)	Revenue from Sale of Energy to all categories of consumers (including Subsidy Booked) but excluding Revenue from Energy Traded /Inter-State Sales.
F	Adjusted Revenue from Sale of Energy on Subsidy Received basis (Rs. Cr.)	Revenue from Sale of Energy ( same as E above) minus Subsidy Booked plus Subsidy Received against subsidy booked during the year
G	Opening Debtors for Sale of Energy (Rs. Cr.)	Opening debtors for sale of Energy as shown in Receivable Schedule (Without deducting provisions for doubtful debtors). Unbilled Revenue shall not be considered as Debtors.
H	Closing Debtors for Sale of Energy (Rs. Cr.)	<p>i) Closing debtors for Sale of Energy as shown in Receivable Schedule (Without deducting provisions for doubtful debts). Unbilled Revenue shall not be considered as Debtors.</p> <p>ii) Any amount written off during the year directly from(i)</p>
I	Adjusted Closing Debtors for sale of Energy (Rs. Cr.)	H(i+ii)
J	Collection Efficiency (%)	$(F+G-I)/E*100$

K	Units Realized (Mkwh) = [ Energy Sold*Collection efficiency]	D*J/100
L	Units Unrealized (Mkwh)= [ Net Input Energy-Units Realized]	C-K
M	AT&C Losses (%) = [{ Units Unrealized/Net Input Energy}*100]	L/C *100

**Note:**

- i) \*DISCOMs are required to give gross energy purchased i.e., Total Power Purchased including transmission losses.
- ii) Debtors for trading of power have not been adjusted for calculation of collection efficiency since information is generally not available in notes to accounts.
- iii) Figures in above table, wherever available, should be consistent with the information contained in Annual Report/ Accounts.
- iv) Calculation of AT&C losses in the format given in Table 1 should form a part of annual accounts of all utilities selling directly to consumers as notes to accounts or annexure.
- v) Details of subsidy booked during the year and subsidy received against current year and against previous years as given in Table 2 should form part of annual accounts as notes to accounts or annexure.

**Table 2**

Details of Subsidy Booked and received	Amount
1. Subsidy Booked during the year	
2. Subsidy received during the year (Rs. Cr.)	
i) Subsidy received against subsidy booked for current year (Rs. Cr.)	
ii) Subsidy received against subsidy booked for previous years (Rs. Cr.)	