



THIRTEENTH KERALA LEGISLATIVE ASSEMBLY

**COMMITTEE
ON
PUBLIC UNDERTAKINGS
(2014-2016)**

NINETY NINTH REPORT
(Presented on 3-12-2015)

**SECRETARIAT OF THE KERALA LEGISLATURE
THIRUVANANTHAPURAM**

2015

THIRTEENTH KERALA LEGISLATIVE ASSEMBLY

**COMMITTEE
ON
PUBLIC UNDERTAKINGS
(2014-2016)**

NINETY NINTH REPORT

On

**The Action Taken by Government on the Recommendations
contained in the Ninety First Report of the Committee on
Public Undertakings (2008-2011) relating to Kerala State
Electricity Board based on the Report of the Comptroller
and Auditor General of India for the year ended
31 March, 2004 (Commercial)**

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COMMITTEE ON PUBLIC UNDERTAKINGS

(2014-2016)

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Smt. P. K. Girija, Additional Secretary

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Shri P. S. Selvarajan, Under Secretary.

INTRODUCTION

I, the Chairman, Committee on Public Undertakings having been authorised by the Committee to present the Report on their behalf, present this Ninety Ninth Report on the Action Taken by Government on the recommendations contained in the Ninety First Report of the Committee on Public Undertakings (2008-2011) on the working of the Kerala State Electricity Board based on the Report of the Comptroller and Auditor General of India for the year ended 31 March, 2014 (Commercial).

The statement of Action Taken by the Government included in this report were considered by the Committee constituted for the year (2014-2016).

This Report was considered and approved by the Committee at the meeting held on 28-10-2015.

The Committee place on record their appreciation of the assistance rendered to them by the Accountant General (Audit), Kerala in the examination of the statements included in this Report.

Thiruvananthapuram,
3rd December, 2015.

K. N. A. KHADER,
Chairman,
Committee on Public Undertakings.

REPORT

The Report deals with the Action Taken by Government on the recommendations contained in the Ninety First Report of the Committee on Public Undertakings (2008-2011) relating to Kerala State Electricity Board based on the report of the Comptroller and Auditor General of India for the year ended 31 March, 2004 (Commercial).

The Ninety First Report of the Committee on Public Undertakings (2008-2011) was presented to the house on 15th July, 2010. The Report contained 9 recommendations and the Government furnished reply to all the recommendations. The Committee (2014-2016) considered and approved the replies received from Government at its meetings held on 14-1-2015 and 24-6-2015 without any remarks.

**REPLY FURNISHED BY THE GOVERNMENT ON THE RECOMMENDATIONS OF THE
COMMITTEE WHICH HAVE BEEN ACCEPTED BY THE COMMITTEE
WITHOUT REMARKS**

<i>Sl. No.</i>	<i>Para No.</i>	<i>Dept. concerned</i>	<i>Conclusions/Recommendations</i>	<i>Action Taken by Government</i>
1	2	3	4	5
1	4	Power	<p>The Committee finds that it was a fault on the part of Kerala State Electricity Board in not reclassifying MILMA under HT IV-Commercial tariff despite having chilling and freezing units which led to revenue loss of ₹ 1.16 crore and subsequent interest loss of ₹ 24.17 lakh. The Committee accepts the fact that, MILMA is not a profit driven organisation but one working with the social obligation of supplying milk to millions of public. However the Committee sees no justification in the argument of the Board</p>	<p>As per tariff order dated 14-5-1999, Dairy Farms were classified under HT I-Industrial Tariff, and Cold Storage and Freezing Units were classified under HT IV-Commercial Category. These categorisation was applicable to HT consumers. The units of MILMA were largely Cold Storage and Freezing Units. For that reason such units had to be billed under HT IV-Commercial Tariff.</p> <p>Being HT service, the Special Officer (Revenue) issued bills under HT IV-Commercial Tariff to all units of MILMA.</p>

that increasing tariff rates of MILMA will subsequently result in increased milk prices. The Committee desires to be furnished with the present position of cases filed by MILMA against the Board. The Committee recommends making provisions for determining the power consumed by different units of MILMA for various processes such as chilling and freezing.

The bills issued under HT IV-tariff were challenged by the different units of MILMA by filing W.Ps, 3431I, 37544, 34429, 37186, 37356 of 2003, 237, 11043, 14535, 16238 and 19037 of 2004, which were disposed on 14-1-2005 by a common judgement declaring that the processing and manufacturing units of MILMA are eligible for HT I-industrial tariff and exclusive connections of MILMA, given to Cold Storage for sale purpose need to be charged under HT IV-commercial tariff. Board challenged the judgement by filing Writ Appeals. The WAs 1602, 1609, 1775, 1844, 1947, 2087, 2088 and 2096 of 2005 were disposed off by the Division Bench of the Hon'ble High Court, referring the matter to the Kerala State Electricity Regulatory Commission.

Consequent on the above direction, the KSE Board filed DP No. 27/2006 before the Kerala State Electricity Regulatory

1	2	3	4	5
<p>Commission (KSERC) and KSRC disposed off the petition on 12-9-2006. The decision of the Commission was as below:—</p> <p>“Dairy Plants of KCMMF engaged in production of milk and milk products in given premises having HT electricity service connection shall pay electricity charges applicable to HT I-Industrial Category, as per the bills raised on these plants by the Board in line with the tariff orders in force from time to time.</p> <p>KCMMF Units engaged in chilling and/or Cold Storage Units (s) under a given HT electricity connection shall pay electricity charges applicable to the HT IV-Commercial category as per the bills raised on these units by the Board in line with the Tariff Orders in force from time to time”.</p>				

The Board thereafter issued a Board Order on 19-12-2006 clarifying that units of MILMA without chilling/freezing activity alone are eligible for HT I-industrial tariff. Various units of MILMA filed Writ Petitions before the Hon'ble High Court of Kerala against the above Board Order. The Writ Petitions were allowed on 6-6-2007 directing the Board to raise bill at HT I-tariff alone to MILMA. Writ Appeals 567 & 572/2008 filed by the Board against the common judgement were dismissed. Later the Konikkara unit of MILMA filed W.P. No. 12538/2007 against the same Board Order dated 19-12-2006. The Writ Petition was allowed on 15-6-2011 and Board Order was quashed. Board filed W.A. No. 1991/2011 against the above judgement which was partly allowed by the Hon'ble High Court of Kerala by its order dated 13-1-2012 wherein it was ordered that sales outlets of MILMA come under Commercial Tariff.

1	2	3	4	5
<p>Present mode of billing of MILMA Units</p> <p>As per the B.O. dated 19-12-2006 HT IV- (commercial) tariff was applied to all units of MILMA having chilling/freezing load and HT I-tariff restricted only to units wherever there is production of milk and milk products without any chilling/freezing activity.</p> <p>But as per the letter No. 1539/CT/ KSERC/2012/848 dated 27-9-2012 of Kerala State Electricity Regulatory Commission, the tariff applicable for processing of Milk by pasteurization, storage and packing under HT shall be under HT I-Industrial category (copy enclosed) Annexure I. Hence after having confirmation in this regard from the concerned Deputy Chief Engineers, the Milma Units having HT connection for the above purpose are categorized in HT I-tariff with effect from 1-7-2012 and billed accordingly.</p>				

2	6	Power	<p>The Committee finds that Kerala State Electricity Board had shown undue favour to M/s Alleppey Prince Hotel by issuing the additional bill only from March, 2003 the date in which meter was tested instead of November 1998 the month of installation of meter. The Committee understands that crores of rupees as revenue to Board was lost due to failure to detect unauthorised energy consumption. The Committee recommends that KSEB should take urgent steps for inspection of meters of both commercial and domestic consumers to avoid pilferage of power.</p>	<p>M/s Prince Hotel, Alappuzha was issued with a short assessment bill amounting to ₹ 35,98,574 during July 2004 pertaining to the period from 12/1998 to 3/2003 by taking the multiplication factor as 60.</p> <p>The consumer filed an appeal before the Deputy Chief Engineer, APTS by remitting ₹ 7,19,715 on 30-11-2004. As the appeal was rejected, the consumer approached the Hon'ble High Court against the bill. The Hon'ble High Court in its final verdict directed the consumer to remit the amount. Accordingly the consumer remitted the whole amount including interest as detailed below:</p> <ol style="list-style-type: none"> 1. ₹ 7,19,715 remitted on 30-11-2004 2. ₹ 3,50,000 remitted on 28-12-2005 3. ₹ 2,00,000 remitted on 18-5-2006 4. ₹ 7,00,000 remitted on 22-2-2007 5. ₹ 2,37,01,855 remitted on 28-3-2007
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1	2	3	4	5									
				<p>With respect to the inspection of meters, it may please be noted that, Board had constituted Anti Power Theft Squad (APTS) units with a view to maintain constant vigil against theft/pilferage of Electrical Energy. At present 13 APTS units are functioning all over the state under the control of Chief Vigilance Officer. The units are regularly conducting surprise inspections in the consumer premises to detect and prevent theft/pilferages of electricity. The inspection conducted by the units for the last 5 years in commercial and domestic consumer premises are shown below:</p> <table border="1" data-bbox="653 143 893 619"><thead><tr><th data-bbox="653 494 762 619">Year</th><th data-bbox="653 331 762 494">Category</th><th data-bbox="653 143 762 331">No. of Inspections</th></tr></thead><tbody><tr><td data-bbox="762 494 827 619">2008-09</td><td data-bbox="762 331 827 494">Commercial</td><td data-bbox="762 143 827 331">6169</td></tr><tr><td data-bbox="827 494 893 619"></td><td data-bbox="827 331 893 494">Domestic</td><td data-bbox="827 143 893 331">5029</td></tr></tbody></table>	Year	Category	No. of Inspections	2008-09	Commercial	6169		Domestic	5029
Year	Category	No. of Inspections											
2008-09	Commercial	6169											
	Domestic	5029											

3	14	Power	The Committee views that the utter carelessness of the Kerala State Electricity Board resulted in failure to apply the reduced market rate of meters even though the Board was aware of the matter on the date of opening of tender which conferred undue benefit of ₹ 10.18 lakh on the supplier. The Committee points out that as the Board has not made	If the suppliers are asked to supply the additional quantity at a price which is re-fixed based on the tender rate opened at a later date after the supply, they are forced to accept a contract on an unknown price fixed at an unknown future date which will be against all commercial expediences and will only warrant unwanted litigations even by reliable suppliers.	2009-10	Commercial	7343
						Domestic	4407
					2010-11	Commercial	8368
						Domestic	7625
					2011-12	Commercial	9039
						Domestic	6989
					2012-13	Commercial	7957
						Domestic	6677

1	2	3	4	5
			<p>full payment on the supply before the date of opening of tender, the Board could have invoked the provision and adjusted the price variation. As such the Committee recommends that the materials are to be purchased taking into consideration the market price on the date of actual supply of materials.</p>	<p>Even though there is difficulty in comparing rates by market analysis, considering the fast change in specification due to various electronic features in the meter, maximum attention is being given for a market analysis before issuing additional orders.</p>
4	15	Power	<p>The Committee expresses concern that the complaints regarding faulty meters are arising. The consumers have to bear the consequences if meters tend to be faulty. The Committee recommends that the meters purchased must be of superior quality.</p>	<p>In order to ensure that the meters purchased are of superior quality, the following steps are being adopted in the Board:</p> <ul style="list-style-type: none"> • The meters are procured only from genuine manufacturers of the item having ISI Certification/ISO Registration for the supply of static meters, through two part tender namely, Pre-qualification bid and price bid. • Additional clauses such as bidder should possess valid BIS and ISO

			<p>Certification, Performance Certificate from the power utility where earlier supply of energy meters were made to be furnished, meters should be guaranteed for a minimum period of five years from the date of acceptance of last part of consignment by Board, Technical Committee of Board will test check the sample meters in the presence of authorised representatives of the firms etc. are incorporated in the pre-qualification conditions to ensure purchase of good quality meters from reputed firms.</p> <ul style="list-style-type: none"> • The firms should furnish copy of type test certificate of the meter as per relevant IS issued from CPRI or any other laboratory approved by Government of India so as to prequalify them. • Further, before pre-qualifying the firms, the sample meters submitted by
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1	2	3	4	5
				<p>the participated firms are tested in Board's TMR divisions by the technical experts of the Board/CPRI Bangalore to verify the conformity with the technical specification and assuring quality.</p> <ul style="list-style-type: none"> • The meters should also comply with CMMI level 3 certification. • The overall performance of the firms relating to the previous purchase orders such as percentage of faulty meters, service support of the firm etc. are also collected from the field for evaluation. • Before issuing despatch instruction to the firm, the test witnessing of the meters are done by the expert engineers of the Board at the company's factory to ensure quality.

5	16	Power	<p>The Committee understands that lakhs of Rupees have to be recovered as dues by Board from private parties. The Committee desires to be intimated about the steps taken to recover the amount both from Government organisations as well as private parties.</p>	<ul style="list-style-type: none"> On receiving the meters at KSEB's TMRs, the meters are again sample tested and meters qualified in the sample testing alone are released to the consumer's premises.
			<p>Out of the total arrears amounting to ₹ 1191.01 crore as on 31-3-2011, an amount of ₹ 613.32 crore was from private sector. Substantial portion of the above is due to the litigations pending before different Courts of Law.</p> <p>KSEB Ltd. has been implementing several schemes for realisation of arrears and thereby Board could regulate the accumulation of arrears effectively. The steps initiated by Board for realization are furnished here under :</p> <ul style="list-style-type: none"> Board has conducted Revenue Adalath for LT, HT/EHT consumers for hearing and settling consumer grievances regarding billing. 	

1					
2					
3					
4					
5					<ul style="list-style-type: none"> • Board has implemented One Time Settlement (OTS) scheme where the consumers are allowed to settle arrears of electricity charges at reduced interest rate. • In order to realize the long pending arrears of closed industries, waiver of fixed charges for LT Industrial units/Plantations and minimum demand for HT Industrial units/Plantations during closed period of industries were granted subject to their reopening before a specific date. • RR actions are being initiated against dismantled consumers for the recovery of arrears. • Steps are initiated for strict follow-up in cases pending before various Courts of Law. • Heads of State Government Departments were provided with the consumer wise

				<p>details of arrears in respect of their respective departments requesting to settle arrears at the earliest and also intimated that the failure to settle arrear may warrant disconnection of electricity.</p> <p>In the light of the facts detailed above the Hon'ble committee may please accept the report and to drop the above recommendations.</p>
6	40	Power		<p>Voltage availability in Malabar area</p> <p>Kerala has been experiencing power shortage since 1982. Kuttiady Hydro Electric Project is one of the oldest power houses in Kerala with an installed capacity of 75 MW (3x25 MW). The Kuttiady Extension Scheme (KES) Project is an addition of one unit of 50 MW to the existing power house. The additional unit was proposed for the utilization of the estimated annual spillage of 75 MW and the unit was commissioned during 2001. Later in 2008, Kuttiady Tail Race Scheme (KTR) with installed capacity of 3.75 MW was</p>
				<p>The Committee understands that there was inordinate delay, in the initial stages of implementation of Kuttiady Extension Scheme (KES). The delay of nine years in implementing the scheme was due to indiscriminate decisions regarding the tendering processes which in turn led to excess cost of Rs. 201.40 crore instead of the estimated cost of Rs. 46.14 crore. The Committee appreciates the fact that, the KES is out of the best projects of the Board in performance wise. The Committee wishes to be informed of the voltage availability in Northern Kerala and steps taken to improve it.</p>

1	2	3	4	5	<p>Commissioned. Subsequently, 100 MW (2x50 MW) Kuttiady Additional Extension Scheme (KAES) was commissioned in 2010. Also the Kuttiady Augmentation Scheme to augment the water availability in Kuttiady reservoir was commissioned in December 2005. This has increased the inflow to Kuttiady reservoir from 2005-06 considerably. Recently a 160 KVA DG set was installed at Kuttiady Power House for providing "Black Start Facility", which is essential for restoring the supply as early as possible, even without the help of the system supply, in case of a cascade tripping.</p> <p>In addition to the above, a Thermal Power Plant at Kozhikkode (KDPP) having 128 MW capacity and Small Hydro Electric Projects, Chembukadavu I & II (6.45 MW) and Urumi I & II (6.15 MW) were installed during 2000, 2003 and 2004 respectively.</p>
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With the implementation of the above schemes, the voltage in North Malabar has improved. The KAES has played its own part in the reduction of system loss. The schemes has increased the peaking capacity and this increase has reduced the requirement of import during peak hours. Since the spillage has been considerably reduced as compared to the past, due to additional generation capacity and it would have been more if the additional capacity has not been created. Now the Kutriady Hydro Electric Project with total installed capacity 228.75 MW (including KTR) and 128 MW KDPP plays a vital role in the power scenario of Malabar area. Also the increase in peaking capacity has reduced the requirement of import during peak hours.

The following steps are also taken to improve the voltage problems northern region:

1	2	3	4	5
				<p>(1) By constant follow-up from KSEB the upstream works in the 220 KV transmission corridor from Mysore to Kadakola was completed, whereby KSEB could avail about 180 MW from Kadakola at Kaniyampetta. This has contributed more power availability to Malabar area from the earlier availability of 25 MW through this feeder.</p> <p>(2) Four new 220 KV substations were commissioned at Malabar area viz., Malaparamba (23-12-2007), Vatakara (7-6-2009), Taliparamba (29-3-2005) and Shornur (2003).</p> <p>(3) New capacitor banks were commissioned at eight substations in Malabar area from 2004 onwards at Kunnamkulam, Edappal, Tirur, Keezhissery, Thalassery, Taliparamba, Azheekode and Kanjikode.</p> <p>(4) Efforts are being taken for interlinking of Kuttiady and Vatakara through new 110 KV feeder and for the construction of Mysore-Areacode 400 KV Double Circuit line.</p>

<p>It is evident that due to the commissioning of generating stations and 220 KV substations and 220 KV transmission lines, the voltage availability in Northern Kerala has improved much. The problems in the Northern Kerala will completely be solved with the commissioning of 400 KV substation by Power Grid Corporation of India Limited (PGCIL) and with the construction of Mysore-Areacode 400 KV transmission line.</p>				
<p>The effective rate of interest after including interest, exposure fee, guarantee fee, commitment fee, foreign exchange variation etc. is worked out as 15.38% by KSE Board. The detailed calculation called for by the Committee is furnished as Annexure II.</p> <p>Charging of exposure fee is a common practice/feature and is an integral part of the</p>	<p>The Committee finds that the details regarding calculation of effective rate was not furnished properly to the Accountant General (AG). The Committee is surprised at the attitude of the KSEB in admitting that the documents were not correctly stated to the Accountant General. The Committee understands that the effective rate charged by Export</p>	<p>Power</p>	<p>41</p>	<p>7</p>

1	2	3	4	5
			<p>Development Corporation was much lower than the rate offered by other financial institutions. The Committee recommends to furnish all the details regarding calculation of effective rate.</p>	<p>terms and conditions of financial arrangements. It is like an insurance cover against what the lender perceives as country risk. This expenditure covers different risk aspects and hence the payment of exposure fee has not resulted in any undue benefit to EDC.</p> <p>The Board had negotiated with EDC while availing loan for KES and obtained approval of Government of Kerala for the terms and conditions of the EDC loan. It may also be noted that the interest rate of 7.4% quoted initially as per term sheet dated 15-8-1995 was brought down to 7.01% through negotiation. Again the exposure fee of 8.26% agreed to is less than the equivalent co-face premium of 10.17% charged in the case of foreign currency loan for BDPP.</p> <p>Actually before availing the loan the Board had calculated that the effective rate of</p>

interest would be around 15.38% as against the then prevailing effective rate of interest of 16.6% for loans from PFC.

The effective rate charged by EDC was much lower than the rate offered by other financial institutions. The interest rate of funds raised by the Board during 1996-97 and 1997-98 is given below:

1996-97

Financial Institution	Interest rate
REC	16%
NABARD	16.5%
SIDBI	19%
HDFC	17.5%
PFC	15 to 17%
Non SLR Bonds	17%

1	2	3	4	5								
				<p data-bbox="158 539 180 639">1997-98</p> <table border="1" data-bbox="234 207 529 562"> <tr> <td data-bbox="234 346 327 562">Non SLR Bonds</td> <td data-bbox="234 207 327 346">13.5% to 15.75%</td> </tr> <tr> <td data-bbox="327 346 387 562">SIDBI</td> <td data-bbox="327 207 387 346">17.35%</td> </tr> <tr> <td data-bbox="387 346 442 562">REC</td> <td data-bbox="387 207 442 346">16%</td> </tr> <tr> <td data-bbox="442 346 529 562">PFC</td> <td data-bbox="442 207 529 346">15%- 16.75%</td> </tr> </table> <p data-bbox="551 154 884 639">Compared to the interest rates for the loans availed by the Board during 1996-97 and 1997-98, the effective rate of EDC loan was much lower. The Department of Economic Affairs, Ministry of Finance, Government of India as well as the Government of Kerala had accorded approval for availing the loan from EDC only after considering all the factors including the cost of fund.</p>	Non SLR Bonds	13.5% to 15.75%	SIDBI	17.35%	REC	16%	PFC	15%- 16.75%
Non SLR Bonds	13.5% to 15.75%											
SIDBI	17.35%											
REC	16%											
PFC	15%- 16.75%											
8	42	Power	The Committee understands that the exposure fee and commitment fee is a	The commitment fee @0.375% p.a., was payable with effect from 29-9-1995, the								

part of the financial package for the loan availed from Export Development Corporation (EDC). The committee is of the opinion that the Board should have negotiated the effective date of payment of commitment fee for the month in which funds were actually committed i.e., from August 1997 only. The Committee finds that the documents were not furnished properly to the Accountant General in this case and recommends that the Board should take steps to avoid such instances in future. The Committee also recommends that the draft audit paragraphs should be discussed thoroughly with the Accountant General so that any ambiguity regarding audit paragraphs may be cleared before finalisation of Audit Report.

date of offer of loan as per the agreement with EDC. Though the agreed date was 29-9-1995, the Board had taken up the matter with EDC and it was only because of the efforts and negotiation carried out by KSEB, that EDC agreed to change the effective date for payment commitment fee to 24-2-1996 i.e., the loan agreement date. Moreover the interest rate of 7.4% quoted initially as per term sheet dated 15-8-1995 have been brought down to 7.01% through negotiation. Even, power Finance Corporation was charging commitment charge from the date of signing of loan agreement till the date of drawal of the amount. Further, it may be noted that commitment fee charged by EDC (0.375%) was much lower as compared to the rate of 1% charged by REC/PFC during that period.

The recommendations of the committee regarding non furnishing of documents to

1	2	3	4	5
9	43	Power	<p>The Committee is surprised to note that the Board considered BHEL merely for estimation purposes for obtaining loan assistance from the Canadian Agency. The Committee views that it was a sheer negligence on the part of the Board in avoiding a public sector undertaking like BHEL which in turn resulted in extra expenditure of Rs. 48.50 crore. The Committee is of the opinion that reducing the grant amount while estimating the loss would decrease the attractiveness of grant. The Committee understands that the decision was taken and approved by Government for speedy implementation of Kuttiaady Extension Scheme and</p>	<p>Accountant General are noted and all the available documents requested by audit will be furnished without delay and in future the draft audit paras will be discussed thoroughly with the audit party of the Accountant General.</p> <p>It was the practice to award major works through global tenders or through MoU route. Both the methods have their own advantages and disadvantages. When the global tender takes more time to materialize, it has advantage of obtaining competitive offers. Whereas in the case of MoU route, competent and highly experienced contractor can be chosen and the work awarded in the shortest possible time. In the case of KES the work was awarded on MoU basis.</p> <p>The offer that had been received from M/s BHEL during 1990 was only based on rough estimate and without any commitment. It was obtained to calculate</p>

	<p>recommends to furnish the details regarding the same. The Committee opines that there is no justification in the argument of the Board for avoiding global tenders. The Committee also recommends that all future works should be undertaken after inviting tenders.</p>	<p>the cost of electrical and mechanical works, as the same cannot be estimated otherwise. The offer was obtained from M/s BHEL for the purpose of estimation. In the offer of M/s BHEL, it was specifically furnished that these prices are based on rough estimate and are without any commitment from outside. Actual prices may vary depending on final design and time of project execution. So it is not fair to compare the offer given for budgetary purposes in 1990 with the actual prices obtained in 1996.</p> <p>In view of the observations and recommendations of the committee, all future works by the Board will be done only after inviting tenders.</p>
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K. N. A. KHADER,
Chairman,
Committee on Public Undertakings.

Thiruvananthapuram,
3rd December, 2015.

ANNEXURE I

©
Government of Kerala
കേരള സർക്കാർ
2012



Regn. No. KERBIL/2012/45073
dated 5-9-2012 with RNI

Reg. No. രജി. നമ്പർ
KL/TV(N)/634/2012-14

KERALA GAZETTE

കേരള ഗസറ്റ്

EXTRAORDINARY

അസാധാരണം

PUBLISHED BY AUTHORITY

ആധികാരികമായി പ്രസിദ്ധപ്പെടുത്തുന്നത്

Vol. I	Thiruvananthapuram, Wednesday	28th November 2012	No.	} 1305
വാല്യം 1		തിരുവനന്തപുരം, ബുധൻ		
			7th Agrahayana 1934	നമ്പർ
		1934 അഗ്രഹായനം 7		

KERALA STATE ELECTRICITY REGULATORY COMMISSION

THIRUVANANTHAPURAM

SCHEDULE OF TARIFF AND TERMS AND CONDITIONS FOR RETAIL
SUPPLY BY KSEB WITH EFFECT FROM 1-7-2012 TO 31-3-2013

(Vide Order No. OP 23 of 2012 dated 25-7-2012)

Unless the context otherwise requires words and expressions used in this schedule and defined in the Electricity Act, 2003 or the Regulations specified by the Kerala State Electricity Regulatory Commission and the Terms and Conditions of Supply approved by the Commission shall have the meaning respectively assigned to them in the Acts or Regulations mentioned above.

The tariff mentioned in this schedule shall apply to Consumers to whom the Kerala State Electricity Board has undertaken or undertakes to supply electricity notwithstanding anything to the contrary contained in any agreement entered into with any consumer earlier by Board/Government or any of the Tariff Regulations or Rules and/or Orders previously issued.

The rates specified in this schedule are exclusive of Electricity Duty and/or surcharge and/or any other cesses, taxes, minimum fees, duties and other impositions existing or that may be levied or imposed in future by the Government or the Commission; which are payable in addition to the charges as per the tariff mentioned in this Schedule.

PART A

EHT AND HT TARIFF

General Conditions for HT and EHT Tariff

1. For the purpose of conversion from kVA to kW or vice versa, an average power factor of 0.9 shall be taken.
2. Billing demand shall be the recorded maximum demand for the month in kVA or 75% of the Contract demand (as per the agreement) whichever is higher.
3. When the actual maximum demand in a month exceeds the Contract demand as per the agreement the excess demand shall be charged at a rate of 150 per cent of the demand charges applicable.
4. All HT/EHT consumers shall install Time of Day (ToD) meters at their cost. They shall undertake maintenance and replacement of the defective meters, CT/PT, and other equipments owned by them at their cost. If they fail to do so within two months from the date of intimation they will be charged 50% extra over the prevailing rates applicable to them for both Demand and Energy.
5. All EHT consumers (except Railway Traction) and all HT/Decmed HT consumers (except Cinema theatres, drinking water supply pumping stations of Kerala Water Authority, Corporations, Municipalities and Panchayats) shall be billed on ToD tariff as per the formula indicated in the Annexure A to this Schedule.
6. The monthly minimum payable shall be the minimum guarantee amount as per minimum guarantee agreement, if any, or the billing demand as per condition 2 above, whichever is higher. This applies even during the period of disconnection of power supply.
7. In the case of factory lighting and colony supply of EHT/HT (Industrial) Consumers, the applicable tariff shall be subject to the following:
 - (a) *Factory Lighting*—When the total connected lighting load of the factory is less than or equal to 5% of the connected load for power, it can be tapped off from the power mains without segregation. When the above lighting load exceeds this limit, the whole lighting load should be segregated and metered by a sub-meter and lighting consumption in excess over 10% of the bulk supply consumption for power shall be charged at 7 paise extra per kWh for EHT and 25 paise per kWh for HT consumers.

(b) *Colony Supply*—Colony supply when taken from the Consumer's EHT/HT supply shall be segregated and metered by means of a sub-meter and the consumption will be charged at 7 paise extra per kWh for EHT and 25 paise/kWh for HT consumers.

(c) If no segregation is made as specified in (a) or (b) above, the bill amount of the consumer shall be increased for demand and energy charges by 10% and 20% for EHT and HT consumers respectively.

8. Power factor incentives/penalties as per Annexure B shall be applicable to HT and EHT consumers.

EHT Tariff

This tariff shall be applicable to all Extra High Tension consumers. The expression Extra High Tension (EHT) consumer means a consumer who is supplied with electrical energy at a voltage exceeding 33000 Volts under normal conditions subject however to the percentage variation indicated in the agreement with the Board or allowed under the Kerala Electricity Supply Code, 2005 specified by the Kerala State Electricity Regulatory Commission.

EHT Supply (66 kV, 110 kV, 220kV)

<i>Supply Voltage</i>	<i>Demand Charge (Rs./kVA of Billing Demand/Month)</i>	<i>Energy Charge (Paise/kWh)</i>
220 kV	275	400
110 kV	290	400
66 kV	300	400

Railway Traction (110 kV)

<i>Supply Voltage</i>	<i>Demand Charge (Rs./kVA of Billing Demand/Month)</i>	<i>Energy Charge (Paise/kWh)</i>
110 kV	250	400

HT Tariff

This tariff shall be applicable to all High Tension consumers to whom the Board has undertaken or undertakes to supply energy. The expression High Tension (HT) consumer means a consumer who is supplied with electrical energy at a voltage of 33,000 Volts, 22,000 Volts or 11,000 Volts under normal conditions, subject however to the percentage variation indicated in the agreement with the Board or allowed under the Kerala Electricity Supply Code, 2005 specified by the Kerala State Electricity Regulatory Commission.

High Tension (HT-I) Industrial

Tariff applicable to general purpose industrial load including Printing Presses (including presses engaged in printing dailies), Plantations, granite crushing units, dairy farms, hatcheries, software development units, Seafood Processing Units, all non-agricultural pumping, drinking water pumping for public by Kerala Water Authority, Corporations, Municipalities and Panchayats, Processing of milk by Pasteurization, storage and packing

Normal Rates

Demand Charges (Rs./kVA of Billing Demand/Month)	300
Energy Charge (Paise/kWh)	410

High Tension (HT-II) Non-Industrial/Non-Commercial

Tariff applicable to non-industrial, non-commercial consumers such as Public Offices run by Central/State Government, Local Bodies, Technical and Educational Institutions and Hostels run by or affiliated to Universities or Government Departments or Government Hospitals or Government Nursing Homes, Charitable Institutions, offices of political parties approved by Election Commission of India and Colonies supplied with energy at HT and HT domestic.

Normal Rates

Demand Charges (Rs./kVA of Billing Demand/Month)	350
Energy Charge (Paise/kWh)	410

Note--- The HT Domestic connection shall be effected subject to the following conditions:

1. The connections provided shall be for the own domestic use of the consumer. He shall not install separate meters for different flats/rooms in his building/complex.
2. He shall not rent out the rooms/flat/apartments and shall not resell the power supplied to the occupants inside or outside the premises to which HT connection is provided.
3. If the apartment/flat/room is rented out or made use of for any other purpose, he shall take individual LT connection at his cost. LT tariff shall apply in such cases. He shall maintain the transformer and allied equipments at his cost in such cases.

High Tension (HT-III) Agriculture

Tariff applicable to agricultural consumers for all cultivations including dewatering, lift irrigation, sericulture, poultry farms, silk worm breeding, livestock farms, piggery farms, and combination of dairy and livestock farms.

Normal Rates

Demand Charges (Rs./kVA of Billing Demand/Month)	165
Energy Charge (Paise/kWh)	180

High Tension (HT-IV) Commercial

Tariff applicable to commercial establishments such as airports, hotels/restaurants, lodges, hostels, guest/rest houses, travellers bungalows, cold storage, freezing units, business houses, film studios, cinema theatres, self financing educational institutions, hospitals other than government owned, private nursing homes, milk chilling plants, private scanning units, private X-ray units, private clinical laboratories, offices/ telephone exchanges of telecom companies, radio stations, television broadcasting companies, television channels, LPG Bottling plants and construction works.

Normal Rates

Demand Charges (Rs./kVA of Billing Demand/Month)	400
Energy Charge (Paise/kWh)	
Up to 30,000 units (All units)	550
Above 30,000 units (All units)	650

High Tension (HT-V) Seasonal Consumers

1. HT Consumers with seasonal load shall register themselves with Board as seasonal consumers for the purpose for which electricity is used. He shall be billed under appropriate tariff for the period of use.
2. For registration as a seasonal consumer, the consumer should have a minimum of four working months per annum or he should guarantee a minimum equivalent thereto for the working season.
3. If the seasonal consumer uses his supply for different purposes during different seasons (periods) and if he does not register as a seasonal consumer, he shall be charged at the highest tariff applicable for the various operations for the whole year.
4. If such a consumer registers with the Board as seasonal consumer and specifies the period during which the supply is used for different purposes, the tariff rates applicable to the different uses shall be charged for the entire period.
5. The conditions for Lighting for seasonal industrial consumers shall be the same as applicable in the case of HT I.
6. When the registered seasonal consumer does not use supply for a few months outside the season, (period) he should agree for disconnection without notice upon the expiry of the period and pay higher rates during the working seasons as below:
 - (a) Demand charges shall be increased by $5(12-N)\%$ where 'N' is the number of months during which the consumer registers himself with the Board to utilize the service in the year.
 - (b) There will be no billing for the idling period.
 - (c) The service to the consumer will be disconnected without notice immediately on termination of the registered period unless the consumer asks for continuance of the service during the idle period for which also he will be charged at the same seasonal rate applicable for the original period.
 - (d) Monthly minimum equivalent to demand charges for 75% of the contract demand increased as per (a) above shall be collected from the consumer in each working month.

PART B

Low Tension (LT) Tariff

The expression 'Low Tension Consumer' (LT) means a consumer who is supplied with electrical energy at low or medium voltage by the Board. The voltages are however being subject to percentage variations allowed under Kerala Electricity Supply Code, 2005.

General Conditions

1. The tariff minimum payable by all LT consumers other than LT-VI (D) shall be the fixed charge of respective category.
2. All LT Industrial and LT Agricultural consumers are required to install static capacitors approved by ISI for power factor improvement, for their inductive load as recommended in the Annexure C attached and obtain the permission of the Licensee.
3. For LT Industrial and Agricultural consumers who have not installed ISI approved capacitors of recommended value the rate applicable shall be higher by 20% (both on fixed and energy charges) applicable to the respective categories.
4. For welding sets without ISI approved capacitors of recommended value the fixed charge and energy charge shall be higher by 30%.
5. In the event of static capacitor becoming faulty or unserviceable the consumer shall forthwith intimate the matter to the concerned Officer of the electrical section/Sub-division and the consumer shall make immediate arrangements for repair.
6. If the capacitor is not put back into service duly repaired and to the satisfaction of the Board within one month, enhanced charges as per item 3 or 4 above shall be payable for the whole period during which the capacitor was faulty.
7. Consumers (other than LT-IV Industrial and LT-V Agriculture) who have segregated their power loads may install ISI approved static capacitors for power factor improvement as recommended in the Annexure C to this Schedule and obtain approval of the Board. In such cases they shall be eligible for a rebate of 5% on the energy charges only. The rebate shall be allowed for consumption from the billing month succeeding the month in which the approval has been obtained.

8. Power supply to common facilities such as fire fighting, common lighting, lifts, water pumping, sewage treatments facilities, waste disposal facilities, etc. in apartment complexes and individual houses for domestic use shall be billed under domestic tariff.
9. Power supply to common facilities in the multi-storied building with non-domestic/commercial occupation only shall be charged under the appropriate LT-VI or LT-VII tariff. When there is a combination of occupation of different categories of consumers, common facilities shall be charged at the highest LT-VI or LT-VII tariff applicable among such categories.
10. Power supplies to common facilities, in multi-storied buildings mainly for domestic occupation shall be under the domestic tariff if the connected load other than domestic is less than 5% of the total load.
11. ToD tariff shall be applicable to LT-IV Industrial consumers having connected load 20 kW and above and LT I(a) domestic (3 Phase) consumers having monthly consumption of above 500 units. The charges and other terms and conditions for ToD tariff is given as Annexure 'D & E' to the schedule. The scheme shall be effective from 1-1-2013.

Low Tension-I (LT-I)

(a) The tariff applicable to supply of electrical energy for Domestic use (single phase/three phases)

Fixed Charges	<i>Single Phase:</i> Rs. 20 per consumer per month <i>Three phase :</i> Rs. 60 per consumer per month	
Energy Charges	0-40 units	150 paise per unit
	41-80 units	240 paise per unit
	81-120 units	290 paise per unit
	121-150 units	360 paise per unit
	151-200 units	480 paise per unit
	201-300 units	600 paise per unit
	301-500 units	750 paise per unit
	Above 500 units	650 paise (for all units)

Note:-- Fixed charges shall not be applicable for single phase consumers having average consumption of 40 units or below per month for the previous six months.

The tariff minimum payable during the period of disconnection and other than during the period of disconnection shall be:

Single phase --Rs. 20 per consumer per month.

Three Phase --Rs. 60 per consumer per month.

Note:-- 1. Electricity used for water supply projects for pumping water solely for domestic purpose coming under local self government and beneficiaries committees, schemes under Jananidhi, Jaladhara, Swajaladhara, and similar water supply projects coming under water supply societies, drinking water supply schemes in SC/ST and laksham vedu settlement colonies and taken over and managed by three tier panchayaths, all social drinking water supply schemes which are established through MP/MLA fund/PPS/three tier panchayath fund, and Rajeev Gandhi Drinking Water Schemes managed by beneficiary groups where water is used only for domestic purpose, shall be charged under Domestic tariff. The method of billing for the schemes shall be:

(a) the total group consumption shall be divided by the number of beneficiary households to estimate the bill.

(b) the same shall be multiplied with number of beneficiary households to arrive at the total bill for the scheme.

2. Home stay units approved by Department of Tourism shall be billed under LT-I(a) Domestic.

3. Domestic consumers shall be allowed to utilize electrical energy in some portion of their residence for their own use for purposes other than domestic as defined under LT-I when such connected load does not exceed 20% of the total connected load or 500 Watts in their premises. When connected load other than domestic use in such cases exceeds the above 20% or 500W whichever is less, such loads shall be segregated and separate service connection obtained under appropriate tariff. When this is not done, the tariff applicable to the whole service shall be at the appropriate tariff applicable to the connected load used for purpose other than domestic, if such tariff is higher than the tariff for LT-I (a).

LT—I (b) Tariff applicable to Libraries and reading rooms other than Libraries and reading rooms of educational institutions, sports/arts clubs, sailing/swimming activities and Gymnasiums (with connected load not exceeding 2000 W) and Offices of political parties approved by Election Commission of India.

Fixed Charges

Single Phase—Rs. 20 per consumer per month

Three Phase—Rs. 60 per consumer per month

<i>Slab</i>	<i>Energy charges (Paise/kWh)</i>
Up to 40 kWh	200
41 to 80 kWh	310
81 to 120 kWh	360
121 to 150 kWh	450
151 to 200 kWh	520
201 to 300 kWh	620
Above 300 kWh	750

The tariff minimum payable during the period of disconnection and other than during the period of disconnection shall be:

Single Phase—Rs. 20 per consumer per month

Three Phase—Rs. 60 per consumer per month

Low Tension—II (LT-II) Colonies

Tariff applicable to colonies of HT and EHT consumers where resale of energy is not involved and where supply at a single point is given at LT by the Board for domestic use in staff quarters, street lighting and pumping water for domestic use, colonies of Universities, State/Central Government Departments, Public Institutions like Companies/Boards/Corporations under State/Central Government, Hospitals therein, colonies of Railways, State/Central Government undertakings, Postal/BSNL/AIR/Doordarshan and private colonies.

LT—II Colonies

Fixed Charge (Rs./Month)	2,200
Energy Charge (Paise/kWh)	650

Note: In Special cases where supply is given at more than one point each supply point shall be considered as a separate consumer for the purpose of billing.

Low Tension—III (LT-III) Temporary Connection

Tariff applicable for illumination, exhibition, festivals, public meeting and fairs (single or three phases).

LT—III Temporary Connections

Energy Charge (Paise/kWh)	1350
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OR

Daily minimum Rs.130 /kW or part thereof of connected load, whichever is higher

Note: 40% concession in the rates shall be allowed if the connection is for,—

- exhibitions conducted by Local bodies/Government educational institutions/recognized private educational institutions;
- festivals of public religious worship centers for illumination, public address system and security lighting.

Low Tension—IV (LT-IV)—Industry

Tariff applicable for general purpose industrial loads (single or three phase) viz., grinding mills, flour mills, oil mills, rice mills, saw mills, ice factories, rubber smoke houses, prawn peeling units, floriculture activities, tyre vulcanizing/retreading units, workshops using power mainly for production and/or repair, pumping water for non- agricultural purpose, public waterworks, sewage pumping, power laundries, hatcheries, screen printing of glassware or ceramic, printing presses, bakeries (where manufacturing process and sales are carried out in the same premises) diamond cutting units, stone crushing units, book binding units with allied activities, garment making units, electric crematoria, pyrolators installed by local bodies, mushroom farms, shrimp farms, SSI units engaged in computerized colour photo printing, computer consultancy service units with

SSI registration engaged in software services and data processing activities and desktop publishing, software units, audio/video cassette/CD manufacturing units, dairy farms, agricultural nurseries (without sale), tissue culture units, Seafood processing units, granite cutting units (where boulders are cut into sheets in the same premises), Cardamom drying and curing units, and units carrying out extraction of oil in addition to the filtering and packing activities carrying out in the same premise under the same service connection, manufacturing rubber sheets from latex, telemetry stations of KWA, processing of milk by pasteurization, storage and packing, Granite slabs manufacturing units.

LT - IV Industrial

Fixed Charge Rs. per kW or part thereof per Month	60
Energy Charge (Paise/kWh)	425

Note:— (a) Consumers having connected load 10HP or below, the fixed charges shall be Rs.60/consumer per month.

(b) If ISI approved static capacitors are not installed by software units and similar consumers to compensate the inductive load including air conditioners, 25% extra shall be charged on the total fixed charge inclusive of entire connected load. Software technology industries requiring new connection shall be provided connection only if they install ISI approved static capacitors to compensate the inductive load of air conditioners if any. The entire consumption and connected load of above consumers shall be charged at industrial tariff (LT-IV).

(c) Workshops with Automobile service stations shall segregate the workshop load for availing the benefit of industrial tariff.

Low Tension—V (LT-V) Agriculture

Tariff applicable to, agricultural consumers including dewatering and lift irrigation, poultry farms, silk worm breeding units, livestock farms (minimum number of milch cattle shall be five) and combination of livestock and dairy farms, Aquaculture, rabbit farms, piggery farms (Minimum six breedable adult animals in the farm).

LT—V Agriculture

Fixed Charge Rs. per kW or part thereof per Month	6
Energy Charge (Paise/kWh)	150

In all cases ISI approved capacitors of recommended value (Sec Annexure C) shall be installed for inductive load.

LT - VI (A) Non-Domestic**LT—VI (A)**

Tariff applicable to premises of religious worship, institutions imparting religious education, government or aided private educational institutions, libraries and reading rooms of educational institutions, convents, Government Hospitals, X-Ray units, laboratories and mortuaries attached to Government Hospitals, Blood Banks of IMA/Govt. Hospitals/Local Self Governments, Private Hospitals registered under Cultural, Scientific and Charitable Societies Act and exempted from payment of income tax.

LT - VI (A) Non-Domestic

Fixed Charge Rs. per kW or part thereof per Month	50
Energy Charge (Paise/kWh)	Up to 500 kWh.....480 Above 500 kWh.....550

LT—VI (B)

The tariff applicable to offices and institutions under State/Central Government, Corporations, Boards under State/Central Government/ Local bodies, Kerala Water Authority, KSRTC, KSWTC, Hostels of educational institutions affiliated to Universities or under the control of the director of technical/medical education/public instruction or such other offices of Government or run by the Government or state social welfare board, hostels run by institutions that are registered under cultural, scientific and charitable societies Act and exempted from payment of income tax, KHRWS pay wards and institutions of KHRWS, travellers bungalows, guest/rest houses under Government, typewriting institutes, private hospitals, private clinical laboratories, X-ray units, private mortuaries, private blood banks, private scanning centres, offices of advocates/chartered accountants/Company Secretary/Consulting Engineers/tax consultants/architects/social organizations, press clubs, museum/zoo, computer training institutes, offices of political parties not approved by the Election Commission of India and collection centers of 'FRIENDS' single window service centers under department of Information Technology, Police Clubs, Akshaya-c-centers and mobile cameras at traffic signal points.

LT—VI (B) Non-Domestic

Fixed Charge Rs. per kW or part thereof per Month	70
Energy Charge (Paise/kWh)	
Up to 500 kWh	550
Above 500 kWh	650

LT—VI (C)

Tariff applicable to offices or institutions under Income Tax/Central Excise, Customs, offices under motor vehicles department/ sales tax department/excise department, offices of all other tax/revenue collecting departments under State/ Central Government (other than local bodies), department of posts, light houses, pawn brokers, banks, ATM Counters, railways (including railway stations) offices of Airport Authority of India (except airport) Office of Sub-Registrars, Micro Financing Institutions and any other LT categories not included in this schedule.

LT—VI (C) Non-Domestic

Fixed Charge Rs. per kW or part thereof per Month	180
Energy Charge (Paise/kWh)	
Up to 500 kWh	700
Above 500 kWh	850

LT—VI (D)

Tariff applicable to orphanages, anganawadis, schools and hostels of mentally retarded students, deaf/dumb/blind/physically handicapped persons, old age homes, Cheshire homes, SoS Children's' Villages, polio homes, cancer and palliative care centers, HIV rehabilitation centers and other similar institutions recognized by the Government.

LT—VI (D) Non-Domestic

Fixed Charge Rs. per kW or part thereof per Month	Nil
Energy Charge (Paise/kWh)	150

The tariff minimum payable during the period of disconnection and other than during the period of disconnection shall be:

Single Phase—Rs. 15 per consumer per month

Three Phase—Rs. 25 per consumer per month.

Low Tension—VII (LT-VII) Commercial**LT-VII (A)**

Tariff for commercial consumers such as display lights, cinema studios, commercial premises, hotels and restaurants (having connected load exceeding 1000 W), showrooms, business houses, private hostels/lodges/guest/rest houses, freezing plants, cold storages, milk chilling plants, bakeries (without manufacturing process), Audio/video cassette recording/duplication units, CD recording units, self financing educational institutions, petrol/diesel/LPG/CNG bunks, Automobile service stations, all construction works, installations of cellular mobile communications/cable TV networks, satellite communications, offices/exchanges of telecom companies, Offices or institutions of AIR, Doordarshan, radio stations, insurance companies, call centers and marble cutting units, LPG Bottling plants, Ornamental fish breeding, House Boats, computerized wheel alignment centres, Agricultural Nurseries(with sale) and Units carrying out filtering and packing and other associated activities using extracted oil brought from outside.

LT—VII (A) Commercial

Fixed charge (Rs/ kW per month)	
Single Phase	6000
Three Phase	12000
Energy Charge (paise per unit)	
Up to 100 units per month	545
Up to 200 units per month	605
Up to 300 units per month	675
Up to 500 units per month	730
Above 500 units (all units)	850

- Note:—* 1. If the agriculture nurseries do sale also in the same premises, the tariff applicable shall be LT-VII A if there is no segregation of load for pumping.
2. If the LT-VII A consumer opts for segregation of their motor load for pumping and installs separate meters, LT-IV tariff shall be applied for pumping and LT-VII A tariff shall be applied for other activities in the same premises.

LT—VII (B)

Tariff applicable to consumers having connected load not exceeding 1000 Watts of shops/bunks/hotels and restaurants/telephone/fax/c-mail/photocopy booths and internet cafes.

When connected load in the above cited cases exceeds 1000 Watts the consumers, shall be charged under LT-VII (A). If monthly consumption exceeds 200kWh, entire consumption shall be charged under LT-VII (A) tariff.

LT—VII (B) Commercial

Fixed Charge Rs. per kW or part thereof per Month	40
Energy Charge (Paise/kWh)	
Up to 100 kWh	400
Above 100 kWh and up to 200 kWh	600

LT—VII (C)

Tariff applicable to cinema theatres, circus, Sports/arts clubs or sailing/swimming activities and Gymnasiums having connected load exceeding 2000W.

LT—VII (C) Commercial

Fixed Charge Rs. per kW or part thereof per Month	90
Energy Charge (Paise/kWh)	
Up to 1000 kWh	500
Above 1000 kWh	650

Note:— If the consumption of consumers under LT—VII Commercial (A) or (B) exceeds a particular block, the entire consumption shall be charged under the next block. For example if the consumption exceeds 100 units but does not exceed 200 units, the entire consumption is chargeable at the rates applicable to 200 units block.

Low Tension—VIII (LT-VIII) Temporary Extension

Applicable to temporary extension taken from consumers premises

LT - VIII Temporary extensions

Fixed charges per day—Rs. 65/kW or part thereof of connected load plus the application fee, testing fee etc.

Low Tension—IX (LT-IX) Public Lighting

Tariff applicable to various categories of public lighting per lamp. The Lamp/bulb, holder, condenser and choke shall be supplied by the local bodies free of cost for initial installation and periodical replacement.

A. Composite Tariff

Type of Lamp	Watts (W)	Rs./Lamp/Month Burning Hours per day		
		4 Hours	6 Hours	12 Hours
(1)	(2)	(3)	(4)	(5)
Ordinary	40	14	22	43
Ordinary	60	22	32	65
Ordinary	100	36	54	108
Fluo tube	40	14	22	43
Fluo tube	80	29	43	86
Floodlight	1000	360	540	1080
MV Lamp	80	29	43	86
MV Lamp	125	45	68	135
MV Lamp	160	58	86	173
MV Lamp	250	90	135	270

(1)	(2)	(3)	(4)	(5)
MV Lamp	400	144	216	432
SV Lamp	70	25	38	76
SV Lamp	80	29	43	86
SV Lamp	100	36	54	108
SV Lamp	125	45	68	135
SV Lamp	150	54	81	162
SV Lamp	250	90	135	270
CFL	11	2	3	6
CFL	22	4	6	12
CFL	44	8	12	24
CFL	18	3	5	10
CFL	36	6	10	19
CFL	72	13	19	39
CFL	15	3	4	8
CFL	30	5	8	16
CFL	36	6	10	19
CFL	72	13	19	39
CFL	144	26	39	78
LED	18	3	5	10
MV Lamp	1200	1296
SV Lamp	250	270

B. Metered Street Lights**Tariff for Metered Street Lights**

Fixed charge (Rs./meter/month)	30.00
Energy Charge (paise per unit)	275

1. When public lighting is to be done after extension of lines, the beneficiaries shall pay the cost of the work as per terms and conditions of supply approved by the Commission.
2. In campuses where lines and lights are provided by the consumer, LT metered supply shall be provided at 275 paise /kWh plus fixed charge of Rs.30 per meter per month subject to other conditions regarding the payment of cost of the work.
3. Supply to Light houses when taken from the board's street mains will be charged at appropriate public lighting tariff. Where low tension metered and independent supply is provided, the rate applicable will be 275 paise/ kWh plus fixed charge at Rs. 30 per meter per month and subject to other conditions regarding payment of cost of the work.
4. Metered supply will be given by the Board in areas where the Board's Low Tension distribution lines exist, for special type of lamps, rates for which are not given in the annexure, provided the lamps are installed and maintained by the local bodies at their cost. The tariff applicable in such cases shall be 275 Ps per unit plus fixed charge at Rs. 30 per meter per month, subject to other conditions regarding payment of cost of the work.
5. Separate charges shall not be collected from the consumers towards service charges or meter hire.
6. Electricity duty is not payable for public lighting as per the Kerala Electricity Duty Act, 1963.
7. Traffic signal lights shall be billed under '(LT IX B) Public lighting metered street lights.'

PART—C

TRANSMISSION CHARGE, WHEELING CHARGE AND CROSS SUBSIDY
SURCHARGE

For consumers/generators/licencees utilizing KSEB Transmission and Distribution network under Open Access the rates applicable shall be:

1. Transmission charges
 - a. at EHT Level : 22 ps/unit
2. Wheeling charges
 - a. at HT level : 26 ps/unit
3. Cross Subsidy Surcharge

EHT 66 kV	11 ps/unit
EHT 110 kV	Nil
Railways	24ps/unit
HT I Industrial	Nil
HT II Non Industrial	49ps/unit
HT IV Commercial	255ps/unit

By order of the Commission,

(Sd.)

Secretary.

ANNEXURE A

ToD TARIFF OF HT AND EHT CONSUMERS

The ToD tariff applicable for HT-EHT consumers for energy consumption with effect from 1-7-2012 is given below:

	Rates (% of Ruling Charges)		
	Normal period (6.00 Hrs to 18.00 Hrs)	Peak period (18.00 Hrs to 22.00 Hrs)	Off peak (22.00 Hrs to 6.00 Hrs)
Demand Charges	100%	150%	80%
Energy Charges	100%	140%	85%

Billing of the Demand Charges

- (a) Demand Charge for Normal Time (6.00 hours to 18.00 hours) shall be:
Billing Demand during Normal Time x Ruling Demand Charge/kVA x 12/24
- (b) Demand Charge for Peak Time (18.00 hours to 22.00 hours) shall be:
Billing Demand during Peak Time x Ruling Demand Charge/kVA x 1.50 x 4/24
- (c) Demand Charge for Off-peak Time (22.00 hours to 6.00 hours) shall be:
Billing Demand during Off-peak Time x Ruling Demand Charge/kVA x 0.80 x 8/24

$$\text{Total demand charges} = (a) + (b) + (c)$$

Billing of Energy Charges

The billing of the energy charge for HT and EHT consumers shall be done as follows:

- (d) Normal Time .. *Consumption during normal time x ruling energy rate/unit.*
- (e) Peak Time .. *Consumption during peak time x ruling energy rate/unit x 1.40*
- (f) Off-peak Time .. *Consumption during off-peak time x ruling energy rate/unit x 0.85*

$$\text{Total energy charge during a month} = (d) + (e) + (f)$$

Other Conditions

- Ruling demand/energy charges shall be the normal period demand/energy charges as per notified tariff.
- Billing demand in normal and off-peak period during a month shall be the recorded maximum demand or 75% of the contract demand whichever is higher. Billing demand for peak hours shall be the recorded maximum demand.
- *Excess demand charges:* Excess demand charges shall be applicable to the recorded maximum demand in excess of contract demand during normal period and peak period, which shall be charged at 50% extra (i.e., excess demand during normal/peak period x ruling demand charges x 0.5). Excess demand charges during off-peak period shall be applicable only if the recorded maximum demand during off peak period is in excess of 130% of the contract demand.
- Procedure for billing ToD tariff shall be as given in Annexure F.

ANNEXURE B

POWER FACTOR INCENTIVE AND PENALTY

The following incentive and penalty shall be applicable to HT and EHT consumers for power factor improvement:

Power factor range	Incentive
Power factor between 0.9 to 1.00	0.25% of energy charges for each 0.01 unit increase in power factor from 0.9
Power factor range	Penalty
Power factor below 0.90	1% energy charge for every 0.01 fall in power factor from 0.90

ANNEXURE C

RECOMMENDED VALUES OF STATIC CAPACITOR IN KVAR FOR POWER FACTOR IMPROVEMENTS

A. Induction Motors (LT)

<i>Sl. No.</i>	<i>Total Motor Rating (HP)</i>	<i>KVAR rating of capacitors insisted</i>
1	Up to 3	1
2	Above 3 up to 5	2
3	Above 5 up to 7.5	3
4	Above 7.5 up to 10	4
5	Above 10 up to 15	5
6	Above 15 up to 20	6
7	Above 20 up to 25	7.5
8	Above 25 up to 30	10
9	Above 30 up to 40	12
10	Above 40 up to 50	14
11	Above 50 up to 60	18
12	Above 60 up to 80	22
13	Above 80 up to 100	25
14	Above 100 up to 130	35

B. Welding Transformers (LT)

<i>Sl. No.</i>	<i>Rating of welding transformers in KVA</i>	<i>KVAR rating of capacitors insisted</i>
(1)	(2)	(3)
1	1	1
2	2	2
3	3	2

(1)	(2)	(3)
4	4	3
5	5	4
6	6	4
7	7	5
8	8	6
9	9	7.5
10	10	7.5
11	11	8
12	12	9
13	13	10
14	14	10
15	15	11
16	16	12
17	17	13
18	18	13
19	19	14
20	20	15
21	Above 20 up to 22	16
22	Above 22 up to 24	17.5
23	Above 24 up to 26	18
24	Above 26 up to 28	20
25	Above 28 up to 30	21
26	Above 30 up to 35	24
27	Above 35 up to 40	27.5
28	Above 40 up to 45	32.5
29	Above 45 up to 50	35

ANNEXURE D

ToD TARIFF FOR DOMESTIC CONSUMERS

Applicable to Domestic consumers who consume more than 500 Units/month.

	<i>Normal Period</i> (6.00 Hrs to 18.00 Hrs)	<i>Peak Period</i> (18.00 Hrs to 22.00 Hrs)	<i>Off Peak Period</i> (22.00 Hrs to 6.00 Hrs)
Charges for consumption above 500 Units/month	100% (Rs 6.50/Unit)	120% (Rs 7.80/Unit)	90% (Rs 5.85/Unit)

- Note:*—
1. Six months consumption shall be monitored from normal bi-monthly readings during January/February and July/August every year. If the average monthly consumption for first or second half of the year is above 500 Units, the consumer will be brought under ToD System after installing ToD meter in the premises.
 2. ToD based billing will be done whenever the monthly consumption exceeds 500 Units. If the consumption falls below 500 Units/month in any month, slab based billing shall be followed.
 3. This shall be effective from 1-1-2013 for those consumers who consume more than 500 Units/month average based on the average consumption for the period from 1-7-2012 to 1-1-2013.

ANNEXURE E

ToD TARIFF FOR I.T—IV INDUSTRIAL CONSUMERS

1. ToD scheme shall be applicable for LT Industrial consumers having connected load of 20 kW and above.

	<i>Normal Period</i> (6.00 Hrs to 18.00 Hrs)	<i>Peak Period</i> (18.00 Hrs to 22.00 Hrs)	<i>Off Peak Period</i> (22.00 Hrs to 6.00 Hrs)
Demand Charges and Energy Charges	100%	125%	80%

Other Conditions

- The ToD scheme shall be effective from 1-1-2013.
- Ruling demand/energy charges shall be as per the rates given below:
 - Demand charges Rs. 100 per kVA per month
 - Energy Charges 425 per/unit.
- Billing demand in normal and off peak period during a month shall be the recorded maximum demand or 75% of the contract demand whichever is higher during normal/off peak period. Billing demand for peak period shall be the recorded maximum demand.
- *Excess demand charges:* Excess demand charges shall be applicable to the recorded maximum demand in excess of the contract demand during normal period and peak period, which shall be charged at 50% extra i.e., excess demand during normal/peak period X ruling demand charges X 0.5. Excess demand charges during off-peak period shall be applicable only if recorded maximum demand during off peak period is in excess of 130% of the contract demand.
- Procedure for ToD tariff shall be as given in Annexure F

Billing of the Demand Charges

- (a) Demand Charge for Normal Time (6.00 hours to 18.00 hours) shall be:
Billing Demand during Normal Time x Ruling Demand Charge/
kVA x 12/24
- (b) Demand Charge for Peak time (18.00 hours to 22.00 hours) shall be:
Billing Demand during Peak Time x Ruling Demand Charge/
kVA x 1.25 x 4/24
- (c) Demand Charge for Off-peak Time (22.00 hours to 6.00 hours) shall be:
Billing Demand during Off-peak Time x Ruling Demand Charge/
kVA x 0.80 x 8/24

Total demand charges = (a) + (b) + (c)

Billing of Energy Charges

the billing of the energy charge shall be done as follows:

- (d) Normal Time .. *Consumption during Normal Time x ruling energy rate/unit.*
- (e) Peak time .. *Consumption during Peak Time x ruling energy rate/unit x 1.25*
- (f) Off-peak time .. *Consumption during Off-peak Time x ruling energy rate/unit x 0.8*

Total energy charge during a month = (d) + (e) + (f)

ANNEXURE F**BILLING PROCEDURES FOR To D TARIFF FOR LT—IV INDUSTRIAL, HT AND EHT CONSUMERS****1. Demand Charges (DC)**

- (i) The recorded maximum demand during normal time zone (T1) from 06.00 hrs to 18.00 hrs = RMD1
- (ii) The recorded maximum demand during peak time (T2) from 18.00 hrs to 22.00 hrs = RMD2
- (iii) The recorded maximum demand during off-peak time (T3) from 22.00 hrs to 06.00 hrs = RMD3
- (iv) The Contract Demand (kVA) = CD
- (v) The Ruling Demand Charge (Rs./kVA) = D
- (vi) Billing Demand
- (a) in Time Zone (T1), BMD1 = RMD1 or 75% of the CD whichever is higher
- (b) in Time Zone (T2), BMD2 = RMD2
- (c) in Time Zone (T3), BMD3 = RMD3 or 75% of the CD whichever is higher

(vii) (I) In the case of LT—IV Industrial, Demand Charge in each time zone shall be:

- (a) in Time Zone (T1), Dc1 = $BMD1 \times D \times (12/24)$
 (b) in Time Zone (T2), Dc2 = $BMD2 \times D \times 1.25 \times (4/24)$
 (c) in Time Zone (T3), Dc3 = $BMD3 \times D \times 0.80 \times (8/24)$

(II) In the case of HT and EHT consumers, Demand Charge in each time zone shall be:

- (a) in Time Zone (T1), Dc1 = $BMD1 \times D \times (12/24)$
 (b) in Time Zone (T2), Dc2 = $BMD2 \times D \times 1.50 \times (4/24)$
 (c) in Time Zone (T3), Dc3 = $BMD3 \times D \times 0.80 \times (8/24)$

(viii) Excess Demand in the case of LT—IV industrial, HT and EHT consumers in each time zone shall be:

- (a) in Time Zone (T1), Ed1 = $(RMD1 - CD)$
 (b) in Time Zone (T2), Ed2 = $(RMD2 - CD)$
 (c) in Time Zone (T3), Ed3 = $[RMD3 - (1.30 \times CD)]$

(ix) Total Excess Demand Charge (ED) = $Ed1 \times 0.5 \times D \times (12/24) + Ed2 \times 0.5 \times D \times (4/24) + Ed3 \times 0.5 \times D \times (8/24)$

(x) Total Demand Charge (DC) = $Dc1 + Dc2 + Dc3 + ED$

2. Energy Charges (EC)

- (i) The energy consumption in Time Zone (T1) = $X1$
 (ii) The energy consumption in Time Zone (T2) = $X2$
 (iii) The energy consumption in Time Zone (T3) = $X3$
 (iv) The Ruling Energy Charge (Rs./unit) = E

(v) (I) In the case LT—IV Industrial consumers, Energy Charges in each time zone shall be :

- (a) in Time Zone (T1), Ec1 = $X1 \times E$
 (b) in Time Zone (T2), Ec2 = $X2 \times E \times 1.25$
 (c) in Time Zone (T3), Ec3 = $X3 \times E \times 0.8$

(II) In the case HT-EHT consumers, Energy charge in each time zone shall be:

- (a) in Time Zone (T1), $E_{c1} = X1 \times E$
 (b) in Time Zone (T2), $E_{c2} = X2 \times E \times 1.40$
 (c) in Time Zone (T3), $E_{c3} = X3 \times E \times 0.85$

(vi) Total Energy Charge (EC) = $E_{c1} + E_{c2} + E_{c3}$

3. Total Monthly Charges = $DC + EC$

ANNEXURE G

OPTIONAL DEMAND BASED TARIFF

- Eligibility .. Optional Scheme for LT—IV Industrial, LT—VII (A) & (C) Commercial, having connected load equal or above 20 kW.
- Billing demand .. Recorded maximum demand or 75% of the contract demand whichever is higher
- Demand charges .. Based on Rs./kVA of billing demand as per tariff mentioned in the table below:

Consumer Categories	Tariff
	Rs./kVA of billing demand per month
LT—IV (Industrial)	100
LT—VII(A) (Commercial)	192
LT—VII(C) (Commercial)	161

Energy Charges .. Existing energy charges of respective categories shall apply.

Other Conditions

- The tariff shall be effective from 1-7-2012.
- Consumers who opt for maximum demand based tariff have to install ToD compliant meters at their cost. Meters may be arranged by KSEB or the Consumers. If the consumers provide meters, it has to be got tested at KSEB's lab or at Electrical Inspectorate. It will be the responsibility of KSEB to ensure the accuracy of the meters after proper testing.
- For those who opt for maximum demand based tariff, the contract demand shall be treated as connected load.
- The consumers who opt for maximum demand based tariff shall declare the contract demand in kVA by executing a supplementary agreement showing the contract demand and details of connected load in their premises.
- The consumers who opt for the new system may be allowed to revise upwards or downwards the declared contract demand within six months from the date of option without any conditions or charges. After this, the usual terms and conditions shall be applicable for changing contract demand.
- The Billing demand shall be the recorded maximum demand or 75% of the contract demand which ever is higher. In case the billing demand exceeds the contract demand, excess demand shall be charged 50% extra.
- The above scheme (optional demand based tariff) shall be effective till ToD tariff is made compulsory.

**KERALA STATE ELECTRICITY REGULATORY COMMISSION
THIRUVANANTHAPURAM**

**SCHEDULE OF TARIFF AND TERMS AND CONDITIONS
FOR BULK SUPPLY TO LICENSEES BY KSEB**

WITH EFFECT FROM 1-7-2012 TILL 31-3-2013

(vide Order No. OP 23 of 2012 dated 25-7-2012)

Unless the context otherwise requires the words and expressions used in this schedule and defined in the Electricity Act, 2003 or the Regulations specified by the Kerala State Electricity Regulatory Commission shall have the meaning respectively assigned to them in the Acts and Regulations mentioned above.

The tariff mentioned in this schedule shall apply to Licensees who avail energy through High Tension or Extra High Tension systems at their terminal notwithstanding anything to the contrary contained in any agreement earlier entered into with any Licensee by Kerala State Electricity Board/Government or any of the Tariff Regulations and/or rules and/or orders previously issued.

The rates specified in this schedule are exclusive of Electricity Duty and/or surcharge, other cesses, taxes, minimum fees, duties and other impositions existing or that may be levied in future by the Government or the Commission which are payable in addition to the charges as per the tariff mentioned in this Schedule.

The rates are subject to further revision as and when the cost of internal generation increases, and/or the cost of power purchased from other agencies in the State increases, and/or the cost of imported power and/or fuel cost adjustment price payable for imported energy increases beyond the present level.

The tariff applicable will be two part tariff as under:—

	<i>Demand Charges (Rs./kVA of Billing Demand per month)</i>	<i>Energy Charges (Paise per unit)</i>
Kinesco Power and Utilities (P) Limited	300	415
Cochin Special Economic Zone	300	430
Rubber Park India (P) Limited	300	370
Technopark	300	400
Cochin Port Trust	350	530
Thrissur Corporation	350	520
Kanan Devan Hills Produce Company Limited	300	370
Military Engineering Service	350	410

Note:— Billing Demand shall be the recorded Maximum Demand for the month in kVA or 75% of Contract Demand whichever is higher.

Special Conditions

1. The rates notified in this order are the normal ruling rates.
2. The maintenance and replacement of defective meters shall be done by the Licensees at their cost. If they fail to do so, they will be charged 50% extra over the rates notified in this order for both demand charge and energy charge. They shall also do the maintenance of CT/PT and all other equipments owned by them at their cost.
3. For billing purpose each point of supply shall be treated as a separate consumer.
4. ToD tariff shall be applicable to HT, EHT and LT consumers of the licensees other than KSEB as per the terms and conditions mentioned in this order.

ANNEXURE II

<u>EDC Loan</u>	<u>Effective rate of Interest.</u>
Total Loan Amount	= 28.05 ALC \$ = Rs. 72.33 Cr.
Dates of Availing	= 12/97 -- 54.7 Cr.
	12/99 -- 18.21 Cr.
Interest rate	= 7.01%
Exposure fee on the dates of availing.	= 6.25%
Guarantee fee to State Bank	= 2.4%
Commitment fee.	= 3%
	8
Date of Commissioning	= 6-99
Date of Repayment start	= 12/99.
1. Total interest to be paid	= Rs. 29.3866 Cr.
2. Total Guarantee fee	= 17.75 Cr.
3. Exposure fee	= 4.36 Cr.
4. Commitment fee	= 0.48 Cr.
5. Foreign exchange variation @ 5%	= 18.21 Cr.
Total	<u>64.3656</u>
	=====
Effective Interest Rate	= $\frac{7.01 \times 64.3666}{29.3866}$
	= 15.38%
	=====