

**BEFORE THE KARNATAKA ELECTRICITY REGULATORY COMMISSION,  
BENGALURU**

**Dated : 14<sup>th</sup> December, 2018**

**Present:**

Shri M.K. Shankaralinge Gowda	..	Chairman
Shri H.D. Arun Kumar	..	Member
Shri D.B. Manival Raju	..	Member

**In the matter of collection of Operation and Maintenance (O&M) charges  
by the KPTCL from the Generators.**

**PREAMBLE:**

1. Pursuant to the Order dated 26<sup>th</sup> February, 2015, in O.P. No 13/2014 read with the Order dated 24<sup>th</sup> April, 2018, in O.P.No. 81/2016, and other connected cases, the Commission had issued 'Discussion Paper' dated 07<sup>th</sup> August, 2018 in the matter of collection of Operation and Maintenance Charges by the Karnataka Power Transmission Corporation Limited (KPTCL), the transmission Licensee in the State, from the Generators for the Operation and Maintenance works carried by the KPTCL, in respect of the dedicated Transmission lines and line terminal bays (Bays) in the KPTCL sub-stations.
2. Considering the facts narrated and the reasons stated in the 'Discussion Paper', the Commission sought the suggestions, comments and views of all the stakeholders and requested them to submit the same on or before 12.09.2018, on the following issues:
  - (i) Whether the IPP is required to maintain dedicated transmission line / bays constructed subsequent to the Electricity Act, 2003?

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- (ii) Whether the KPTCL is required to maintain dedicated transmission line/ bays, constructed prior to the Electricity Act, 2003?
  - (iii) Whether the KPTCL can furnish the actual expenses incurred/to be incurred, for maintaining the dedicated transmission line/bays, in its substations?
  - (iv) If not, what should be the methodology for estimating the expenses incurred/to be incurred, for maintaining the said line/bays.
3. In response to the 'Discussion Paper', eight Generating Companies and the KPTCL, have filed their written suggestions, comments, and views. A Public hearing was fixed by the Commission on 31.10.2018 at 3.00 PM, after publishing prior notice thereof, in which a considerable number of stakeholders participated. Some of them apart from making oral submissions mainly reiterating their views already filed, also filed written comments and suggestions/views. The KPTCL also filed replies for the objections raised by the Generators.
4. Except Shree Renuka Sugars Limited, a Co-Generation plant, the other stakeholders who responded to the Discussion paper issued have not disputed the entitlement of the KPTCL to claim O&M charges, for the bays and dedicated transmission lines, wherever the KPTCL has undertaken the maintenance of the same. The Generators have claimed that as a matter of fact, they themselves are maintaining the dedicated Transmission lines and therefore, the KPTCL is not entitled to claim maintenance charges towards the dedicated Transmission lines. However, there is a consensus that the bays have to be operated and maintained by the KPTCL itself, but not by the Generators.
5. The main objection of the Generators is with regard to quantum of O&M charges, payable as claimed by the KPTCL. The Generators urged that the annual Operation and Maintenance cost can be, 1% to 1.5% of the

capital cost on dedicated Transmission line and bay with annual escalation of 4% to 5.72% or it can be a benchmark cost/normative cost per Ckm per MW of different voltage classes of transmission lines with yearly escalation. Whereas, the KPTCL has claimed 1.5% of the capital cost with annual escalation of 12%.

6. Shree Renuka Sugars Limited has urged that a Co-Generation Plant, is different from IPPs like Hydro, Wind and Solar Power Plants and that the Co-Generation plant is more environmental friendly, as compared with others and therefore, the Co-Generation plants have no liability to pay O&M charges. Further, it contended that dedicated Transmission lines and bays are handed over to the KPTCL to consider them as their assets and accordingly the KPTCL claims the benefit of the depreciation, in its ARR and therefore, the collection of O&M charges by the KPTCL does not arise.
7. At the outset, we hold that the contention of Shree Renuka Sugars Limited, that Co-Generation plants are more environmental friendly, than other renewable energy plants and hence they are not liable to pay maintenance charges, is not acceptable, since there is no relationship between the plants being environment friendly or otherwise. The question here is maintenance of the dedicated transmission line and terminal bay which are meant for evacuation of power generated from the private power plants to the KPTCL Sub-station. The KPTCL has contended that the transmission assets created from contribution by generators are not considered as assets of the KPTCL for the purpose of claiming depreciation, and that, such assets are taken over by the KPTCL only for maintenance. Therefore, the contention of Shree Renuka Sugars Limited is liable to be rejected.
8. The following issues would arise, for our consideration, for determining the claim of the KPTCL, in respect of O&M charges:

- (a) Whether the KPTCL is obliged to maintain the dedicated Transmission lines of Generators?
  - (b) Whether the KPTCL is obliged to maintain the line terminal bay of the generator's dedicated transmission line located at the KPTCL substation?
  - (c) What should be the methodology for arriving at the Operation and Maintenance charges of the bays and maintenance charges of dedicated Transmission line?
  - (d) What should be the O&M charges and from which date and what should be the procedure for recovery?
9. **Decisions of Commission and reasons thereon:** Considering the submissions of the stakeholders including KPTCL and the material placed record, we proceed to give our findings on the above issues:

- (a) *Whether the KPTCL is obliged to maintain the dedicated Transmission lines of the Generators?*

A Generating company is required to establish, operate and maintain dedicated Transmission lines, as per Section 10 of the Electricity Act, 2003. It is not brought to our notice that there is any provision in the Electricity Act, or the Rules or the Regulations made thereunder, that the Transmission licensee has to maintain the dedicated Transmission lines. However, we note that earlier to enactment of Electricity Act, 2003, the State utilities used to take over the dedicated Transmission lines and thereafter used to maintain them as part of the State Grid, without insisting on payment of maintenance charges. Whatever may be the reason for it, after the Electricity Act, 2003 coming into force, the Transmission licensee taking over the dedicated Transmission line for maintenance or other purpose does not arise. The dedicated

Transmission lines can be maintained by the KPTCL at the request of the Generator on reaching an agreement for payments of the maintenance charge. The same was the position earlier to Electricity Act, 2003, as is clear from Section 18-A of the Electricity Supply Act, 1948. Therefore, we hold that the KPTCL is not obliged to maintain the dedicated Transmission line constructed either subsequent to the promulgation of the Electricity Act, 2003 or prior to it.

- (b) *Whether the KPTCL is obliged to maintain the line terminal bay of the generator's dedicated transmission line located at the KPTCL sub-station?*

In the previous Order dated 24.04.2018, in O.P. No 81/2016 and other connected cases, in Para 8(h), this Commission has observed that, as the premises of the KPTCL substation is a protected area, outsiders are prohibited from entering into the said premises and therefore, no employee of an IPP is allowed inside the premises of the KPTCL sub-station for safety and security reasons. This observation was reiterated in the Discussion Paper. None of the stake holders has disputed such observation. Therefore, though the line terminal bay is the property of the generator, the KPTCL is obliged to maintain the line terminal bays, as outsiders are not allowed to enter the sub-station and maintain it.

- (c) *What should be the methodology for arriving at the Operation and Maintenance charges of the bays and maintenance charges of dedicated Transmission line?*
- (i) Before considering the above issue, we would like to deal with the powers of the Commission to determine the O&M charges payable to the KPTCL. The maintenance charges for line terminal bays could have been agreed to between the parties by mutual negotiations. But that has not happened. Though, there could be no agreement regarding the payment of maintenance charges, the KPTCL

cannot refuse to maintain it, as the KPTCL is obliged to maintain line terminal bay for reasons cited earlier. As there is no agreement between the parties on payment of O&M charges, the Commission is required to regulate it and fix the charges. Otherwise, this would essentially end up in a dispute, between the generator and the transmission licensee and in such a situation, this Commission is required to adjudicate such disputes, under the provisions of Section 86(1)(f) of the Electricity Act, 2003.

- (ii) The following are the two methodologies, suggested by some of the stakeholders during the proceedings.
1. Maintenance charge based on capital cost, with yearly escalation.
  2. Maintenance charge based on benchmark cost/normative cost per Ckm per MW of different voltage classes of Transmission lines with yearly escalation.

It is submitted that second alternative is more reliable and advantageous, as the same is based on the normative cost, whereas in the first alternative, the computation of the capital cost is subjective.

- (iii) The KPTCL has contended that it is not possible to arrive at the normative operation and maintenance cost of the line terminal bay of the generators' dedicated transmission line located in the KPTCL substation, as a separate account, is not maintained, for the operation and maintenance of these bays and it is not possible to segregate the O&M cost of these bays from the entire O&M expenses of the KPTCL transmission system.
- (iv) The stakeholders have not produced any material to estimate O&M expenses of line terminal bays, though every generator is operating and maintaining identical line terminal bay located at the switchyard of its generating station. It appears that even the

generators have not maintained separate account to arrive at the O&M expenses of line terminal bay and that it may not be possible to segregate the expenses incurred only towards the line terminal bay from its total O&M expenses. Therefore, we think that, the methodology of calculating the O&M charges based on capital cost, with yearly escalation, is the only feasible way.

- (v) The apprehension that ascertaining the capital cost of the line terminal bay would be difficult or uncertain or vague is not well founded. The estimation of cost of the construction work of line terminal bay is invariably carried out by the KPTCL, therefore both the parties can easily ascertain the capital cost of line terminal bay.
- (vi) In response to the issue raised in the Discussion Paper regarding the methodology for estimating the O&M expenses, particularly in respect of line terminal bay, on capital cost basis, the stakeholders have suggested O&M expenses, varying from 1% to 1.5% of the capital cost of line terminal bay, with an annual escalation of 4% to 5.72%.
- (vii) We note that, the power sector in general, has recognised O&M cost of 1.5%, in the case of static electrical plants and 3% to 5% in the case of rotating electrical plants. This range of O&M cost could be seen in all the earlier agreements for claiming the O&M expenses in the power sector. Also, in the case of the PGCIL, the maintenance charges are being collected at 1.5% of the capital cost, for the line terminal bays of State Transmission utilities terminating at the PGCIL sub-stations, across India.
- (viii) The Commission notes that in the case of line terminal bay, the electrical equipment installed are static equipment. The computation of capital cost can be restricted only to the capital cost, relating to line terminal bays excluding the cost of land. However, the cost of equipment or spares required for

replacement of failed or defective equipment or parts has to be borne by the Generator, in addition to the O&M charges.

- (ix) The stakeholders have suggested an annual escalation from 4% to 5.72 % on the O & M charges for the base year. The KPTCL, in its circular No. KPTCL/B28(a)/32543/12-13 dated 17.08.2012, has claimed 12% annual escalation on the base year's O & M charges. The CERC and many of the SERCs including this Commission have adopted annual escalation of 5.72% on the O&M charges arrived at on the base year, while computing the tariff payable to the generating companies. However, for the present, the KPTCL has agreed for an escalation in line with the escalation rates as determined by the CERC from time to time. Considering the above aspects, the Commission decides to adopt an annual escalation rate of 5.72%, on the base O & M charges, which is considered to be reasonable.
- (x) The above methodology could also be adopted, in respect of dedicated transmission lines, which are maintained by the KPTCL, at the request of any generator, for claiming the O&M charges.
- (d) *What should be the O&M charges and from which date and what should be the procedure for recovery?*
- (i) From the above discussions, it is found that, the KPTCL is not obligated to maintain the dedicated transmission lines of the generators. However, the KPTCL may undertake the maintenance of dedicated transmission lines, at the request of generators on reaching an agreement for payment of O&M charges by the Generator at the rate of 1.5% of the capital cost of the dedicated transmission line with an annual escalation of 5,72% on the O & M charges for the base year. If there is no agreement on payment of maintenance charges, the KPTCL shall not undertake the maintenance of dedicated transmission lines of the generator. In



such a situation, it is the responsibility of the generator to maintain the dedicated transmission line and the KPTCL shall not claim the O & M charges from the generator.

- (ii) As regards the operation and maintenance of the line terminal bay, located in the KPTCL sub-station, the same has to be invariably maintained by the KPTCL for the reasons already discussed. The operation and maintenance charges for the line terminal bay shall be at 1.5% of the capital cost of the line terminal bay with annual escalation of 5.72% of the O & M charges for the base year.
- (iii) The Commission notes that, as per the circular dated 17<sup>th</sup> August, 2012 of the KPTCL, a few generators might have already paid the O&M charges towards dedicated transmission line as well as line terminal bay located at the KPTCL sub-station, while a few others might not have paid and disputed the same. From the above analysis, there is no obligation on the KPTCL, to maintain the dedicated transmission line and it can undertake such maintenance only if there is consensus, between the parties on payment of maintenance charges. In case, the KPTCL has already carried out maintenance of dedicated transmission lines of the generators and has not recovered the maintenance charges, it shall claim the same at the rates decided in this Order from the generator. In case, any generator fails to honour claims, the KPTCL shall have the right to recover the same through appropriate legal recourse. The KPTCL shall not, however, take any coercive action not permitted under law, for the recovery of the unpaid amounts.
- (iv) The KPTCL shall have the right to recover the O&M charges, at the rate as determined by the Commission in this Order, from 17.08.2012, i.e., the date of the KPTCL's Circular, claiming O&M charges for line terminal bay already maintained by the KPTCL. In case, the arrears of O&M charges towards line terminal bay are not paid within the stipulated time as per the demand notice raised by the KPTCL, it may

file an application under Section 142 of the Electricity Act, 2003, against the defaulting generator.

- (v) As regards the new line terminal bays, to be maintained by the KPTCL is concerned, the parties may enter into an agreement disclosing the capital cost of the line terminal bay and other relevant terms regarding payment of O&M charges, the demand to be raised, the interest to be paid for the delayed payments, etc.

10. In view of the above discussions and conclusions, we pass the following:

**ORDER**

- (a) The KPTCL alone has to operate and maintain the line terminal bay of dedicated transmission line of the generators, located at the KPTCL sub-station. The operation and maintenance charges, payable by the generators for the line terminal bay, shall be at 1.5% of the capital cost of the line terminal bay with an annual escalation of 5.72% on the O & M charges, for the base year, besides the generators meeting the cost of equipment or spares required for replacement of failed or defective equipment.
- (b) The KPTCL shall have the right to recover the O&M charges for line terminal bay at the rate as determined by the Commission in this Order from 17.08.2012, i.e., the date of the KPTCL's Circular, claiming O&M charges for line terminal bay. In case, any arrears of O&M charges towards line terminal bay is not paid within the stipulated time in the demand notice raised by the KPTCL, an application may be filed under Section 142 of the Electricity Act, 2003 against the defaulting generator.
- (c) At the time of establishing the line terminal bay, the parties shall enter into an agreement disclosing the capital cost of the line terminal bay and other relevant terms, regarding payment of O&M

charges, the demand to be raised, etc. Interest at the rate of 6.25% per annum shall be payable for any delayed payments.

- (d) There is no obligation on the KPTCL to maintain the dedicated transmission line of the generators and it can undertake such maintenance only if there is a consensus between the parties on payment of maintenance charges. In case, the KPTCL has already carried out maintenance of the dedicated transmission lines of the generators and could not recover the maintenance charges, it has to take appropriate legal recourse for the recovery of the same. It cannot adopt any coercive action not permitted under law, against the generator for recovery of arrears of such maintenance charges.
- (e) The generators who have challenged the O&M charges, claimed by the KPTCL in Original Proceedings, before this Commission and whose cases are pending, are at liberty to pursue their cases, if they are not agreeable with this Order.

**Sd/-**

(M.K. SHANKARALINGE GOWDA)  
CHAIRMAN

**Sd/-**

(H.D. ARUN KUMAR)  
MEMBER

**Sd/-**

(D.B. MANIVAL RAJU)  
MEMBER