

# KERALA STATE ELECTRICITY REGULATORY COMMISSION

## THIRUVANANTHAPURAM

PRESENT: Sri.K.J.Mathew, Chairman  
Sri.P.Parameswaran, Member  
Sri.Mathew George, Member

**May 3, 2011**

### **Petition OP No. 40/2010**

In the matter of

ARR&ERC of Kanan Deven Hill Plantations Company Private Limited  
(KDHPCL) for 2011-12

Kanan Deven Hill Plantations Company Private Limited - Petitioner

## **ORDER**

### **Background**

1. Kanan Deven Hill Plantations Company Private Limited (*hereinafter referred to as KDHPCL or licensee*) is a distribution licensee supplying electricity in Munnar. The KDHPCL obtained the Licence for distribution through the transfer of licence from M/s Tata Tea limited as per the order dated 9-1-2007 of the Commission. In its petition dated 18-12-2010, the licensee has submitted a petition for the approval of ARR&ERC for the year 2011-12 before the Commission. A public hearing was held at the Licensee's area in Munnar on 11-2-2011. In the petition, KDHPCL has projected ARR of Rs.1212.50 lakhs and total revenue of Rs.1340.52 lakh leaving a surplus of Rs.128.02 lakh. After accounting a return on capital of Rs.29.52 lakh and tax of Rs.43.53 lakh, the net surplus was projected as Rs.54.97 lakhs. The licensee has proposed the surplus to be transferred to the reserve.

### **Hearing on the matter**

2. In the hearing held on 11-2-2011 in Munnar consumers and representatives of KSEB were present. KSEB has provided written comments on the petition. In their comments, KSEB has mentioned that the power purchase cost is to be estimated based on the Commission's Order on the revision of BST dated 13-12-

2010. Further, the excess demand charges projected by the licensee shall not be allowed. In the case of employee costs, the Board stated that, about 36% of the employee cost is for two top management persons, which is very high and the cost of 'estate electricians' shall not be included as part of ARR&ERC exercise. The legal charges, travelling expenses and miscellaneous expenses included as part of A&G expenses are to be examined in detail. There is an increase of 50% in O&M expenses projected by the licensee. Further, the excess demand charges, depreciation, T&D loss etc are to be looked into. The average realization projected for 2011-12 is lower compared to 2009-10, which needs to be corrected.

3. As per the direction of the Commission the voltage problem raised by the licensee particularly when the Madupetty generation is not available was explained by KSEB. KSEB has reported that as per the readings available at the Chithirapuram substation, the 11kV feeder sending end voltage is maintained within the statutory limits. The feeders are at present carrying its full capacity of 200 Amp. KSEB also reported that there is no under frequency relays in operation in the Chithirapuram substation.

### **Analysis and decision of the Commission**

The Commission has considered the comments/suggestions of participants in the hearing. The item wise details are examined below:

4. **Energy Sales:** The licensee has projected the total sales for the year 2011-12 as 34.94 MU. Of this, own consumption is estimated as 16.59 MU (47.48%). The feed back energy is estimated as 5.80 MU and the total energy requirement projected as 47.16 MU for 2011-12.
5. After considering the past data, the Commission accepts the projections of the licensee on the energy sales. The licensee may note that as per the Order of Hon. Appellate Tribunal, the own consumption of the licensee shall be treated at par with similar other consumers and shall be metered and billed at appropriate tariff. The licensee in its letter dated 15-2-1011 has stated that own consumption is metered at each consumption point. The Commission notes that the communication dated 15-2-2011 is silent on this issue of billing such consumers at appropriate tariff. The Commission in its truing up orders for KDHPCL for 2004-05 to 2009-10 has considered the tariff of HT-1 Industrial for estimating the revenue from own consumption and also directed the licensee to provide the details of all connections under 'own consumption'. In the absence of actual data on 'own consumption' the veracity of distribution losses reported by the

licensee cannot be properly verified, since adjustment in 'own consumption' could result in improved loss levels. The energy sales approved for the year 2011-12 is as follows:

**Proposed and approved Energy sales for 2011-12**

	2009-10 (Actuals)	2010-11 (Approved)	2011-12 (projections)	2011-12 (Approved)
Category	(MU)	(MU)	(MU)	(MU)
HT industrial	8.50	24.38	8.58	8.58
HT IV commercial	0.90	0.84	0.91	0.91
LT Domestic	4.25	4.39	4.30	4.30
LT colonies	1.14	1.25	1.16	1.16
LT industries	0.28	0.27	0.29	0.29
LT non-domestic	0.72	0.67	0.73	0.73
LT Commercial	2.10	1.90	2.12	2.12
Street lighting	0.23	0.24	0.23	0.23
Own consumption	16.42		16.59	16.59
<b>Total Energy sales</b>	<b>34.54</b>	<b>33.93</b>	<b>34.91</b>	<b>34.91</b>

6. **T&D loss and Energy requirement:** The energy loss reported for the year 2009-10 is 13.63% as against the approved level of 14.49%. For 2011-12 the licensee has projected the T&D loss as 13.62%. In the past ARR&ERC Orders, the Commission has directed the licensee to reduce the losses and from 2008-09 onwards loss levels have been reduced substantially. The actual loss level reported for 2008-09 was 14.42% as against the approved level of 18.97%. The loss level approved for 2010-11 was 14%. The Commission in the previous ARR&ERC order directed the licensee to provide a detailed proposal for reduction of distribution losses by 1% every year. However, the licensee neither conducted any study nor given any proposal on reduction in losses. The Commission in the previous order has directed that the loss reduction target for next two years (2011-12 and 2012-13) shall be 1% every year. Accordingly the loss level for 2011-12 shall be 13%.
  
7. Based on the approved sales and approved loss level, the gross energy requirement would be 46.80MU for 2011-12, as against 47.16MU proposed by the licensee. After considering the feedback energy, the net energy to be purchased would be 41 MU.

### Energy requirement and T&D loss approved for 2011-12

<b>Total Energy sales</b>	<b>34.54</b>	<b>33.93</b>	<b>34.91</b>	<b>34.91</b>
Feed back	5.74	5.59	5.80	5.80
Distribution loss	6.37	6.40	6.42	6.09
<b>Gross energy requirement</b>	<b>46.65</b>	<b>45.92</b>	<b>47.13</b>	<b>46.80</b>
Distribution Loss %	13.65%	13.94%	13.62%	13.00%

8. **AT&C Loss:** In the distribution business, T&D loss and AT&C loss are the common performance parameters employed. The collection efficiency reported by the licensee is 100%. Accordingly, the AT&C loss target fixed for the year 2011-12 is **13%**.
9. **Capital expenditure programme:** The licensee has projected a capital expenditure of Rs.12 lakhs for 2011-12 for replacement of two old transformers. The licensee has revised the capital expenditure programme for 2010-11. In addition to the capital works of Rs.35.20 lakhs proposed for 2010-11, additional works of Rs.16.75 lakhs being envisaged. The total capital works for 2010-11 is thus Rs.51.95 lakhs.
10. **Power purchase cost :** In the ARR, the licensee has projected the power purchase cost as Rs.1070.28 lakhs based on the Grid tariff -1 with demand charges of Rs.255/kVA and energy charge of Rs. 2.15/kWh. The Commission in its order dated 25-5-2010 revised the tariff applicable to KDHPCL with effect from 1-12-2007. This order was upheld by the Hon. APTEL vide order dated 28-1-2011 in appeal No.140 of 2010. Considering this, the licensee has given an estimate of power purchase cost as per the Commission's order dated 25-5-2010 as Rs.1358.64 lakhs.
11. The Commission has revised the Bulk Supply Tariff applicable to the licensees vide its order dated 13-12-2010. Accordingly the power purchase rate for the licensee is to be calculated at the revised rates ie., Rs.270/kVA as the demand charges and 328 paise/kWh as energy charges. Accordingly, the Commission revised the power purchase cost as Rs.1492.86 lakhs against Rs.1070.28 lakhs proposed by the licensee.

**Power purchase cost projected and approved for 2011-12**

	Projected by the licensee	Approved by the Commission
Gross Energy Requirement (MU)	47.16	46.80
Less Feed Back energy (MU) (5.8MU)	41.36	41.00
Energy Charges (Rs./kWh)	2.15	3.28
<b>Total Energy Charges (Rs.lakhs)</b>	<b>889.46</b>	<b>1,344.64</b>
Contract demand (kVA)	7,000	7,000
Excess Demand (kVA)	500	
Demand charges (Rs./kVA)	255	270
<b>Demand charges (Rs.lakhs)</b>	<b>229.50</b>	<b>226.80</b>
Excess demand charges (Rs.lakhs)	7.65	
Total demand charges	237.15	226.80
Total Power purchase cost (Rs.lakhs)	1,126.61	1,571.44
Rebate (Rs. Lakhs)	56.33	78.57
<b>Total Power purchase cost (Rs.lakhs)</b>	<b>1,070.28</b>	<b>1,492.86</b>

**12. Interest and financing charges :** The licensee has projected the interest and financing charges as Rs.8.15 lakhs, which consists of the interest on security deposits only. The licensee has not proposed any other item under interest and financing charges. The Commission allows the interest & financing charges as proposed by the licensee. The Commission directs that interest on security deposit shall be credited promptly to the consumer's account as per the provisions of the Kerala Electricity Supply Code and only the actual interest paid to the consumers alone will be admitted in the truing up process.

**13. Depreciation:** The GFA at the beginning of the year 2011-12 proposed by the licensee is Rs.286.16 lakhs. The total addition to GFA proposed is Rs.12 lakhs for 11kV works. The total depreciation estimated by the licensee is Rs.10.95 lakh. Further, as per the estimation of the licensee, the contribution for creation of capital assets is Rs.18.26 lakh at the end of 2011-12, for which admissibility of depreciation is to be ascertained. The Commission will in detail analyse these matters as part of the truing up process. The licensee has clarified that the depreciation is calculated as per the rates under CERC norms. The Commission notes that the rates used by the licensee is as per the norms for the period 2003-08. The depreciation shall be allowed as per the CERC norms which is revised

for the tariff period 2009-14. The revised rates and the applicable depreciation is as follows:

Asset class	Proposed by Licensee			Approved	
	GFA at the beginning of the year	Rate of depreciation	Depreciation	Rate of depreciation	Depreciation
	(Rs.lakhs)	(%)	(Rs.lakhs)	(%)	(Rs.lakhs)
LT lines, service connections etc	194.4	3.67	7.13	5.28	10.26
Metering equipment	40.16	3.61	1.45	5.28	2.12
Miscellaneous equipment	32.53	5.99	1.95	6.33	2.06
Others	7.06	5.95	0.42	6.33	0.45
<b>Total</b>	<b>274.15</b>		<b>10.95</b>		<b>14.89</b>

The Commission allows the depreciation for 2011-12 at Rs.14.89 lakhs provisionally, which shall be finalized during the truing up process when the actual details of assets will be available.

**14. Employee costs:** The employee costs proposed by the licensee is Rs.83.10 lakhs as against Rs. 58.77 lakhs approved for the year 2010-11. The licensee has included Rs. 14.94 lakhs as the salary of Manager and Rs.14.93 lakhs as the proportion of 25% of the salary of Executive Director amounting to Rs.29.87 lakhs as part of employee costs. The salary of regular staff amounting to about 40 persons is estimated as Rs.48.69 lakhs. The licensee has also proposed a provision of 10% increase in salary to the tune of Rs.4.54 lakhs. It is not properly established that 25% of time is of the manager/ED is earmarked in the licensee business, which requires a detailed scrutiny. The Commission has decided to engage consultancy assignment in ascertaining the joint costs of licenses. As mentioned in the ARR&ERC Order for 2010-11 of KDHPCL, the Commission in principle agrees to book a portion of salary of Manager/Executive director if their time is allotted on a permanent basis. Till such time a decision is taken based on the consultancy studies, a notional provision of Rs.5 lakhs is allowed as a proportion of salary of senior management. Hence, the employee costs allowed provisionally for the year 2011-12 is Rs.58.23 lakhs.

**15. Repair and maintenance expenses :** The licensee has been maintaining 170 km of 11kV overhead lines and 180km of 3 phase line with 134 number of distribution transformers having different capacities. The licensee has projected the R&M expenses for 2011-12 for OH lines, buildings, transformers etc., as follows:

	Rs. lakhs		
	2009-10 (Actual)	2010-11 (Approved)	2011-12 (projections)
Buildings	1.50	0.56	1.58
Up keep of HT lines	11.22	6.65	8.62
Upkeep of LT lines	5.14	2.13	3.05
Vehicle/fuel & maintenance	2.47	1.53	2.03
Other (up keep of lighting installations)	1.25		0.40
<b>Total</b>	<b>21.58</b>	<b>10.87</b>	<b>15.68</b>

16. The actual expenses for 2009-10 reported by the licensee is Rs.21.58 lakhs, mainly on account of higher provision for maintenance of HT lines. As against this the approved expenses for 2010-11 is only Rs.10.87 lakhs.. The projections for 2011-12 is comparatively lower than 2009-10 actuals. However, the projection for 2011-12 is about 44% more than the approved level of expenses for 2010-11. The licensee has also projected Rs.0.40 lakhs for upkeep of lighting systems. Considering the importance of upkeep of distribution system for trouble free supply, the Commission approves the projections of the licensee on R&M expenses, subject to the condition that the expenses projected under upkeep of lighting systems shall be allowed in triuing up process after prudence check.

**17. Administration and General expenses:** The administration and general expenses proposed by the licensee is Rs.13.13 lakhs for 2011-12 where as the approved expenses for 2010-11 was only Rs.6.72 lakhs. The increase is mainly on account of the increased provision (Rs.5 lakhs) made for legal expenses. Since A&G expenses is a controllable item, the Commission would allow 10% increase over the provision approved for 2010-11, which is Rs.7.39 lakhs. The licensee shall limit the expenses to the approved level.

**18. Other debits:** The licensee has included duty on line losses, Section 3 duty and periodical inspection charges under other debits totaling to Rs.11.21 lakhs. Section 3 duty shall not be passed on to the consumers and duty on line loss is as part of Section 4 duty. Hence, the Commission is in a position to allow only the inspection charges under other debits, which is Rs.0.20 lakhs as projected by the licensee.

**19. Return on equity:** The licensee has projected Rs.29.52 lakhs as return on capital at the rate of 14% and a provision of tax of Rs.43.53 lakhs for 2011-12. However, based on the details provided by the licensee, the Commission could

not arrive at the basis for this estimation of return. The Commission is in the process of ascertaining the eligible level of rate base for allowing return for the licensees through independent study. Till then a provisional return on equity of Rs.5 lakhs is allowed, which will be finalized based on a detailed examination of the accounts of the licensee with the help of an independent agency.

20. **Gross Aggregate revenue requirements:** Based on the above, the gross ARR proposed and approved for 2011-12 is as given below.

Particulars	Proposed by the licensee	Approved by the Commission
	(Rs. Lakhs)	(Rs. Lakhs)
Power purchase cost	1,070.28	1,492.86
Repair and maintenance	15.68	15.68
Employee cost	83.10	58.23
Interest & financing charges	8.15	8.15
A&G expenses	13.13	7.39
Depreciation	10.95	14.89
Other debits	11.21	0.20
Return on Equity	29.52	5.00
<b>Gross ARR</b>	<b>1,242.02</b>	<b>1,602.41</b>

21. **Revenue from tariff :** The licensee has projected the revenue from tariff as Rs.1331.79 lakhs based on the tariff existed immediately prior to 1-12-2007. The Commission notes that the average tariff estimated by the licensee for the 'own consumption' is lower than the average tariff for the similar category. In the truing up orders, the Commission has directed the licensee to provide the details of connections under 'own consumption'. Hon. APTEL has ordered that there shall not be any discrimination among consumer categories and hence own consumption shall be billed in appropriate tariff category based on the actual meter reading. Based on the information provided by the licensee, the major portion of the 'own consumption' is HT industrial category. In the absence of proper estimates and details of tariff category of own consumption, the Commission uses the average tariff of HT industrial consumers for projecting the revenue from 'own consumption', as a provisional measure.

22. The Commission also notes that the average tariff projected by the licensee is lower than the actual average tariff for 2009-10. Hence, the Commission is not in a position to accept the revenue projections. Hence, for the purpose of estimation of revenue, the Commission is of the view that the actual average tariff for 2009-10 may be used, which is more reasonable and reliable. In the

case of 'own consumption', the Commission adopts the tariff of HT industrial in 2009-10 provisionally. The licensee shall submit the actual figures during truing up exercise.. Accordingly, the revenue from tariff provisionally estimated at Rs.1464.27 lakhs as given below:

Category	Projected by the Licensee			Approved by Commission		
	Energy sales	Average realisation	Revenue	Energy sales	Average realisation for 2009-10	Estimated Revenue for 2011-12
	(MU)	(Rs./kWh)	(Rs.lakhs)	(MU)	(Rs./kWh)	(Rs.lakhs)
HT industrial	8.58	3.90	334.90	8.58	4.07	349.07
HT IV commercial	0.91	4.45	40.51	0.91	5.12	46.57
LT Domestic	4.30	1.46	62.64	4.30	1.45	62.45
LT colonies	1.16	5.65	65.55	1.16	6.24	72.36
LT industries	0.29	3.29	9.55	0.29	4.23	12.25
LT non-domestic	0.73	6.77	49.41	0.73	8.27	60.34
LT Commercial	2.12	7.64	161.97	2.12	8.33	176.57
Street lighting	0.23	3.60	8.29	0.23	4.22	9.71
Own consumption	16.59	3.61	598.97	16.59	4.07	674.96
<b>Total</b>	<b>34.91</b>	<b>3.81</b>	<b>1,331.79</b>	<b>34.91</b>	<b>3.46</b>	<b>1,464.27</b>

**23. Non Tariff Revenue:** The licensee has estimated Rs.8.73 lakhs as the revenue from non-tariff, which includes Rs.5.97 lakhs as interest on deposit with KSEB, and Rs.2.76 lakhs from miscellaneous charges. The Commission accepts the projection of the licensee on non-tariff income.

**24. Revenue Surplus/gap:** Based on the above, the revenue surplus/gap for the year 2011-12 estimated by the licensee and the approved by the Commission is as follows:

Particulars	Proposed by the licensee	Approved by the Commission
	(Rs. Lakhs)	(Rs. Lakhs)
Power purchase cost	1,070.28	1,492.86
Repair and maintenance	15.68	15.68
Employee cost	83.10	58.23
Interest & financing charges	8.15	8.15
A&G expenses	13.13	7.39
Depreciation	10.95	14.89
Other debits	11.21	0.20

Return on equity	29.52	5.00
Income tax	43.53	
<b>Gross ARR</b>	<b>1,285.55</b>	<b>1,602.41</b>
Less Non-tariff income	8.73	8.73
<b>Net ARR</b>	<b>1,276.82</b>	<b>1,593.68</b>
Revenue from sale of power	1,331.79	1,464.27
<b>Revenue Surplus</b>	<b>54.97</b>	<b>-129.40</b>

25. The revenue surplus estimated by the licensee is Rs.54.97 lakhs for 2011-12.

The Commission based on the reasons given above provisionally approves Net ARR of Rs.1593.68 lakhs and the revenue from tariffs as Rs.1464.27 lakhs. Thus the net revenue gap provisionally estimated as Rs.129.40 lakhs, as against Rs.54.97 lakhs surplus proposed by the licensee. The revenue gap is mainly on account of increase in power purchase cost due to revision of BST as per the Commission Order dated 13-12-2010. The Commission for the time being proposes no adjustment for the revenue gap for the reason that there is surplus arrived at during the truing up for the years 2005-06 to 2009-10 and some of the expenses approved are provisional.

26. The Commission notes that the licensee so far has not provided tariff proposal even though the revision of retail supply tariff effected by the Commission vide its order dated 31-1-2008 was set aside by the Hon. High Court of Kerala. Further the licensee has not yet implemented the revised ToD tariff for HT and LT consumers. The Commission directs that the licensee shall submit tariff proposal including ToD tariff for LT & HT along the similar lines existing for the consumers of KSEB.

27. The Commission notes the services deficiencies in the distribution system prevailing in this area of supply of the licensee. The incoming feeders to the area are heavily overloaded and the consumers are subjected to frequent outages due to system constraints. The failure of this licensee in discharging the primary duty of providing reliable power supply to the consumers is noted with displeasure and anxiety.

### **Orders of the Commission**

28. After the analysis of the ARR&ERC petition filed and the clarifications thereof submitted by the licensee, the Commission provisionally approves the ARR&ERC for the year 2011-12 for the KDHPCL as stated above. The Commission also issues the following directives for compliance.

- The revenue gap arrived above is mainly on account of the revision of BST. The increase in the BST shall be met from the revenue surplus arrived at the truing up process.
- The licensee shall submit a tariff petition for revision of retail tariff so as to have uniform retail supply tariff and to align with the tariff existing in the licence area of KSEB.
- The licensee shall submit the audited accounts of the licensee's operations and other business separately with a consolidated statement.
- The Licensee shall undertake a detailed study of the distribution system in its area of supply and submit a proposal for reduction in losses by a minimum of 1% per year. The licensee shall also take immediate action to strengthen the facility for drawing power to the area of supply, and submit an action taken report to the Commission within 3 months.
- The licensee shall provide quarterly reports on the achievement of standards of performance.

The petition disposed of, ordered accordingly.

**Sd/-**

**P.Parameswaran  
Member**

**Sd/-**

**Mathew George  
Member**

**Sd/-**

**K.J.Mathew  
Chairman**

**Approved for Issue**

**Secretary**