

## TRANSMISSION CORPORATION OF ANDHRA PRADESH LIMITED

Sub: Procedure for Administrative and Technical Sanction for works pertaining to Transmission connectivity to Bulk Loads and Power Evacuation Schemes and Capitalization of such works after commissioning — Orders Issued.

TOO (CE-Construction-2) Ms. No. 20

Date: 23/04/2012

*Read the following:*

1. *TOO (CE-Const.) Ms. No. 187 dated 07/12/2007*
2. *TOO (CE-Const.) Ms. No. 273 dated 10/03/2008*
3. *TOO (CE-Const.) Ms. No. 133 dated 11/09/2008*
4. *TOO (CE-Const.) Ms. No. 8 dated 03/04/2009*

1. Approvals are being accorded by APTRANSCO from time to time for execution of transmission works pertaining to extension of EHT supply to Bulk Load Consumers, for providing transmission connectivity for evacuation of power from power plants of Power Developers such as IPPs/CPPs and to Open Access consumers (Collectively referred to as "Power Developers" henceforth) and for Deposit Contribution Works such as shifting of EHT lines etc., by Consumers/Power Developers or third parties by paying necessary supervision charges to APTRANSCO.
2. It is felt necessary to streamline and simplify the Scheme Approval procedure and also to stipulate detailed procedure regarding handing over of such assets created by third parties to APTRANSCO through a legal title transfer process and subsequent capitalization of such assets by APTRANSCO. It is also felt essential to standardize the base project costs and to rationalize various overheads chargeable for different categories of works viz. Bulk Load Works, Power Evacuation Works and Deposit Contribution Works.
3. In order to achieve the above stated objectives of streamlining and simplifying the Scheme approval procedure duly enhancing the consistency and transparency of the Scheme approval process and to lay down clear procedure for capitalization of assets created by the third parties, APTRANSCO herewith approves the procedures indicated herein along with applicable charges to be collected.
  - (i) The concerned Chief Engineers to circulate Bulk Load/ Power Evacuation/DC Works schemes to be executed by the Consumer/Developer/OA Generator for full Board approval.
  - (ii) The note file seeking full Board approval for Bulk Load/Power Evacuation Schemes and DC works will indicate the total scheme cost based on the standardized 'Base cost-data' for transmission works as being done for regular capital works / improvement schemes.

The Establishment & General charges, Supervision charges, Engineering charges, spares and other charges along with applicable taxes, and any other charges payable by the consumer/developer will be as indicated below:

**Standard Cost-data format per unit of work (Per kM, Per Bay etc.)**

Sl. No.	Description	Bulk Load Schemes	Power Evacuation Schemes	Deposit Contribution works.
	<b>Base Project Cost - Standard cost-data components</b>			
(i)	<b>Material Cost</b>			
	Electrical & Automation	Standard material cost per kM of line/Per Bay etc.,		
	Telecom	Standard material cost per kM of line/Per Bay etc.,		
	<b>Total Material Cost</b>	<b>Total Standard material cost per kM of line/Per Bay etc.,</b>		
(ii)	<b>Labour Cost incl. taxes</b>			
	Electrical & Automation	10% of material cost		
	Telecom	10% of material cost		
	Civil	LS amounts based on latest estimates		
	<b>Total Labour Cost</b>			
(iii)	<b>Base Project Cost per Bay, Per kM of line Etc.</b>	<b>Material + Labour (i) + (ii)</b>	<b>Material + Labour (i) + (ii)</b>	<b>Material + Labour (i) + (ii)</b>

**Total Scheme Cost /Charges payable by the Consumer/Developer**

**I. In case APTRANSCO executes the works:**

Sl. No.	Description	Bulk Load Schemes	Power Evacuation Schemes	Deposit Contribution works.
A	<b>Total Base Project Cost</b>	Cost of line/kM X line length + Cost /Bay X No. of bays + Cost of Switching station etc., *		
B	Spares	3% on cost of Material + Cost of Spare Bay equipment in case of Switching station		
C	Contingencies	3% on Total Base Project Cost		
D	Engineering Charges	2.5% on Total Base Project Cost		
E	Establishment and Overhead charges	10.75% on Total Base Project Cost		(10.75 + 25%) on Total Base Project Cost (As per TOO Ms. No. 187 Dt. 07/02/2007)
F	Advance Manning Charges for one year in case of switching station	Based on the latest applicable rates		
G	Provision towards 10% escalation of prices	10 % on Total Base Project Cost		
H	Service Tax including Education Cess	As applicable from time to time		
I	<b>Total Cost payable by the Consumer/Developer</b>	<b>Sum of (A) to (H) + Development Charges</b>	<b>Sum of (A) to (H)</b>	<b>Sum of (A) to (H)</b>

## II. In case consumer/developer executes the works:

<b>Total Base project cost = Cost of line/ km X line length + Cost /Bay X No. of bays + Cost of Switching station etc., *</b>				
Sl. No.	Description	Bulk Load Schemes	Power Evacuation Schemes	Deposit Contribution works.
(a)	Spares	3% on Cost of Material + cost of Spare Bay equipment in case of Switching station		
(b)	Engineering Charges	2.5% on Total Base Project Cost		
(c)	Supervision Charges	10% on Total Base Project Cost		
(d)	Advance Manning Charges for one year in case of switching station	Based on the latest applicable rates		
(e)	Service Tax including Education Cess	As applicable from time to time		
(f)	<b>Total Cost payable by the Consumer/Developer</b>	Sum of (a) to (e) + <b>Development Charges</b>	Sum of (a) to (e)	Sum of (a) to (e)

\* DC works involving less than 1 km lines will be treated as 1 km. The format of terms and conditions to be communicated along with Scheme Approval are annexed.

- (iii) 'Base Cost-data' for 220kV and 132kV lines, substations/switching stations and bay extensions, communication systems etc., will be standardized on an annual basis and will be hosted on the APTRANSCO website just like SSR and drawings which are already available on APTRANSCO's website. This will ensure consistency of Scheme amounts and also facilitates greater transparency and will minimize scope for errors. In case of 400kV works Schemes will be formulated on a case to case basis as 400kV works involve huge investments and are not amenable for standardization.
- (iv) On full Board approval, the Scheme will be communicated to the Zonal Chief Engineers for approving Bill of quantities for supply and labour portion along with applicable rates based on the detailed estimates submitted by the concerned field Superintending Engineer / TLC, Superintending Engineer / Civil, Superintending Engineer/ Telecom. The approval accorded by the Zonal Chief Engineer as stated above will form the basis for execution of works.

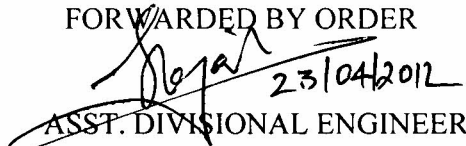
- (v) The Construction Chief Engineers at the headquarters will accord approval of the contractor proposed by the consumer/developer for executing the works duly verifying whether the contractor meets the qualification requirements for taking up Bulk Load / Power Evacuation as stipulated in the TOO No. 152 dated 13/07/2011.
- (vi) On completion of project, the zonal Chief Engineers to workout the project cost based on actual quantities and rates indicated in the schedule. In case the actual project cost is exceeding the Administrative Sanction amount, the zonal chief Engineers will inform the consumer/developer the additional supervision charges to be paid under intimation to the Executive Director/Planning RAC & Reforms before release note/synchronizing proposal.
- (vii) The Zonal Chief Engineers shall ascertain that additional supervision charges, if any, due to increase in quantities are paid by the consumer/developer and the work is completed in full shape and all statutory requirements like PTCC approvals etc., are fulfilled before commissioning of the works.
- (viii) There will be no penalty for delay in completion of works executed by the bulk load consumers/Power developers and other third parties for DC works as there is no loss to APTRANSCO due to such delay.
- (ix) Capitalization of commissioned works is to be done as outlined below:
  - (a) In case of Schemes requiring construction of switching stations/Bay extensions for which land is acquired by the consumer/developer, ownership of the land is to be transferred to the APTRANSCO by way of a registered gift/donation deed in favour of the concerned Executive Engineer/TLC. Further, the consumer/developer must furnish a notarized undertaking (on stamp paper), declaring that the assets transferred to APTRANSCO by gift/donation deed are suitably reflected in their accounting books.

- (b) On completion and commissioning of works, the consumer/developer has to transfer the title/ownership of the assets created by them to APTRANSCO (duly specifying the details of materials/equipment) by executing a notarized Gift/donation deed with a complete schedule of equipment indicating serial Nos., rating, make and value of the material/equipment as per the original invoice. The consumer/developer has to submit self-attested copies of invoices to APTRANSCO along with the Gift/donation deed.
4. These orders are issued as per the approval of the Chairman and Managing Director vide No. 702 dated 03/03/2012.
5. These orders are also available on APTRANSCO website and can be accessed at the address <http://www.aptransco.gov.in>.

**BY ORDER AND IN THE NAME  
OF  
TRANSMISSION CORPORATION OF ANDHRA PRADESH LIMITED**

**SD /-  
B. UMAKAR RAO  
DIRECTOR/ PROJECTS**

//      FORWARDED BY ORDER      //

  
23/04/2012  
ASST. DIVISIONAL ENGINEER

To:

The Executive Director/Planning, RAC & Reforms, Vidyut Soudha/Hyderabad  
The Chief Engineer/Construction-I/Vidyut Soudha/Hyderabad.  
The Chief Engineer/Construction-II/Vidyut Soudha/Hyderabad.  
The Chief Engineer/400kV construction/Vidyut Soudha/Hyderabad.  
The Chief Engineer/Power Systems/Vidyut Soudha/Hyderabad.  
The Chief Engineer/LI/Vidyut Soudha/Hyderabad.  
The Chief Engineer/Civil/Vidyut Soudha/Hyderabad.  
The Chief Engineer/Transmission/Vidyut Soudha/Hyderabad.  
Personal Secretary to the Chairman & Managing Director.  
Personal Secretary to the Joint Managing Director/(Commercial, IPC & IT).  
DE (T) to the Joint Managing Director/Vigilance & Security.  
ADE(T) to the Joint Managing Director/(HRD & Distribution).  
Personal Secretary to the Director/Finance & Revenue.  
DE (T) to Director/Transmission.  
Personal Secretary to Director/Grid Operation.  
Personal Secretary to Director/Projects.  
All the Chief Engineer/Zones  
Central Record Section and stock file  
T.O.O Section.

**ANNEXURE-I**  
**TERMS & CONDITIONS**

*(In case the Company executes the work by paying supervision charges to APTRANSCO)*

1. M/s [Name of the Company, Brief address] hereafter called as "The Company" may execute the works indicated in the scheme approval letter no..... date..... on their own under departmental supervision.
2. The Company would be executing the works and the APTRANSCO will only supervise the works. However after completion of the works, the company shall pay the additional supervision, Engineering and spares charges if any due to increase in the scheme cost.
3. The works should be executed by licensed contractor who have executed similar works as per standards of APTRANSCO under the supervision of APTRANSCO officials. Approval of APTRANSCO shall be obtained before engaging the contractor. The quality of work should be strictly adhered to the technical specification of APTRANSCO.
4. Material/Equipment should be purchased from the approved manufacturers of APTRANSCO as per the list enclosed. Original guarantee card should be handed over to the APTRANSCO along with the invoices and other necessary documents.
5. The works will be checked regularly by APTRANSCO's Quality Control Wing. The company shall adhere to the Quality Assurance Plan of APTRANSCO during execution of works.
6. All the major materials like conductors, line towers, substation structures, insulators, earth wire and other materials should be got inspected and tested by the APTRANSCO officials. No material shall be used without approval of APTRANSCO. The Company/contractor shall give at least 15 days advance intimation to enable APTRANSCO to depute his representative for witnessing acceptance and routine tests. No material shall be dispatched from its point of manufacture before it has been satisfactorily inspected and tested and cleared for dispatch.
7. All layouts & drawings for the equipment and materials shall be as per the Standard drawings of APTRANSCO, line route proposals, test certificates are to be got approved by APTRANSCO. All the standardized/approved GTPs and Drawings are available at APTRANSCO web site. Approved copies of GTPs and drawings and Technical Specification are to be made available at work site.
8. For Transmission lines, PTCC route approval and energisation approval shall be obtained prior to commissioning of the lines for all the lines exceeding 0.8KM. Expenditure towards works to be executed as per PTCC approval shall be borne by the company only. Processing and obtaining of PTCC approval is the responsibility of the Company.
9. Right of way for tower foundations, erection of towers, shifting and stringing shall be arranged by the company with the assistance of APTRANSCO. The APTRANSCO cannot be held responsible in the event of occurrence of any delays due to unforeseen calamities / accidents during the execution of the works or for such incidents or consequential losses or damages.
10. The measurements of actual works executed are to be got recorded in the departmental Measurement Books. Prior approval of APTRANSCO shall be obtained for technical deviations from APTRANSCO's standard specification or significant change in scope of work.
11. The Company shall hand over all the works executed at Para (1) by them to the APTRANSCO after completion in full shape. The completed works will be taken over by the APTRANSCO only if they are found to be in conformation to APTRANSCO's specifications

after the statutory inspection is done by APTRANSCO officials. The company is allowed to retain the dismantled materials if any after completion of the works.

12. The APTRANSCO reserves the right to get the works executed by an alternate agency at company's cost and risk, in case the execution of the work is not satisfactory and not as per specification by the APTRANSCO.
13. The company shall arrange third party NABL laboratory testing of energy meter and metering CTs and PTs for ratio test and phase angle error tests before APTRANSCO and APEPDCL officials.
14. The Company shall warrant for the satisfactory functioning of the materials / equipment supplied and for the satisfactory operation of the workmanship performed by him, for a minimum period of 12 months from the date of commissioning of the project (Line / Sub-Station / Bay works etc.) whichever is later. If any defects are found within this period the Company shall rectify such defects without any extra cost to APTRANSCO. The company must furnish 10% of gross estimated value of works indicated in the scheme approval letter by way of DD drawn in favour of Pay Officer/ APTRANSCO/ Vidyut Soudha/Hyderabad or Bank Guarantee issued by any Nationalised / Scheduled Bank for performance guarantee period of 12 months from the date of charging with 2 months claim period thereafter.
15. The works mentioned in the scheme approval letter shall be deemed to be the property of the APTRANSCO after take over. APTRANSCO can utilize the above works in any manner as required from time to time. The Company shall cooperate with APTRANSCO for facilitating Shutdown/Line Clears for maintenance purpose or works involving construction activities such as line crossing etc.,
16. In case of Schemes requiring construction of switching stations/Bay extensions for which land is to be acquired by the consumer/developer, the suitable site with sufficient area shall be acquired and handed over to APTRANSCO before erection. In case of switching station, the actual charges towards O&M of the switching station shall be paid by the company every year in the month of April, the charges for which will be intimated in the month of March. The O&M charges shall be payable by the consumer till the time, the switching station is converted into regular substation. After conversion of switching station into substation O&M charges will be borne by APTRANSCO. Undertaking should be given 'NO OBJECTION' to APTRANSCO for taking up expansion of Switching Station or conversion into regular Substation or adding additional bays for future consumers.
17. In case of Schemes requiring construction of switching stations/Bay extensions for which land is acquired by the consumer/developer, ownership of the land is to be transferred to the APTRANSCO by way of a registered gift/donation deed in favour of the concerned Executive Engineer/TLC. Further, the consumer/developer must furnish a notarized undertaking (on stamp paper), declaring that the assets transferred to APTRANSCO by gift/donation deed are suitably reflected in their accounting books.
18. On completion and commissioning of works, the consumer/developer has to transfer the title/ownership of the assets created by them to APTRANSCO (duly specifying the details of materials/equipment) by executing a notarized Gift/donation deed/Donation deed with a complete schedule of equipment indicating serial Nos., rating, make and value of the material/equipment as per the original invoice. The consumer/developer has to submit self-attested copies of invoices to APTRANSCO along with the Gift/donation deed.

*(The above terms and conditions shall be accepted by the Company duly furnishing an undertaking on Rs. 100/- stamp paper along with payment of supervision charges)*

SD /-

B. UMAKAR RAO  
DIRECTOR / PROJECTS

// FORWARDED BY ORDER //

  
23/04/2012  
ASST. DIVISIONAL ENGINEER



**ANNEXURE-II**  
**TERMS & CONDITIONS**

*(In case works are executed by APTRANSCO by collecting total Scheme cost from the Company)*

1. M/s [Name of the Company, Brief address] hereafter called as "The Company" requested APTRANSCO to execute the works indicated in the scheme approval letter no..... date.....
2. The works mentioned in the scheme approval letter shall be executed by APTRANSCO by awarding the works through its regular practice and as per standards of APTRANSCO. All the clauses pertain to deviations, penalties, Time extensions etc., shall also apply to these works and APTRANSCO shall be final authority in taking decisions in such deviations wherever required for completion of the works. However after completion of the works, the company shall pay the increase in the scheme cost if any due to increase in the quantities or change in the scope of the works or due to additional works required to complete/commissioning of the scheme.
3. The Company is agreeing to all the rules, procedures and normal technical and administrative policies of APTRANSCO to be equally applicable for the present works also and that the Company irrevocably consents for the decisions of APTRANSCO Board on such decisions/policies taken from time to time.
4. APTRANSCO will seek the Consent of the Company only in such cases where overall increase in value of the works is anticipated to be more than 25% of the approved scheme cost.
5. In case of Schemes requiring construction of switching stations/Bay extensions for which land is acquired by the consumer/developer, ownership of the land is to be transferred to the APTRANSCO by way of a registered gift/donation deed in favour of the concerned Executive Engineer/TLC.
6. The works mentioned in the scheme approval letter shall be deemed to be the property of the APTRANSCO after take over. APTRANSCO can utilize the above works in any manner as required from time to time. The Company shall cooperate with APTRANSCO for facilitating Shutdown/Line Clears for maintenance purpose or works involving construction activities such as line crossing etc.,
7. For Transmission lines, PTCC route approval and energisation approval shall be obtained prior to commissioning of the lines for all the lines exceeding 0.8KM. Expenditure towards works to be executed as per PTCC approval shall be charged to the Company.
8. The cost of testing of energy meter and metering CTs and PTs for ratio test and phase angle error tests at third party NABL laboratory is chargeable to the Company.
9. The APTRANSCO cannot be held responsible in the event of occurrence of any delays or for such incidents or consequential losses or damages due to unforeseen calamities / accidents and/or due to other reasons which are beyond control of APTRANSCO.

*(The above terms and conditions shall be accepted by the Company duly furnishing an undertaking on Rs. 100/- stamp paper along with payment of scheme cost)*

SD /-  
B. UMAKAR RAO  
DIRECTOR / PROJECTS

// FORWARDED BY ORDER //

  
23/04/2012  
ASST. DIVISIONAL ENGINEER