



ANDHRA PRADESH ELECTRICITY REGULATORY COMMISSION

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Amendment of General Terms and Conditions of Supply – Approval - Issued.

Proceedings No. APERC/Secy/ 04 / 2016

Dated:06-01-2016

Read the following:

1. Secy/01/2006 Dated: 06-01-2006.
2. Central Electricity Authority (Technical Standards for Construction of electrical plants and Electric lines) Regulations, 2010.

1). Introduction

Chairman and Managing (CMD)/APTRANSCO, CMD/APEPDCL, CMD/APSPDCL and Advisor / Energy Department, made a proposal, seeking enhancement of power supply capacity at 33 kV and 11 kV. The Details of the proposal in brief are furnished below:

- 2). Power evacuation / maximum power supply capacity of a conductor are mainly dependent on
 - (i) Voltage level and Power Factor,
 - (ii) Type of conductor and ambient conditions (temperature etc),
 - (iii) Line length and Regulation constant (MW Kilometer),
 - (iv) Permissible Voltage drop limits (for 11 kV and 33 kV + 6% and - 9%).

The proposal also refers to the technical standards mentioned in the report of IIT/Roorkee. Presently, the Dog conductor (105 sq.mm) is being used to extend power supply upto 10 MVA on 33 kV express feeders. Nowadays 33 kV line configurations / designs with Panther (conductor used for 132 kV lines) are also available which can carry a maximum of 25 MW.

- 3). The Commission considered the proposals submitted by the Discoms and APTRANSCO and felt that it is necessary to carry out certain amendments to General terms and Conditions of Supply (GTCS) to facilitate natural growth of industries in the state and also for improvement in the revenues of Discoms. Accordingly, the Commission hereby approves the following amendments to the General Terms and Conditions of Supply issued vide proceedings No: Secy/01/2006 Dated: 06-01-2006.

- 4). For Clause 3.2.2.1, the following Clause shall be substituted, namely:-

"3.2.2.1. HT consumers intending to avail supply on common feeders:

For total Contracted Demand with the Company and all other sources.

Contracted Demand	Voltage level
Upto 1500 kVA	11 kV or 33 kV
1501 kVA to 5000 kVA	33 kV
Above 5000 kVA	132 kV or 220 kV as may be decided by the Company."

5). For Clause 3.2.2.2, the following Clause shall be substituted, namely:-

"3.2.2.2. HT Consumers seeking to avail supply through independent (Dedicated) feeder from the substations where transformation to required voltage takes place shall be:

For total contracted Demand with the licensees and all other sources.

Capacity	Supply Voltage
Upto 3000 kVA	11 kV or 33 kV
3001 kVA to 5000 kVA	33 kV
5001 kVA to 20,000 kVA	33 kV or 132 kV
Above 20,000 kVA	132 kV or 220 kV.

While extending the power supply, the details mentioned in the Table-1 and Table -2 shall be used as a guideline.

Conductor	Continuous Current rating at 45°C Amb.Temp (in Amps)	Maximum allowable distance		
		10 MVA	15 MVA	20 MVA
Dog (105 Sq.mm)	283	20 km	14 km	----
Wolf (158 Sq.mm)	336.7	----	20 km	15 km
Panther (212 Sq.mm)	405.3	----	25 km	20 km

Conductor	Continuous Current rating at 45° C Amb.Temp (in Amps)	Maximum allowable distance	
		2500 kVA	3000 kVA
Rabbit (52.9 sq.mm)	178	5.00 km	4.00 km
Dog (105 Sq.mm)	283	10.00 km	8.00 km

6) The order will come into force with effect from 04th January, 2016 and will supersede all earlier orders. The Distribution Licensees shall make available the copies of these GTCS (Amendment), Proceedings at all their offices down to the Section Level for reference by any consumer who desires to refer to the same during working hours.

This Order is signed by the Andhra Pradesh Electricity Regulatory Commission on 06th Jan, 2016

(BY ORDER OF THE COMMISSION)


6-1-2016
SECRETARY (i/c)