

A Monthly Publication of the Kerala State Electricity Board Engineers' Association

## A Modest Proposal

The Kerala State Electricity Regulatory Commission completed public hearings on the ARR and ERC petition submitted by the Kerala State Electricity Board Ltd. for the year 2014-15. Our association expressed our views on the same before the Commission at the three venues of public hearing.

This time the Aggregate Revenue Requirement (ARR) and Expected Revenue from Charges(ERC) assumes a greater significance, since this is the first petition by the Kerala State Electricity Board Ltd. after its evolution from KSEB. There is a comprehensive revaluation and reassessment of the assets and the liabilities. The constitution of the Master Trust for managing the pension funds and the decision to issue two bonds to the Master trust by KSEB Ltd. has been well appreciated by our Association. This will enable the trust to partly meet the future pension liabilities of the present incumbent employees in the Board. In accordance to the provisions in Transfer Scheme, as on 31st October 2013, the liability on the part of KSEBL for funding the terminal liabilities other than PF has been considered as Rs. 12,419 crore.

But the greatest concern here is that, whether KSEB Ltd. will be able to service the first bond, which is having a cost of Rs 8144.41 crore at a coupon rate of 10% for 20 years. In order to provide the bond interest and the principal, the amount has to be reflected in the balance sheet of KSEB Ltd. ie in the ARR & ERC. And the KSERC also has to accommodate such a liability, which will definitely call for a major tariff increase to meet the revenue deficit.

Contd. to page 4



Issue - 7 Vol - 2 July 2014

## New Office Bearers KSEB Engineers Association



President Er.E.Mohammed Shereef



General Secretary Er.V.Ranjit kumar



Vice-President (S) Er.C.Sureshchand



Vice-President (N) Er.T.P.Unnikrishnan



Treasurer Er.K.Mukesh Kumar



Secretary(HQ) Er.D.S.Rajesh



Secretary(North) Er.V.Suresh



Secretary (South) Er. Viji Prabhakaran



Organising Secretary (North) Er.K.Nagaraj Bhat



Organising Secretary (South) Er.E.Santhosh



## KSEB Engineers' Association Office Bearers - 2014 - 15

#### **ASSOCIATION**

#### **President**

Er.E.Mohammed Shereef

#### Vice-President (S)

Er.C.Sureshchand

#### Vice-President (N)

Er.T.P.Unnikrishnan

#### **General Secretary**

Er.V.Ranjit kumar

#### Treasurer

Er.K.Mukesh kumar

#### **Organising Secretaries**

Er.K.Nagaraj Bhat (North) Er.E.Santhosh (South)

#### Secretaries

Er.D.S.Rajesh (HQ)
Er. Viji Prabhakaran (South)
Er.V.Suresh (North)

#### **BENEVOLENT FUND**

#### Chairman

Er.N.T.Job

#### Vice -Chairperson

Er. V.S Geetha

#### Secretary

Er. M.Muhammad Rafi

#### Treasurer

Er. William Vinayan Raj

### Joint Secretaries

Er. V.Anil Er. P.C. Salil

## EDITORIAL BOARD

#### **Chief Editor**

Er. P. Muraly

#### **Associate Editor**

Er. Cherian P. Thomas Er. Kunjunni P.S.

#### Ex. Officio Members

Er. V. Ranjit Kumar Er. G. Shaj Kumar



## Contents

- Editorial
- ➤ ARR & Tariff Determination are we in the right Track ...?
- വൈദ്യുതി വിതരണ ലൈനുകൾ
   ചെറിയ കാര്യങ്ങളും വലിയ നേട്ടങ്ങളും

Er. ഇ.എം. നസിർ

🕨 ഇറാക്കിലെ ആഭ്യന്തര കലാപം

Er. രാജൻ വി.

🍃 മൊത്തം – ചില്ലറ

Er. എച്ച്. സുരേഷ് AEE

Twenty Minutes of Agony at Shahran Airbase

By U.S. Ravindran (Rtd.) E.E.

Board Orders



But this time, KSEB Ltd. has neither shown the depreciation of the revalued asset cost of Rs 4000 crore nor the principal payback of Rs 8144.41 crore in the ARR statement, inorder to avoid the tariff shock to the consumers. The annual contribution to the Master Trust for the year 2014-15 amounting to Rs 101.12 crore has been included in the employee cost. This is only a tentative amount that may vary every year and the correct amount can be arrived through an actual valuation.

So , this time the total Revenue expenditure is Rs 12057.62 crore with a Revenue receipt of Rs 9126.41 crore, resulting in a revenue deficit of Rs 2931.21 crore. But KSEB Ltd. has asked for only a moderate tariff revision for meeting the revenue deficit of Rs 1423.64 crore.

The Government seems to be in a positive mood for allowing the tariff revision, since the next legislative elections are fast approaching in 2016, and hence it cannot go in for a tariff revision in the next two years. Also the financial situation is so bad that it cannot continue with the present subsidy scheme or

impose more power subsidies. Hence the situation is ripe for a power hike. Moreover the present cross subsidy scheme, where the HT and EHT consumers are charged with very high tariff and domestic consumers with very low tariff cannot be continued for very long, since there is a chance of HT and EHT consumers opting for the open access, where by they can obtain low cost power from power traders.

But to what extent the power tariff should be hiked is the question. A steep hike will cause public outrage as well as, it will set a suitable environment for private players to enter the distribution sector. At present, the private sector is not interested in electricity distribution since the profit is very less from this sector.

Certain small steps can help the Commission to sail through the storm. TOD tariff can be introduced for domestic consumers with consumption above 300 units/month. Fixed Charge for three phase domestic consumers consuming below 300 units/month can be retained at present Rs. 60/month. However consumers consuming above this limit may be charged at per kW rate





rather than a fixed value. Tariff Class of LT VIIA and VIIB be merged and support for small commercial consumers be administered based on consumption limit rather than connected load. Introduction of penal measures for injecting harmonics into the grid which causes capacity reduction, equipment overheating, relay malfunction and nuisance tripping of grid. Renewable energy generation incentives in tune with CERC regulations can be provided, with stress for Off Grid Solar projects and the same need to be accounted for the Renewable Energy Purchase obligation of KSEBL.

According to Clause 2 Part-IV of Schedule in CEA Connectivity Regulation 2007, the power factor of the distribution system and bulk consumer shall not be less than 0.95 whereas the present normative requirement by KSERC is 0.9 only. Hence the CEA standards should be made mandatory for all HT/EHT consumers and industrial consumers in the State for meeting the reactive power requirement of the system and for better reactive management.

According to Clause 2(2) of IEGC, the "time block" is defined as block of 15 minutes each for which Special Energy Meters record values of specified electrical parameters and relevant billing parameters are measured according to 15 minutes time block. KSERC has been adopting 30 minutes time block for such parameters and there is conflict and complications in measuring and accounting electrical parameters especially in the scenario of increase in open access requests. Hence the KSERC should adopt same 15 minutes time block for the State in tune with the CERC regulation for better synchronisation in the energy measurement and accounting methodologies adopted in the country.

The only solution to this conundrum is the restoration of the non-tariff income of KSEB Ltd, which has been severly curtailed by the KSERC through its recent Supply Code. A decent non-tariff income with a modest tariff increase can help KSEB Ltd. to tide over the present crisis without much public ire and we expect the Commission will excercise a pragmatic stand in this matter.





# ARR & TARIFF DETERMINATION: ARE WE IN THE RIGHT TRACK....?!

*Er. C.P. George* Dy. Chief Engineer

Today with the Electricity Act 2003 more than 11 years old; the National Electricity Policy 2005 more than 9 years old & the Tariff Policy more than 8 years old it is time to have a relook on the principles and methodologies adopted by KSEBL for the preparation and submission of ARR and the philosophies and methodologies adopted by the Honourable KSERC in evaluating the ARR. With responsibility of the policy determination in the power sector entrusted exclusively to the Government of India by the Act and with important regulations like CEA (I & O) Meters 2006, Grid Connectivity regulation 2007, IEGC 2010 & CEA Grid Std. 2010 etc are fully operational, we need to know the frame work in tariff determination and evaluate the ARR in its true spirit as envisaged in the policy documents for achieving the objectives. With the evolution of National Grid, the entire power sector in the country is operating in a different paradigm and we need to accept the realities for the development of the sector according to the aspirations of the consumers and for the well being of the state economy.

Actually the frame work for determination of relevant tariffs has already been specified in the Electricity Act, the National Electricity Policy and the Tariff Policy and appropriateCommissions are mandated to operate within the specified frame work only. With relevant CEA regulations specify the constructional and operational standards for the power sector

in the country and CERC regulations determines the operational codes for the national grid and philosophies & methodologies for tariff determination in generation and transmission, SERC role is to ensure the implementation and practice of these philosophies and methodologies for appropriate integration of the state grid with national grid and the development of the state power sector in tune with the National Electricity Policy and Nation Electricity Plan.

According to Section 61 of Electricity Act 2003; appropriate Commission shall, subject to the provisions of this Act, specify the terms and conditions for the determination of tariff, and in doing so, shall be guided by the following, namely:

- the principles and methodologies specified by the Central Commission for determination of the tariff applicable to generating companies and transmission licensees;
- the generation, transmission, distribution and supply of electricity are conducted on commercial principles;
- safeguarding of consumers' interest and at the same time, recovery of the cost of electricity in a reasonable manner;
- that the tariff progressively reflects the cost of supply of electricity and also, reduces cross-subsidies in the manner



specified by the Appropriate Commission

the National Electricity Policy and tariff policy:

According to Section 62 (1) of Electricity Act 2003; The Appropriate Commission shall determine the tariff in accordance with provisions of this Act for (a) supply of electricity by a generating company to a distribution licensee; (b) transmission of electricity; (c) wheeling of electricity &(d) retail sale of electricity.

According to Para 2.2 of Tariff policy 2006; the Central Electricity Regulatory Commission (CERC) and State Electricity Regulatory Commissions (SERCs) shall be guided by the tariff policy in discharging their functions including framing the regulations under section 61 of the Act.

According to Para 2.3 of Tariff policy 2006;Regulatory Commissions shall be guided by the principles and methodologies specified by the Central Commission for determination of tariff applicable to generating companies and transmission licensees

As such, the entire philosophy can be summarised to state that the ARR must reflect the Cost of Supply of electricity and all the business in the power sector including Generation, transmission and distribution of electricity must be conducted on commercial principles. In order to determine the cost of supply we need to have

the landed cost of electricity at the transmission - distribution interfacing point which must determined in tune with the methodologies and principles specified by CERC. This means we need to have a Hydro Tariff, which determines the generation cost of each project, we need to have a transmission ARR which determines the cost of transmission of electricity in the state transmission network with actual transmission loss determined through time synchronised interfacing meters and a separate distribution ARR. The distribution ARR shall be arrived from the landed cost of electricity at the transmission distribution interfacing point (Which is the generation / power purchase cost added with the state transmission loss and transmission cost) with the distribution cost and distribution loss. So far we have not taken any steps to adopt the principles and methodologies specified by CERC in the hydro tariff and the transmission tariff and hence any arbitrary and adventurous decisions on distribution ARR without determining the landed cost of electricity at the interfacing point according to the CERC methodologies is not according to the spirit of the electricity Act, National Electricity policy and the tariff policy.

Actually the state power sector is now at a critical turning point with the consumers in the state vigorously demanding better quality in supply of electricity and it must be remembered that delivering electricity safely with quality & reliability is a costly affair and appropriate level of capital investment and O&M



expense is the basic requirement for the same. The capital investment in the state for generation and transmission wings during the past few decades are far below the desired level and the investment in distribution sector has been concentrated mainly to service connection requirements and LT lines constructions. This is evident from the fact that our LT/HT ratio is still at 5: 1 or 6: 1 level where as the desired level is 1:1. As such we are managing the state power sector with old generating stations with extended life span, obsolete substations & transmission lines with expired life and distribution sector with age old assets without any modernisation, automation and mechanisation. With the result, the level of interruptions and rate of accidents in the sector have been increased to an alarming level and any decisions by KSERC on ARR should be based on ground realities KSERC should not correct assessment of actual situation in the state sector rather than mislead by the lobbies of vested interest.

Determination of Hydro tariff on CERC methodologies and principles are very important aspect to justify the investment in the existing as well as new hydro stations projects. The proposed allocation in the capital investment & operational cost with power evacuation cost shall be justified accordingly and delay in the project shall not be burdened to the consumers. At the same time managing the old power station need higher O&M cost and employee cost as same need to be accounted in tune with **CERC** 

methodologies. Generation now being a de-licensed activity, blaming the KSEBL for lack of generation inside the state is inappropriate. This is actually an indication of the failure of the state government to attract the investment and KSERC to frame appropriate regulations to encourage appropriate investments.

Determination of Transmission Tariff and the Investment in Transmission

Electricity Act, NEP & Tariff Policy make very much emphasis on the investment on transmission sector and the Transmission sector in the country marched forward as envisaged in the NEP and the National Grid has come into existence on 31/12/2013. But it is observed that the transmission sector in the Kerala is in a sorry state and we are ill equipped to meet the challenges and opportunities of the evolution of the National Grid. According to Para 5.3.2 of National Electricity Policy 2005; STU is responsible for planning and development of the intrastate transmission system. Network expansion should be planned and implemented keeping in view of the anticipated transmission needs that would be incident on the system in the open access regime. According to Para 5.3.5 of National Electricity Policy 2005; The transmission capacity would be planned and built to cater to both the redundancy levels and margins keeping in view international standards and practices. A well planned and strong transmission system will ensure not only optimal utilization of transmission capacities but





also of generation facilities and would facilitate achieving ultimate objective of cost effective delivery of power. We need heavy investment to upgrade our transmission system to the tune of "N-1" & "N-1-1" requirement as envisaged in the section of the Para 6 - Reliability criteria, in the CEA TRANSMISSION PLANNING CRITERIA, 2013 to avoid localised blackouts. Again we have a mandatory requirement for upgrading our transmission protection system, as envisaged in the Central Electricity Authority (Grid Standards) Regulations 2010 which is a basic requirement for reliability of supply in the state. Grid visibility and protection coordination is another area for urgent investment in communication through Fibre Optic cable network and wireless network. The communication system of the transmission licensee shall comply with Central Electricity Authority (Technical Standards for Connectivity to the Grid) Regulations, 2007 and our Transmission system needs to be upgraded accordingly.

According to Para 7.2.2 of Tariff policy 2006; The Appropriate Commission may require necessary studies to be conducted to establish the allowable level of system loss for the network configuration, and the capital expenditure required to augment the transmission system and reduce system losses. Since additional flows above a level of line loading leads to significantly higher losses, STU should ensure upgrading of transmission systems to avoid the situations of overloading. The Appropriate Commission should permit adequate capital investments

in new assets for upgrading the transmission system.

According to the report in the protection audit conducted by CEA /SRPC in the major grid stations under KSEB recently, none of our major Grid stations fully complied with the requirement of CEA Grid Std. 2010 or Grid Connectivity Standard 2007. They have directed urgent modification to the tune of 98 Core and it is it observed that even this aspect is not appropriately considered in the capital investment plan of the Transmission. Actually many obsolete substations have become grid security risks and the O&M and employee cost for maintaining such substations shall be of multiple levels than the normal requirements

The tariff policies even specify how and when the transmission tariff should be implemented and the basic metering requirement for transmission tariff requirements in transmission. As per Para 7.1.7 of Tariff Policy; after coming into effect of the CERC regulation on framework for the inter-State transmission, a similar approach should be implemented by SERCs in next two years for the intra-State transmission, duly considering factors like voltage, distance, direction and quantum of flow. As per Para 7.1.8 of Tariff Policy; Metering compatible with the requirements of the proposed transmission tariff framework should be established on priority basis. The metering should be compatible with ABT requirements, which would also



facilitate implementation of Time of Day (ToD) tariffs.

Actually the metering infrastructure at appropriate interfacing locations with Generation and distribution at appropriate accuracy class with time synchronisation is a mandatory requirement as per CEA (I&O) Metering regulation and for mandatory energy audit for determination of actual transmission loss measurement as per Energy Conservation Act 2001. But it is observed that we have not taken any steps (even in this ARR) for real time energy audit or actual measurement of transmission loss or transmission tariff determination. As such the renovation and modernisation of our outdated transmission system has been delayed to the level of serious system consequences and a comprehensive systematic investment plan for the transmission system in tune with the CEA Standards is the basic requirement for maintaining the transmission system with efficiency and reliability. The transmission tariff should be determined with appropriate investment for modernisation and renovation and the O&M cost and Employee cost of the transmission function need to be accounted accordingly. Operating with obsolete substations and lines demand higher O&M Cost and employee cost where as with appropriate capital investment same shall be automatically reduced with better performing Grid elements and automation. Again the employee cost used for the capital works shall be capitalised and same shall reflect substantially on the much criticized employee cost

## Distancing Government Responsibilities from Tariff Determination

As per Para 8.2.1 of Tariff policy; The State Commissions should ensure compliance of Section 65 of IE Act, which says no direction of the State government on Tariff Subsidy is applicable unless payment is made in advance, to ensure financial viability of the utilities. Again it mandated enough working capital duly recognising the transition issues faced by the utilities.

As per Para 8.3.2 of Tariff Policy; by the end of year 2010-2011 SERC should ensure that tariffs should be within  $\pm$  20 % of the average cost of supply.

Actually the activities responsibilities of KSEBL, State Government and KSERC has been clearly defined and demarcated in the Electricity Act. KSEBL is only a licensee today and the development of power sector in the State very much depends on the Actions of the State Government and Regulations framed by the KSERC. KSEBL has been asked to function on commercial principles and Electricity Act, NEP and Tariff policy give very much emphasis on Rationalisation of Tariff. But it is observed that the number of categories after every tariff order is on increasing trend and there is no serious effort towards the rationalisation of tariff as envisaged in the tariff policy. KSEBL must be allowed to function on commercial principles with rationalised tariff and let the government officially own the social obligation. Subsidisation of the tariff is against the



guiding principles and the tariff policy and hence need to be considered accordingly.

Revenue Gap and the proposed tariff revision

According to the ARR submitted; tariff revision for a revenue gap of Rs.1423.64 Cr only has been proposed against a revenue gap of Rs.2931.21Cr projected by KSEBL. Since KSEBL do not have any control over the cost of power purchase, the interest on the loan availed, the return on equity (which shall be vests with the Government) and the employee cost (which cannot be curtailed all of a sudden due to obvious reasons), maintaining such huge revenue gap shall end up in shortage of fund for the O&M works and capital works. In the end this shall adversely affect the delivery of electricity to the consumers with quality and safety due to further deterioration of the aged generation, transmission and distribution assets

#### **Power Purchase Cost**

As per Para 8.0 of Tariff Policy; all power purchase costs need to be considered legitimate unless it is established that the merit order principle has been violated or power has been purchased at unreasonable rates. The reduction of Aggregate Technical & Commercial (AT&C) losses needs to be brought about but not by denying revenues required for power purchase for 24 hours supply and necessary and reasonable O&M and investment for system up gradation.

Consumers, particularly those who are ready to pay a tariff which reflects efficient costs have the right to get uninterrupted 24 hours supply of quality power.

### **Employee Cost in Distribution**

SERC is mandated to decide the retail tariff for sale of energy based on cost plus approach only. This means the cost of power at consumer point is to be determined from the power purchase cost & generation Tariff, Transmission Loss and Transmission Tariff, depreciation of capital expenditure in distribution assets, cost/ interest of loan, return on equity, O&M expenditure and employee cost. As such only those cost of the employee utilized for the O&M and recovery of charges need be accounted as employee cost. This means, the cost of employees utilized for other purposes that cannot be accounted in the ARR need to be segregated and the cost for such works need to be realized from such projects or works

## Capital works in the distribution wing:

The execution of capital works including effecting new service connection need a separate system for execution and the employee cost for these works need to be accounted separately and should be capitalized. The depreciation cost of such capital need to be accounted in the ARR appropriately.

According to CERC guidelines the useful life of the transmission/distribution line is 35 years, communication system is



15 years and IT equipment & software is 7 years. Thus many of the O&M works done by distribution wing have the scope of converting it to a capital work by proper identification and program implementations. Instead, present system is forcing its employee to do these works under O&M for maintaining the system and in turn leads to increase in O&M expense and employee cost.

According to the capital investment out lay presented in the ARR, Rs.700 Cr. is proposed for the distribution with 4.0 lakhs new connections (120 Cr. Approx as per KSERC cost data) and 4560 km LT lines (250 Cr. Approx as per KSERC cost data) which itself will cross 500 Cr. On appropriate capitalisation of the same with employee cost. This means the LT/HT ratio shall be deteriorated further and the system will be further loaded without appropriate investment for system improvement in the distribution.

Other Services from KSEBL: KSEBL is providing consultancy service and technical service to most of the electrical projects prepared by local bodies at different levels by rendering the services of the officers and staff from Line Man to Chief Engineer. Actually the time spend by KSEB officers & staff for such works need to be accounted against the consultancy services and legitimate fees collected from the concerned departments can be accounted accordingly to the employee cost.

All the DSM activities except replacement of the faulty meter need to be

accounted separately. KSEB distribution licensee must see that maximum power is sold to the consumer through its infrastructure for better utilization of its infrastructure establishment. Higher the power sold, lesser will be the percentage of employee cost. Again as the tariff is telescopic, more power consumed by the consumer gives better revenue, provided it is metered with a correct meter. Responsibility of the distribution licensee is to distribute electricity with quality and reliability @ minimum loss in the distribution system. We have Bureau of Energy Efficiency constituted by GOI under subsection (l) of section 3 of Energy Conservation act 2001 responsible for Coordinating the functions of energy conservation in India and the State Designated Agency, the Energy Management Centre to coordinate such activities in the state of Kerala. The distribution licensee needs to account the employee utilization for such purposes separately based on the specific schemes initiated by these agencies and deduct the cost from the employee cost.

Deposit works: The man hours used by the officers and staff for providing the services on deposit works is not accounted as per the market value. The cost allowed by the KSERC for such services are pea nuts compared to the market value of the employee cost spend by KSEB. Thus actual cost based on the market value shall be realized and deducted from the employee cost projected.

Hydel Bullet July 2014



Street light maintenance: The responsibility of the licensee is to provide supply through correct meter according to the tariff specified by the KSERC. The street light maintenance is the responsibility of the local body and same need to be done under supervision of KSEB staff on payment of the supervision charge. This supervision charge need to be collected based on the actual cost of the employee utilized and need to be accounted appropriately for the employee cost

Natural Calamities: Works involving natural calamities need to be segregated and shall not be mixed with normal O&M works. Same need to be accounted appropriately in the employee cost.

Organisational Setup: Actually no organization in power sector uses the same employees for O&M and capital works as both functions are managed with different philosophies and principles. The types of skills required for both functions are entirely exclusive and hence efficient function is possible only with exclusive teams. The O&M employee need to entrust the responsibilities functionally with only those works in the distribution system for maintaining the supply. All other services need to be excluded from their responsibility and shall bring under a separate ARU for capital services.

In the end, I shall conclude by stating that the strength of the KSEB and motivational level of the KSEB employee shall decide the future of the power sector in the State. Employees with better

competency and professionalism should be attracted to the organisation with appropriate pay and perks. Employee cost and O&M cost shall be evaluated with appropriate studies and may be brought down with appropriate capital investment and automation.

#### Conclusion

The integration of data with the specified philosophies, principles and methodologies are the basic requirement to provide appropriate direction and thrust to the state power sector. The preparation and evaluation of the ARR according to the frame work based on the principles and methodologies specified in the policy document is mandatory and hence the entire exercise need a thorough relook. Any adventurous decisions based on the inputs from the pressure groups with vested interest shall be suicidal for the state power sector at this critical juncture.

The State Regulatory Commission being the apex body in the state to ensure development of state power sector through implementation of the provision of the IE act, National Electricity Policy, Plan & Tariff Policy in its true spirit through appropriate regulations and orders, the approved ARR should reflect the needs and requirement of the sector in the state and should ensure that the sector shall be able to serve better as per the aspirations of the consumer in the state.





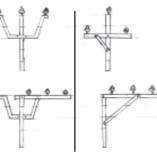
## വൈദ്യുതി വിതരണ ലൈനുകൾ<sup>്</sup> ചെറിയ കാര്യങ്ങളും വലിയ നേട്ടങ്ങളും

Er. ഇ.എം. നസീർ, ചിറയിൻകീഴ് എക്സി. എഞ്ചിനീയർ (റിട്ട.)

- മുൻകാലങ്ങളിൽ 11 കെ.വി. ലൈനുകൾ പൊതുവെ പുരയിടങ്ങളിലൂടെയും വയലേലക ളിലൂടെയുമാണ് കടന്നുപോയിരുന്നതെങ്കിൽ, ഇപ്പോൾ റോഡുകളുടെ പാർശ്വങ്ങളിലാണിവ നിർമ്മിച്ചു വരുന്നത്. സ്റ്റീൽ ടവറുകളുപയോ ഗിച്ചും കോൺക്രീറ്റ് തൂണുകളുപയോഗിച്ചുമുളള cross arm ഈ ലൈനുകളിൽ നിലവിലുളള സങ്കൽപ്പത്തിൽ നിസ്സാരമാറ്റങ്ങൾ വരുത്തിയാൽ വലിയ ലാഭമുണ്ടാക്കാനാകും.
- നിലവിലുള്ള 11 KV ലൈനിന്റെ V-cross arm പാടെ ഉപേക്ഷിച്ച് പകരം ഋജുവായ cross arm ഉപയോഗിച്ചാൽ ഏറെ സ്റ്റീൽ ലാഭിക്കാ നാകും. ഇതിൽത്തന്നെ രണ്ടു Knee braking ന്റെ സ്ഥാനത്ത് ഒന്ന് ഒഴിവാക്കാവുന്നതേയു ളളു.
- 2) റോഡിന്റെ വശങ്ങളിലുളള വൃക്ഷശിഖര ങ്ങൾ ലൈനുകളിൽ കഴിയുന്നത്ര തട്ടാതി രിക്കാൻ ഉപയോഗിക്കുന്നത് നന്നായിരിക്കും L.T. ലൈനുകളിലും ഇത് പ്രയോജനപ്പെടു ത്താവുന്നതാണ്. ഇവയെ clamp ഉപയോ ഗിച്ച് ഘടിപ്പിക്കാതെ പോസ്റ്റിൽത്തന്നെ ദ്വാര ങ്ങളേർപ്പെടുത്തിയാൽ കൂടുതൽ സ്റ്റീൽ ലാഭി ക്കാനാകും. V-cross arm ഉപയോഗിച്ചുകൊ ണ്ടുളള സമ്പ്രദായവും ഒഴിവാക്ക ണം.

11 KV ലൈനുകൾ വഹിക്കുന്ന Steel tower കൾ വാഹനങ്ങൾ മുട്ടിയും മരങ്ങൾ വീണും തകരാറുണ്ട്. അത്തരം സന്ദർഭങ്ങളിൽ പുതി യൊരു ടവർ തൽസ്ഥാനത്തെത്തിച്ച് തൊട്ട ടുത്ത് പുതിയ കുഴിയുണ്ടാക്കി പുതിയ ടവർ അതിലിറക്കി കോൺക്രീറ്റിട്ടുറപ്പിച്ച് ലൈനു കളെല്ലാം അതിലേക്ക് മാറ്റി വൈദ്യുതി വിത രണം പുനഃസ്ഥാപിക്കുകയെന്നത് ശ്രമകര മെന്നുമാത്രമല്ല, സമയ നഷ്ടത്തിനും Steel പാഴാക്കലിനും കാരണമാകുന്നു. തകർന്ന ടവറുകളുടെ തകരാറുളള ഭാഗം മാത്രം മുറിച്ചുമാറ്റി പകരം ആവശ്യത്തിനു നീളമുളള ടവർ, Nut ഉം bolt ഉം ഉപയോഗിച്ച് അതിൽ ഘടിപ്പിക്കുകയാണെങ്കിൽ സമയം ലാഭിക്കാം,കോൺക്രീറ്റ് ലാഭിക്കാം,Steel ലാഭിക്കാം. Steel മുറിച്ചുമാറ്റാനും hole കൾ ഉണ്ടാക്കാനും12 volt DC യിൽ പ്രവർത്തിപ്പി ക്കാവുന്ന cutter ഉo drilling machine നും ഉണ്ടെങ്കിൽ Board ന്റെ വാഹനത്തിന്റെ battery കൊണ്ടുതന്നെ ഇതു പ്രവർത്തിപ്പി ക്കാം. ഒരു ഡിവിഷനിൽ ഇത്തരം ഒരു സെറ്റു പകരണമുണ്ടായാൽ അതിനു കീഴിലുള്ള സെക്ഷൻ ഓഫീസുകളിൽ ആവശ്യമു

> ളളപ്പോഴൊക്കെ ടവർ മാറ്റി സ്ഥാപിക്കാൻ ഇത് പ്രയോ ജനപ്പെടുത്താം. ജീവന ക്കാർക്ക് ഇതിനുള്ള പരിശീ ലനംകൂടി നൽകണമെന്നേ യുള്ളു.



ഒഴിവാക്കേണ്ടവ

ഏർപ്പെടുത്തേണ്ടവ



## ഇറാക്കിലെ ആഭ്യന്തര കലാപം

Er. രാജൻ

**ഗ**ൾഫ്മേഖല കുറെക്കാലമായി പല രീതിയിലും വാർത്തകൾ സൃഷ്ടിക്കുന്നുണ്ട്. വിശേഷിച്ചും മതപരമായ തർക്കങ്ങളാലും ഏറ്റുമുട്ടലുകളാലും മതവും ജാതിയും അത്രപെട്ടെന്നൊന്നും മനു ഷ്യരിൽ നിന്നും ഇല്ലാതാക്കാൻ സാധിക്കില്ലയെ ന്നുളളതിന്റെ തെളിവ് കൂടിയാണിത്. ഇസ്ലാമിക വിശ്വാസികൾ പല വിഭാഗങ്ങളായിട്ടാണ് നില പ്രധാനമായും ഷിയ, സുന്നി, നിൽക്കുന്നത്. കുർദ് വിഭാഗങ്ങളാണ് നിലവിലുളളത്. ക്കിൽ 60%ത്തോളം ഷിയകളും 30%ത്തോളം സൂന്നികളും ബാക്കി കുർദുകളുമാണ്. വിഭാഗക്കാരായ സദ്ദാംഹുസൈനായിരുന്നല്ലോ അവിടത്തെ ഭരണാധികാരി. അദ്ദേഹം കുർദ് മേഖലയ്ക്ക് പരിമിതമായ സ്വയംഭരണം അനു വദിച്ചിരുന്നു. അതേ സമയം ഷിയകളെ ഒതുക്കി ഭരിക്കുന്ന ഒരു രീതിയാണ് അദ്ദേഹം പിന്തുടരു ന്നത്. അതുകൊണ്ടുതന്നെ സമൂഹത്തിൽ ഭരണ ത്തോട് പ്രകടമായ, അതേസമയം രഹസ്യമായ, എതിർപ്പും ഉണ്ടായിരുന്നു. ഇതിൽ നിന്നൊക്കെ ശ്രദ്ധ തിരിക്കാനും മതപരമായ മേൽകോയ്മ നേടാനുമായി സദ്ദാം കുവൈറ്റിനെയും ഇറാ നെയും ആക്രമിക്കുകയും കുവൈറ്റിനെ കീഴ്പെ ടുത്തുകയും ചെയ്തിരുന്നു. അതിന്റെ അനന്തര ഫലമായി യുഎന്നിൽ കൂടി പാശ്ചാത്യ രാജ്യ ങ്ങൾക്ക് പ്രത്യേകിച്ചും അമേരിക്കയ്ക്ക് ഗൾഫ് മേഖലയിൽ ഇടപെടാനുള്ള അവസരം ലഭിച്ചു. അതവസാനം അമേരിക്കയും സദ്ദാമും തമ്മിലു ള്ള പോരാട്ടമായി മാറുകയും അതിന്റെ ഫല മായി അദ്ദേഹം വധിക്കപ്പെടുകയും ചെയ്ത അങ്ങനെ അവിടെ ഷിയാ തെല്ലാം ചരിത്രം. ഭരണം നിലവിൽ വന്നു. അതോടെ അമേരിക്കൻ പിന്മാറ്റവും നടന്നു. പക്ഷെ അപ്പോഴും അവിടത്തെ പ്രശ്നങ്ങൾ പൂർണമായി പരിഹ രിക്കപ്പെട്ടിരുന്നില്ല. അതിന്റെ ബഹിർസ്ഫുര ണമാണ് ഇപ്പോൾ നടക്കുന്നത്. സുന്നി വിഭാഗ ത്തിലെ ഒരു ചെറുഗ്രൂപ്പാണ് അവർക്ക് മുൻതൂക്കമുള്ള പ്രദേശങ്ങളെ ചേർത്ത് ഈ

കലാപം നടത്തുന്നത്. അവിടത്തെ മതപരവും ഇന്ധനപരവുമായ ചില മത്സരങ്ങൾക്കും ഈ കലാപത്തിൽ പങ്കുണ്ട്. അതുകൊണ്ട് തന്നെ ആ മേഖലയിലെ പ്രധാന രാജ്യങ്ങളായ സുന്നി ഭരണമുളള സൗദിക്കും ഷിയാ ഭരണമുളള ഇറാനും ഈ വിഷയത്തിൽ അവരുടേതായ താൽപര്യങ്ങൾ ഉണ്ട്. അതേ സമയം അവർക്ക് ഈ പ്രശ്നത്തിൽ നേരിട്ട് ഇടപെടാനും അവരു ടേതായ പരിമിതികളുണ്ട്. വൻ ശക്തികളെ ഇട പെടുത്തിയുളള ഒരു പ്രശ്നപരിഹാരമാണ് അവർ ഉദ്ദേശിക്കുന്നത്. അതിന് അമേരിക്ക അതിൽ താൽപര്യം കാണിക്കാത്തതുകൊണ്ട് മറ്റ് രാജ്യങ്ങളും പ്രത്യേകിച്ച് ഒന്നും ചെയ്യുന്നി ല.

ഒന്നാം ലോകമഹായുദ്ധത്തിന്റെ അവ സാനം വരെ ഈ ഗൾഫ് മേഖലയുടെ അധിക ഭാഗവും ബ്രിട്ടീഷ് - ഫ്രഞ്ച് അധീനതയിലായി രുന്നു. യുദ്ധാനന്തരം ഈ മേഖലയെ ഒരു തത്വ ദീക്ഷയുമില്ലാതെ ചില സർവ്വയർമാർ തട്ടിക്കൂ ട്ടിയ സ്കെച്ച് അനുസരിച്ച് തയ്യാറാക്കിയ സികെസ്–പികൊട്ട് ഉടമ്പടി പ്രകാരമുളള പല രാജ്യങ്ങളായി വേർതിരിച്ചു. അതിൽ ജാതി-വർഗ്ഗ വിഭാഗങ്ങളുടെ കൂട്ടായ്മയുള്ള പ്രദേശ ങ്ങൾക്കു പ്രത്യേക പരിഗണനകളൊന്നും നല്കി യിരുന്നില്ല. അങ്ങനെയാണ് അതിർത്തികൾ പലതും നേർ വരകളായത്. അന്ന് ആ വൈരു ദ്ധ്യത്തെ എത്തിക്കാനുള്ള ശേഷി ഈ വിഭാഗ ങ്ങൾക്ക് ഇല്ലാതിരുന്നതുകൊണ്ട് ആദ്യ കാലങ്ങ ളിൽ വലിയ പ്രശ്നങ്ങൾ ഉണ്ടായിട്ടില്ല.പിന്നാലെ ഇറാക്കിൽ അധികാരത്തിൽ വന്ന സുന്നി വിഭാ ഗക്കാരനായ സദ്ദാം എല്ലാ വിഭാഗക്കാരെയും ഒതുക്കിയുളള ഭരണമാണ് നടത്തിയത്. പക്ഷെ അപ്പോഴും കുർദ് മേഖലയിൽ സ്വയം ഭരണം അനുവദിച്ചിരുന്നു. അതേ സമയം ഷിയകളിൽ അമർഷം ഉണ്ടായിരുന്നു. സദ്ദാമിന്റെ വധ ത്തോടെ അമേരിക്കൻ സഹായത്തോടെ, ഇറാ ക്കിൽ ഷിയാ ഭരണം നിലവിൽ വന്നു. പതിവ്



പോലെ ആ ഭരണത്തിന് മറ്റ് വിഭാഗങ്ങളുടെ പിന്തുണ ഇല്ലായിരുന്നു. ഇതിന്റെയൊക്കെ അനന്തര ഫലമാണ് ഇപ്പോഴത്തെ കലാപം. കുറെക്കാലമായി യുദ്ധത്തിന്റെ നടുക്കായിരു ന്നതുകൊണ്ട് ആ പ്രദേശത്തുളള എല്ലാ വിഭാഗ ങ്ങളുടെ കൈയിലും ആവശ്യത്തിന് ആയുധ ങ്ങൾ ഉണ്ട്. മതത്തിന്റെ മേൽകോയ്മക്കുള്ള വിശുദ്ധ ഏറ്റുമുട്ടലുകൾ ആകുന്നതുകൊണ്ട് ദയാ ദാക്ഷിണ്യങ്ങൾക്കൊന്നും വലിയ പ്രസക്തിയു ഇറാക്കിന്റെയും സിറിയയുടെയും കുറെ ഭാഗങ്ങൾ ചേർത്താണ് ഐ.എസ്.ഐ.എസ്. പുതിയ മതഭരണം നടപ്പിലാക്കിയത്. കൊണ്ടാണ് കലാപകാരികൾ റംസാൻ തുടങ്ങു ന്നതിന് മുമ്പേ അവരുടെ നേതാവിനെ,അബു ബേക്കർ അൻബാഗ്ധാദിയെ ഖലീഫയായി പ്രഖ്യാപിച്ചത്.

നബി തിരുമേനിക്ക് ശേഷം വന്ന ഭരണാ ധികാരികളെയാണ് ഖലീഫമാരെന്നു അറിയപ്പെ പിൻഗാമിയെന്നാണ് വാക്കിന്റെ ടുന്നത്. അർത്ഥം. ലോക മുസ്ലീങ്ങളുടെ ആത്മീയ നേതാ വാണെന്നാണ് പറയപ്പെടുന്നതെങ്കിലുംഅങ്ങനെ ഒരു അംഗീകാരം ഒരിക്കലും ആ സ്ഥാനത്തിന് ലഭിച്ചിരുന്നില്ല. ഷിയാ വിഭാഗക്കാർ ഈ മത മേലധ്യക്ഷനെ ഇമാമെന്നാണ് പറയുന്നത്. മത പരമായ കാര്യങ്ങളിലും ഭരണത്തിനും അവ സാന വാക്ക് ഇവരുടേതാണ് (ഇറാനിൽ ജനാ ധിപത്യ രീതിയിൽ പ്രസിഡന്റിനെയും പാർല മെന്റിനെയും തെരെഞ്ഞടുത്താലും പ്രധാന വിഷയങ്ങളിലെ അവസാന തീരുമാനം ഇമാമി ന്റേതാണ്). ആദ്യത്തെ ഖലീഫ ആയ റഷീദീൻ ( 632 – 661) നബി കുടുംബത്തിന്റെ അംഗീകാര മുള്ള ആളായിരുന്നു. ജനാധിപത്യ രീതിയിലു ള്ള ഒരു ഭരണക്രമമായിരുന്നു പാലിക്കപ്പെട്ടിരു ന്നതും. ഈ കാലഘട്ടത്തിനുശേഷം 1924 വരെ പല രാജ്യത്തും പല ഖലീഫമാർ ഉണ്ടായിരു ന്നു. അവസാനം ടർക്കി കേന്ദ്രമായി ഒട്ടോമാൻ (ഒസ്മാൻ എന്നുളള പേര് സായിപ്പിന്റെ സംസാ രത്തിൽ കൂടിയാണ് മാറിയത്). പാദുഷയെന്നും അദ്ദേഹം അറിയപ്പെട്ടിരുന്നു. സുന്നി ഖലീഫ

ഭരണം നിലവിൽ വന്നു. അദ്ദേഹം കെയ്റോ യിലെ അബാസിദ് ഖലീഫയെ തോല്പ്പിച്ചു സാമ്രാജ്യം വലുതാക്കി. പക്ഷെ 1775 ൽ റഷ്യ യുമായിട്ടുളള യുദ്ധത്തിൽ ക്രിമിയ പ്രദേശം നഷ്ടപ്പെട്ടപ്പോൾ അവരുമായി ഒരു സന്ധിയിൽ ഏർപ്പെട്ടു. ഈ സമയത്തുതന്നെ സൊകൊട്ടോ യെന്നൊരു ഖലീഫ നൈജീരിയ കേന്ദ്രമാക്കി ആഫ്രിക്കയിൽ നിലവിൽ വന്നു. അഹമ്മദിയ വിഭാഗക്കാരുടെ ഖലീഫയായ കലീഫലുൾ മിർസ ഇപ്പോൾ ലണ്ടൻ കേന്ദ്രമാക്കിയാണ് പ്രവർത്തിക്കുന്നത്. ഒന്നാം ലോക മഹായുദ്ധ ത്തോടെ കോൺഗ്രസ്സിന്റെ പിന്തുണയോടെ മൗലാന മുഹമ്മദ് അലിയുടെ നേതൃത്വത്തിൽ ഒട്ടോമാൻ ഖിലാഫത്ത് പ്രസ്ഥാനം ബ്രിട്ടീഷ്കാ രോടുള്ള എതിർപ്പിന്റെ ഭാഗമായി ഇന്ത്യയിലും എത്തിയിരുന്നു. പക്ഷെ ബ്രട്ടീഷ് ഭരണത്തോട് മത്സരിച്ച് നില്ക്കാൻ അതിന് സാധിച്ചില്ല. 1924 ൽ മുസ്തഫ കമാൽ അറ്റാതുൽക്ക് അധികാരം പിടിച്ചെടുത്തു. ജനാധിപത്യ ഭരണം ടർക്കിയിൽ സ്ഥാപിച്ചതോടുകൂടി ഖലീഫയെന്ന കാഴ്ചപ്പാട് തന്നെ ഇല്ലാതായി. 1926 -ൽ കയ്റോ ഉച്ചകോ ടിയിൽ ഖലീഫയെ പുനഃസ്ഥാപിക്കാൻ ശ്രമിച്ചെ ങ്കിലും നടന്നില്ല. എങ്കിലും മൊറോകോ രാജാവ് ആ സ്ഥാനം സ്വയം ഏറ്റെടുത്തു. ജിഹാദികൾ ഈ സ്ഥാനം രാഷ്ട്രീയമായി (ഹി സ്ബുള്ളയും അറ്റ്–തഹീറും) പുനഃസ്ഥാപിക്കാൻ ശ്രമിക്കുന്നു. അതേ സമയം അൽ - ഖൊയ്ദ പോലുള്ള സംഘടനകൾ ബലപ്രയോഗത്തിൽ വിശ്വസിക്കുന്നു. അതുകൊണ്ട് ഏക ഖലീഫ യെന്ന കാഴ്ചപ്പാട് ഉടനെയൊന്നും നടക്കുന്ന കാര്യമാണെന്ന് തോന്നുന്നില്ല.

ഇറാക്കിലെ ഈ ബഹളത്തിനിടയിൽ അവിടെ ജോലി അന്വേഷിച്ച് പോയ ഇന്ത്യാക്കാ രുടെ (മലയാളികളുടെ) സുരക്ഷിതത്വമായിരുന്നു നമ്മുടെ പ്രശ്നം. അവിടെ വ്യവസ്ഥാപിതമായ ഒരു സർക്കാരിന്റെ അഭാവത്തിൽ മറ്റുവഴികളിൽ കൂടിയാണ് നമ്മുടെ സർക്കാർ സുരക്ഷിതമായ ചാനൽ ഒരുക്കിയത്. ശരിക്കും അത് നമ്മുടെ സ്മാർട്ട് നയതന്ത്ര കഴിവിന്റെ മികവ് തന്നെയാ

## മൊത്തം -ചില്ലറ



**63)**രോ മനുഷ്യനും അവരവരുടെ ഉപയോഗ ത്തിനുള്ള സാധന സാമഗ്രികൾ കടകളിൽ നിന്നു വാങ്ങുമ്പോൾ വിലയേക്കാളുപരി ആവശ്യത്തി നാണ് മുൻതൂക്കം നൽകുന്നത്. എന്നാൽ വിലയെക്കുറിച്ച് കൂടുതൽ ചിന്തിക്കുന്നവർ സാധന ത്തിന്റെ ഗുണനിലവാരം നിലനിൽക്കെത്തന്നെ കുറഞ്ഞ ചെലവിൽ എങ്ങനെ വാങ്ങാം എന്ന് ആലോചിച്ചുകൂട്ടും. ഒരു ചില്ലറ വ്യാപാരിക്ക് (റീ ട്ടെയിൽ) ഒരു സാധനം വിൽക്കാൻ സാധിക്കുന്ന വിലയക്കാൾ കുറഞ്ഞ വിലയ്ക്ക് അതേ സാധനം വിൽക്കാൻ ഒരു മൊത്തവ്യാപാരിക്കു സാധിക്കും എന്ന് നമുക്കെല്ലാം അറിയാം.

ഉപഭോക്താക്കളെയൊക്കെ പാരമ്പര്യേതര ഊർജ്ജ ഉത്പാദനത്തിനു പ്രേരിപ്പിച്ചാൽ അവർ കെട്ടിടങ്ങളുടെമേൽക്കൂരകളിൽ സോളാർ പാനൽ പ്രത്യേകം പ്രത്യേകം സ്ഥാപിക്കുകയും വൈദ്യുതി ലഭ്യതക്കുറവ് പരിഹരിക്കപ്പെട്ടു കൊള്ളുമെന്ന് കെ.എസ്.ഇ.ബി.യിലെ അമര ക്കാർ കരുതി. ആശയം നല്ലതു തന്നെ. പക്ഷേ പ്രത്യേകം പ്രത്യേകം സോളാർ പാനൽ സ്ഥാപിക്കുന്നതിന്റെ ചെലവ് (സബ്സിഡി ലഭിച്ചാൽ പോലും) രണ്ടാംവട്ടം ചിന്തിക്കാനും പിന്തിരി യാനും പലർക്കും കാരണമായി. സമീപഭാവി യിൽ വലിയ ലാഭമൊന്നുമില്ലായെന്നതും എന്നാൽ മുതൽമുടക്ക് ഗണ്യമായുണ്ടുതാനും! സോളാർ പാനൽ സ്ഥാപിക്കുന്ന കാര്യത്തിൽ

ണ്. അതിൽ നമ്മുടെ പ്രവാസി സമൂഹവും ഒട്ടും മോശമല്ലാത്ത പങ്ക് വഹിച്ചിട്ടുണ്ട്. മലയാ ളികൾ ലോകം മുഴുവൻ ജോലി തേടി പോയിട്ടു ളളതുകൊണ്ട് പ്രശ്ന ബാധിത പ്രദേശങ്ങളിൽ നിന്നും പൗരന്മാരെ സുരക്ഷിതരായി ഒഴിപ്പിക്കുന്ന വിഷയം നമ്മുടെ രാഷ്ട്രീയ പാർട്ടി കൾക്ക് എന്നും ഒരു നല്ലമേച്ചിൽപ്പുറമാണ്, അവരത് ശരിക്കും പ്രയോജനപ്പെടുത്തേതുണ്ട്. ഗൾഫ് മേഖലയും ഇസ്രയേൽ–പാലസ്തീൻ വിഷയവും വളരെ സങ്കീർണതകൾ നിറഞ്ഞ പ്രശ്നങ്ങൾ ആയതുകൊണ്ട് ലോക ശക്തികളും

എച്ച്. സുരേഷ് AEE

ചില്ലറ വ്യാപാരം നിലവിൽ ആകർഷകമല്ല. പിന്നെയെങ്ങനെ സ്ഥാപിതശേഷി വർദ്ധി പ്പിക്കും?

ഇവിടെയാണ് മൊത്തവ്യാപാരിയായ ലൈസൻസി ഉണർന്നു പ്രവർത്തിക്കേണ്ടത്. കേരളത്തിൽ വൈദ്യുതി മേഖലയിൽ കെ.എസ്. ഇ.ബി.യോളം ആശ്രയിക്കാവുന്ന വിശ്വാസ്യത യുള്ള മറ്റൊരു ലൈസൻസി ഇപ്പോഴും ഇല്ല തന്നെ. സൂര്യതേജസ്സ് ഉപയോഗിച്ചു കൊണ്ടുള്ള ഗണ്യമായ സ്ഥാപിതശേഷി വർദ്ധനവ് (Addition in installed capacity) വൈദ്യുതി ബോർഡിനു വരുത്താൻ സാധിച്ചാൽ കേന്ദ്രപൂൾ, വൈദ്യുതി, മറ്റ് വ്യാപാരികളിൽ നിന്നുള്ള വൈദ്യുതി എന്നി വയ്ക്കുള്ള കോറിഡോർ ഒരുക്കുന്നതിന് സാവകാശം ലഭിക്കും. ഗവൺമെന്റ് പ്രഖ്യാപി ക്കുന്ന മെഗാ വൈദ്യുത പദ്ധതികൾ സഫലീക രിക്കപ്പെടും വരെയും പിടിച്ചു നിൽക്കണ്ടേ? ഇതി നെന്താണ് വഴി?

1-3-2012ലെ കണക്കുപ്രകാരം കേരള ത്തിൽ 34 ജലവൈദ്യുത നിലയങ്ങൾ, 7 താപ വൈദ്യുതനിലയങ്ങൾ, 3 പാരമ്പര്യേതര നിലയങ്ങൾ, 220KV സബ്ബ് സ്റ്റേഷനുകൾ  $\rightarrow$ 21 എണ്ണം, 110 KV സബ്ബ് സ്റ്റേഷനുകൾ  $\rightarrow$  138 എണ്ണം, 66KV സബ്ബ് സ്റ്റേഷൻ 80 എണ്ണം, 33 KV സബ്ബ് സ്റ്റേഷനുകൾ  $\rightarrow$ 118 എണ്ണം എന്നിവയുണ്ട്. ഇവ

സംഘടനകൾ പോലും ഇടപെടാൻ വൈമനസ്യ മാണ് കാണിക്കുന്നത്. പട്ടാളക്കരുത്തിൽ നേടുന്ന വിജയങ്ങൾ ശാശ്വതമല്ലയെന്നുള്ളതിനു ധാരാളം തെളിവുകൾ നമ്മുടെ മുന്നിൽ ഉണ്ട്. അതുകൊണ്ട് ഈ വിഷയത്തിൽ യഥാർത്ഥ മത വിശ്വാസികൾ ചേർന്നെടുക്കുന്ന തീരുമാന ങ്ങൾക്ക് ആയിരിക്കും നിലനിൽപ്പുള്ളത്. വിഘ ടിച്ച് നിൽക്കുന്നവർ ഇത് മനസ്സിലാക്കിയാലേ ഇപ്പോഴത്തെ പ്രശ്നങ്ങൾ തീരൂ. അപ്പോഴേ ശാശ്വത സമാധാനം ഈ മേഖലകളിലും അങ്ങനെ ലോകത്തും ഉണ്ടാകത്തുള്ളു.



## TWENTY MINUTES OF AGONY AT SHAHRAN AIRBASE

It was in the early months of the year 1991. Gulf war I was at its full swing. I was working at ALKhober a near by town of Dhahran air port. Our company had maintenance contract with the help of American Army war was staged in KSA to release Kuwait. We had instructions to keep all mortuaries of hospitals in good condition. We had maintenance works in Amerian Army camp at Khober towers, F 16 Hanger area and Dhahran Air base.

Huge Hercules jumbo air crafts unloads thousands of thanks, trailers, arms & ammunitions at Dhahran Air base. The arms are transported in long trailers in Convoy to the battle field. Tight security was observed literally at every meter of high way. Totally there was confusing environment.

I had to conduct routine maintenance checks at Army camp at Dhahran Air base.

യിൽ ഒരു അഞ്ചുവർഷത്തിനിടെ നിർമ്മാണം നടന്നിട്ടുള്ളവയിൽ ഒഴികെ മറ്റെല്ലായിടത്തും നിലയങ്ങളോടനുബന്ധിച്ച് വളരെയധികം സ്ഥലം ഉപയോഗിക്കപ്പെടാതെ കിടക്കുന്നു. ഇത്തരം സ്ഥലങ്ങൾ പ്രയോജനപ്പെടുത്തി പര മാവധി സോളാർ പാനലുകൾ സ്ഥാപിച്ച് DCയിൽ നിന്നു AC യാക്കി, 11KV/33KV യിലേക്ക് വോൾട്ടേജ് step-up ചെയ്ത് വൈദ്യുതി ശൃംഖ ലയിലേക്ക് എത്തിക്കാവുന്നതാണ്. ഓരോ നില യങ്ങളിലും ഏറ്റവും കുറഞ്ഞത് auxillary feeding നുള്ള സോളാർ പ്ലാന്റെങ്കിലും സ്ഥാപിക്കപ്പെട ണം. നിലവിൽ പ്രവർത്തിക്കുന്ന നിലയങ്ങളുടെ (ജനറേറ്റിംഗ് സ്റ്റേഷനായാലും സബ്ബ് സ്റ്റേഷനാ യാലും) അടുത്താണ് പുതിയ സോളാർ പ്ലാന്റു കൾ വരുന്നതെന്നതിനാൽ ഇവയുടെ പ്രവർ ത്തനം അതത് സ്റ്റേഷൻ ഓപ്പറേറ്റർമാർക്ക് രേഖപ്പെടുത്താം. ഉത്പാദന പ്രവർത്തനങ്ങൾ വിലയിരുത്താം. Grid പ്രസ്തുത Grid availability

By U.S. Ravindran (Rtd.) E.E.

After the night air attacks in Iraq fighter plane pilots will be relaxing in the camp. The temperature falls below 10° C. Warm water circulation has to be maintained in the swimming pool. In the machine room 100 KW heater unit, water circulating filtering system, chemical pump, injection system (to prevent algae and to keep Ph value 7.1) are to be checked for proper funtioning. The swimming pool area looked like Miami beach. Army officers will be lying down with minimum dress. Comfort girls in their bikinis will be sitting on them massaging their shouler museles and back muscles. It was a visual relief to maintenance staff who were away from their family, for long time. Every body is free to take coffee, tea, pepsi, pop corns etc. from the vending machine installed by the side.

യെ കുറിച്ച് ബേജാറാകണ്ട. ചില്ലറ വ്യാപാരി 1kw സ്ഥാപിച്ചു കിട്ടാൻ പെടുന്ന തത്രപ്പാട് കൂടു തൽ ശേഷി ഒന്നിച്ചു സ്ഥാപിക്കുന്ന മൊത്തവ്യാ പാരിയായ ലൈസൻസിക്കില്ല. ഇത്തരം സംരംഭ ങ്ങൾ പരീക്ഷണാടിസ്ഥാനത്തിൽ ഗുരുതര വൈദ്യുതി ദൗർലഭ്യംമൂലം പടിവാതിൽ ക്കൽ എത്തി നിൽക്കുന്ന വികസന സാദ്ധ്യതകൾ പോലും പ്രയോജനപ്പെടുത്താൻ സാധിക്കാത്ത കേരളത്തിന്റെ വടക്കേയറ്റത്തുള്ള കാസർഗോഡ് ജില്ലയിൽ തുടങ്ങാൻ സർക്കാരും വൈദ്യുതി ബോർഡും ഇച്ഛാശക്തി കാട്ടണം. വിജയിച്ചാൽ മറ്റു ജില്ലകളിലേക്കും പരിപാടി വ്യാപിപ്പിക്കാം. സാങ്കേതിക മികവ് കൂടുതൽ വേണമെങ്കിൽ ഇവ സ്ഥാപിക്കാൻ ഈ മേഖലയിലെ പ്രഗത്ഭരുടെ സേവനം തേടാവുന്നതാണ്. ഇങ്ങനെ കെ.എ സ്.ഇ.ബി. പ്രവർത്തിച്ച് മാതൃക കാട്ടിയാൽ ഇത്തരം സംരംഭങ്ങൾക്ക് മുതൽമുടക്കാൻ സന്ന ദ്ധരായി പലരും മുന്നോട്ടുവരുമെന്ന് തീർച്ചയാ ണ്.



Hydel Bullet July 2014



After routine inspection of swimming pool I was on my way to Khober Towers where another American Army camp was set up. Before leaving the boundary of Dhahran Air base, my Mazda car developed some snags. The indicator lamp showed engine off and by the road side I stopped my car. Naturally as a first step I tried to start the car. But it refused to start. I opened the bonnet to try my little knowledge about Japanese car can trace the cause of the snag. I touched here and there of the engine pipes and wires and attempted to start and to feel proud of my knowledge about automobiles with no result. Since I know about myself better I did not try any further and was in an attempt to close the bonnet. I saw a Volvo car painted in green and white with long becon lights flashing rushed and stopped close to my car. The location was a restricted area and monitored by C.C.T.V. A Saudi Policeman (Muoor traffic police) came out and asked in a harsh voice "Minu intha"?. Since I have been working with Arabs for Previous 9 years I could understand the meaning of what he asked is "who are you"?

I closed the bonnet of the car and replied with my available vocabulary in arabic language" Ana Muhandis Karaba, Mosesa Alyouself, Zayana sekand mal Ajkari Ameriki' (I am electrical engineer of Alyousef establishment doing maintenance work of American military camp). He stared at my face, moved his index finger up and down pointing at me and told "Fen Iquama, Warka, soora? Gib Kulha (where is your Iquama, work permit, ID card take all). I handed over all what he demanded. Then he asked pointing to the car "Ifta Kullu bab" (open all doors of the car) I opened all the 4 doors of the car, bonnet and dickey of

the car. He made a detailed inspection at every nooks and corners of the car lifting the carpet also. He pointed to the red metallic box in the dickey and asked "Ifta santook (open the box). I opened the tool box. He made a close observation of multimeter and tong tester and asked "Shinu hadah? (What are these). I replied "Hadah tools mal Karaba". (They are electrical tools). He took out some wires from the tool box, made close inspection and placed them back in the box. He took out the book on the dash near driver seat and asked "Shinnu hadah Kithab? (what is this book?)

"Hada Bible Kithab mal messiah (that is bible, holy book of Christian) I replied.

"Laes hada kithab hinnak ? Mafi maloom hadah momnoom hinnak (why you bring it here?) He was almost shivering out of anger. "Mutheer ajkari ameriki gib hada kithab, Ana mafi maloom hada monnoom. Ana asif " ( It is given to me by an American army officer. I don't know that, it is not allowed here. I am sorry) I replied in a low tone. "Shiddil bab kullu" (close all doors of car) the policeman ordered. I closed all doors and bonnet of the car. "Thal" (come here) He called me to his car. Showed the back seat and told "Istreey" (sit). He sat by the side and began to examine my work permit of air base ID card etc. Last he took Iquama and seeing the brown colour he asked "Shinu hada" ? Laes mafi abiath. In the mafi muslims (what is this why this not white colour. Are you not a muslim). Muslim are given white Iquamas and nonmuslims brown.

"Ana bil Hind. Bil Hind fee, hindu, messiah, muslim, sikh budh, jain. Kalam Ethnenu asreen (I am from India in India there are hindus, Christians, muslim, sikh



budh, jain. Languages 22). Before I completing my works the policeman started. "Intha kafr. Laes mafi muslim, laes mafi muslim? Laes? Laes? Kalam". (You are a non muslim, why you are not a muslim, why you are not a muslim, why you are not a muslim why? Tell me)

I know that I am in trouble. He is keeping the bible taken from my car with him along with Iqum and other documents. Bible was only a gift from an American officer. It was visibly on the dash board of the car. It was not deliberately placed over there. It was only unawareness of law. Mobile phone was not common in 1990. I had no means of communication to the PRO of our company to explain the situation. He held Iquama against me and repeated the question "Laes into mafi muslim? (why you are not a muslim?) There was not such a problem for the previous 9 years working there.

As a desperate movement I asked the policeman "Shinu fayada ana muslim; soof mutheer Malik Fahd musilm - rayeez Saddam Hussain muslim, laes hada ameriki ajkeri eajy hinnak? Kalam wahad, kithab wahad, kalam kullu ahoy, laes hada harb? (what is special I being a muslim? King fahid (erstwhile ruler of KSA) is muslim; President Saddam Hussein (erstwhile president of Iraq) is also muslim. Then why did American soldiers came here for war? All speak one language; worship one holy book, say all are brothers. Then why war here?

He did not expect these words from me. However the word nutheer (officer) pleased him as he was only a constable. He looked at my face and pointed his index finger and told "Intha Kalam galth. Ajkari mal Saddam Hussein row thakhil Kuwait, Savvy

harb, sheel jeth. Kullu nafar Kuwait row barrah. Ammer Kuwait row barrah. Saddam mafi Ahooy. Lassim Saddam irrja Kuwait. Hada ameriki ajkari eajy hinnak" (what you tell is wrong. The soldiers of Saddam Hussein entered into Kuwait, made war to take oil. All people went out at Kuwait. Ameer went out of Kuwait. Saddam cannot be brother. Surely Kuwait is to be returned. That is why American soldiers here.

I could realize the temperament of the traffic constable. My weak Arabic vocabulary got a good exercise as he does not speak (know) English.

"Soof mutheer Ana fee maloom vazeer Iraqu Tarique Azeez igba kidma emmil majlis Kaleej' Ameer Kuwait Kalam "row barrah", Laes Kuwait mafi gib Iraq soyeh dinar Kidma? Owwal Kuwait Iraq wahad watan. Hada Saddam Savvy ethani murrah".

(Look Officer, I have heard that Irqui minister Tariqu Azeez once requested help from Kuwait in the Gulf coucil meeting. Ameer Kuwait told to get out. Why Kuwait did not give Iraq some Dinars help. Previously Kuwait and Iraq were one country. Saddam made it second time. I justified attack of Iraq on Kuwait.

Then the police constable said "Sadeequ hadha harb Iraq Iran sheel wajid Dinar mal Iraq. Laes Saddam jinchal Iran? Mumkin hadha Ameer Kuwait Kalam row barrah". (Friend the Iraq Iran war took away much Dinars of Iraq. Why Saddam fight with Iran? May be that is why Ameer Kuwait told Iraq minister to get out) He is justifying Kuwaits Ammer's get out order to Iraq in the GCC meeting. I could under stand the Saudi traffic constable has under-



stood the contents of my previous dialogue. Anyway I am at his mercy to get back my I quama and other documents. So I have to continue talking till he leave me or take me. So I told him some history "Soof mutheer, Ana auwal shogul bil Iraq. Ana fee maloom laes harb Iraq. Raeez Saddam Sunmi Muslim. Ustad Khomeni row barrah Iraq. Raeezy shah mal Iran barrah; ustad Khomeni Raeez Iran. Baden Harb Irasq - Iran - hadha harb Suni - Shia.

(Look officer, I before worked in Iraq. I know why Iraq- Iran war. ayatholla Rohalla khomeni Shia muslims leader of Iran before lived in Kerbala a town in Iraq. He told shia muslims to fight with Sunni Muslim. President Saddam a Sunni Muslim. Hussein told him to get our Iraq. When Khomeni became President of Iran after shah then started war - Iraq Iran war a Sunni Shiya war. May be the constable a Sunni muslim he felt some soft corner for Saddam Hussein. He told "soof sadeque intha owwal shogul Iraq. Ana fee maloom Saddam Sadeque entha. "( look friend you work in Iraq before. So Saddam is your friend?.

"Saddam raeez quaiz. Raeez kavy. Moomkin ethani raeez; Iraq thalatha wathan wahad Shia Whad Sunni - wahad Kurdi. Laes harb sunni shia? Ana araf fee Kulliyom jinchal sunni shia emil katif. Kulliyom fee moth? (Presdient Saddam is good - Strong President. May be some other one president, Iraq will be three countries. One for shia one for sunni, one for kurd. Why sunni shia fight? I know there is almost daily fight between sunni and shia in Katif (in KSA). Daily there are death. I replied the police constable including mentioning some sunni - shia fight happening daily in Katif near town to Dharban.

Then the police contable told. "In the kalam sahiy Kullu arab Kalam Wahad, Kithab Wahad, Kalam Kullu ahooy. Allah gib jith wajid. Mafi fayade, Ameriki sheel kullu ryal bil bombs. Thayara mal harb. Soof Sadiq Arabs mooh mafi majnoon. Hadha intha mafi kalam ethani nafar. Emkini intha thakil" (What you told is right. All arabs speak one language, worship on holy book, say everybody brother. Allah give too much oil. No use. American take all our Ryals for bombs and fighter planes. Look my friend, Arabs are fools and crazy. Don't tell these things to here to anybody if so you will be inside (jail). The police constable called my office through his mobile phone nothing telephone number from work permit for sending machanic to repair my Meanwhile he asked my name "Chismek intha"? (What is your name). I told "Ravindran". Then he asked Kalam Kullu (say full name). I told uppath Sankunny Nair Ravindran" He read out my name as written in arabic in the Iqaama " Obath Sancony Nayaraaveendyan". Both of us laughed due to the distored name. I felt proud that they have added indiyan (Indian) in my name. How ever the photo in the ID card matched with my living face. Hence there was no further problems. He returned the bible and all documents and told " Kally hada Kithab thakil sayara. Ethani nafar mafi soof. Hadah momnoom himuk" (Keep this book (bible) in the car no other people should see it. It is not allowed here). After sometime the mechanic came and repaired fuel filter. I told the police"Sukran Mutheer"(Thank you officer) and proceeded to Khober towers - the next Army camp.





## KERALA STATE ELECTRICITY BOARD LTD

(Incorporated under the Indian Companies Act, 1956) Registered Off: Vydhuthi Bhavanam, Pattom, Thiruvananthapuram - 695004

#### **ABSTRACT**

Delegation for financial powers of Executive Officers of KSEB Lts- Revised Sanctioned - Orders issued

### Corporate Office (Planning)

B.O.(DB) No 1842 /2014 (CP /plg/DOP/2014-15) dated Tvpm,4072014

Read 1. Note No. CP /Plg/DOP/2014-15 /38 dt 202-05-14 Chief Engneer (CP)

2. Preeediongs of the Board of Directors meeting dated 29-05-2014

#### **Orders**

Delegation of financial powers of officers KSE Board was last revised in 2008. Based on requests from various corners for a revision of the existing delegation of financial powers of executive officers, the Chairman had constituted a committee to review the existing delegation of powers. The committee conducted serveral meetings and formulated a draft proposal. The committee members considered thr following factors which necessitates an upward revision of the delegation of powers.

1. Many of the works executed rearlier by an officer in a particular rank has fallen outside his powers due to the increased rated in the PWD Schedule and the overall inflationary pressure. It burdens the officers in the upper hierarchy, especially the

Board.

2. There has been an increase in the absolute quantum and hence amount of works executed by all the offers in the recent times as part of the decentralized planning Process,. Upward revision of the delegated powersa is justied to balance the workload among all officers in the line of control.

The committee noted that chages in the delegation of financial powers are made at present from different officers as and when required and these modificatuiond fom not reach officers other than the proposing one. The committee therefore suggested that, in future all chagenes in delegation of powers shall be effected through a single office,

preferably O/o the Chief Engineers (Corporate Planning).

The draft proposals formulated by committee for revision of delegation of financial powers of executive officers were submitted to the Full time Directors for decision. The FTD had directed to incorporate some modification in the daraft proposal. The modified proposal was placed before the Full Board opf Directors vide note read as paper (2) above.

Having examined the Proposal in details, Full Board of Directors hereby accords sanctiuon to revise the delegation of powers of officers of KSEB Lts. as annexed to this order.

Having considered the recemmendation of the committee, it is also directed that any changes/ modifications in the delegation of powers of Executive officers may be taken with the Board of Directors only through the office of Chief Engineer (Corporate Planning) Accordingly this order ias issued.

By order of the Full Time Directors,

Sd/-

(M. Shahul Hameed) Secretary (Administration)



## Annexure to B.O. (DB) No.1842/2014 (CP/Plg./DOP/2014-15) dated 04.07.2014

## DELEGATION OF FINANCIAL POWERS OF EXECUTIVE OFFICERS OF KSEB LTD

2.1	Administrative Sanction for original work of Capital expenditure				
2.1.1	Chief Engineer	Rs. 2 Crore			
2.1.2		Rs. 1 Crore			
2.1.3	<del>                                     </del>	Rs. 50 Lakh .			
2.1.4	<u> </u>	Rs. 7.5 Lakh			
2.1.5	Assistant Engineer	Rs. 15,000 Subject to annual limit of Rs.50,000			
Note:	e: 1. If a work for which Administrative Sanction is given is not taken up within 2 years, then the sanction automatically lapses. Even during the period of currency of the Administrative Sanctionviz. 2 years, if at any time detailed estimate is prepared the cost is found to exceed the amount of Administrative Sanction by more than 10% then fresh Administrative Sanction shall be obtained. This is not applicable if the excess is due to revision of schedule of rates alone				
	project estimate	Engineers are for special types of works such as safety etc.			
2.2	Technical Sanction				
2.2.1	Chief Engineer	Up to 10% above the AS amount for the subject work.			
2.2.2	Deputy Chief Engineer	Rs 2.0 Crore			
	Executive Engineer	Rs 1.0 Crore			
	Asst. Exe. Engineer	Rs 50 Lakh			
2.2.5	Assistant Engineer	Rs 10 Lakh			
Note	<ol> <li>An officer can sanction working estimate for all the works for which he/she has powers to issue technical sanction</li> <li>Technical sanction shall be issued only based on the administrative sanction for the work and the amount of technical sanction for any work shall not exceed the amount of AS by more than 10%</li> <li>If splitting of works is necessitated,the same may be issued by the authority issuing AS</li> </ol>				
2.3	To invite tenders for works (ori	ginal and repair works)			
2.3.1	Chief Engineer	No limit			
2.3.2	Deputy Chief Engineer	Rs 2.0 Crore			
2.3.3	Executive Engineer	Rs 1.0 Crore			
2.3.4	Asst. Exe. Engineer	Rs 50 Lakh			
	Assistant Engineer	Rs 10 Lakh			
Note	Two part tenders are to be invited for works of and above Rs.1 Crore. A pre-qualification committee comprising of the concerned Chief Engineer, concerned Dy. Chief Engineer concerned Executive Engineer and the DA in division /the FO in Circle shall be constituted under the circle for this purpose. Two part tenders invited by Chief Engineer for works of and above Rs.2Crore, a pre-qualification committee comprising of the concerned Director, to be included in addition to existing members				



2.4	Acceptance of Tende	rs - Excess Over Estimate	
2.4.1	Chief Engineer Overall excess 5% for works within the Technical Sanction powers of Chief Engineer		
Note:	All financialpowers for sanctioning excess quantity /extra items/ tender excess shall be exercised only afterobtaining the remarks of the DA/FO. Remarks of Financial Advisor shall obtained for works exceeding PAC of Rs.75 Lakh		
2.5	Excess Quantities /		
		<ol> <li>Up to 25% of the originally agreed PAC subject to a maximum limit of Rs.60 Lakh for works up to Rs. 2.5 Crore</li> </ol>	
2.5.1	Chief Engineer	2 Up to 20% of the originally agreed PAC subject to a maximum limit of Rs.75 Lakh for works above Rs.2.5 Crore and up to Rs.5 Crore	
		3 Up to 15% of the originally agreed PAC subject to a maximum limit of Rs. 1 Crore for works above Rs. 5 Crore	
2.5.2	Deputy Chief Engineer	Up to 25% of the originally agreed PAC subject to a maximum limit of Rs.50 Lakh	
2.5.3	Executive Engineer	Up to 25% of the originally agreed PAC subject to a maximum limit of Rs.25 Lakh	
2.5.4	Asst. Exe. Engineer	Up to 25% of the originally agreed PAC subject to a maximum limit of Rs.3.75Lakh	
2.5.5	Assistant Engineer	Up to 25% of the originally agreed PAC subject to a maximum limit of Rs.7500	
2.6	Revised Estimate		
Note:	Revised estimate is to be sanctioned if there is 5% excess due to execution of excess quantities/extra items.Revised estimate shall be prepared based on revised quantity with original estimate rates		
		1 25% over the original estimate limited to Rs.60 Lakh for works up to Rs. 2.5Crore	
2.6.1		2 20% over the original estimate limited to Rs.75 Lakh for works above Rs.2.5 Crores and up to Rs.5 Crore	
		3 15% over the original estimate limited to Rs. 1 Crore for works above Rs. 5 Crore	
	Deputy Chief Engineer	25% over the original estimate limited to Rs 50 Lakh	
	Executive Engineer	25% over the original estimate limited to Rs.25 Lakh	
	Asst. Exe. Engineer	15% over the original estimate limited to Rs.3.75 Lakh	
	Assistant Engineer	10% over the original estimate limited to Rs 7500	
2.6(a)	Completion Report  1 Chief Engineer		
	2 Deputy Chief Engineer	80% over the original estimate limited to Rs.1 Crore 70% over the original estimate limited to Rs.50 Lakh	
	3 Executive Engineer	60% over the original estimate limited to Rs.25 Lakh	
	4 Asst. Exe. Engineer	30% over the original estimate limited to Rs.5 Lakh	
Note:	The authority sanctionin excess have been sar	g the completion reports shall ensure that the extra items/excessquantities/ tender actioned by the competent authority. Completion report should be prepared based on reed rate. Completionreport shall be sanctioned as per delegation of powers for	



2.6		Deposit Works	
2.6	(b).1	Chief Engineer	Full power without any limits for granting administrative and technical sanction for deposit works to be carried out by the board after collecting cost from the applicant or works being carried out by the beneficiary themselves under the supervision of Board's officials after collecting charges
		Note: For power intensissuing administrative	sive industries prior sanction from the Board shall be obtained before sanction
2.6	(b).2	Deputy Chief Engineer	For granting administrative and technical sanction for deposit works to be carried out by the board after collecting cost from the applicant or works being carried out by the beneficiary themselves under the supervision of Board's officials after collecting charges up to Rs. 1 Crore
2.6	(b).3	Executive Engineer	For granting administrative and technical sanction for deposit works to be carried out by the board after collecting cost from the applicant or works being carried out by the beneficiary themselves under the supervision of Board's officials after collecting charges up to Rs. 50 Lakh
2.6	(b).4	Asst. Exe. Engineer	For granting administrative and technical sanction for deposit works to be carried out by the board after collecting cost from the applicant or works being carried out by the beneficiary themselves under the supervision of Board's officials after collecting charges up to Rs. 10 Lakh
2.6	(b).5	Assistant Engineer	For granting administrative and technical sanction for deposit works to be carried out by the board after collecting cost from the applicant or works being carried out by the beneficiary themselves under the supervision of Board's officials after collecting charges up to Rs. 20,000
2.6	(c)	Labour Contract on	Limited Quotation
2.6	(c).1	Asst. Exe. Engineer	To arrange labour contracts on limited quotation and issue work orders to the extent of Rs.40,000 in each case
2.6	(c).2	Assistant Engineer	To arrange labour contracts on limited quotation and issue work orders to the extent of Rs.20,000 in each case
Not	te:	agreement in stamp p clause to ensure the s safety of the workmen	and purchase costing up to Rs.10,000 in each case are exempted from aper. But in all cases the quotation applicable shall contain necessary afe custody of the boards materials issued to the contractor. Further the engaged by the contractor is at his risk and cost and KSEBL will not be ass or damage on this account and no compensation will be paid by the contractor.
2.7		Tender for purchas	e
Not	te:	store articles or oth Rules and budget p Lakh. Single-part to	r all items without limit and to accept tenders for purchase of stock/ her materials up to Rs.1 Crore at a time subject to Store Purchase provision. Comments of FA to be obtained for purchase above Rs.35 enders can be invited for works/ purchase with PAC up to Rs.1 Crore rs for purchase with PAC exceeding Rs.1 Crore
		2 To purchase all stoo budget provision	k articles on DGS&D/ State/Board/Running contract rates subject to



Note:		ally procured items for transmission & distribution works, Chief ill exercise the above powers
	l ' '	r (SCM) shall procure iron and steel items for fabrication works at
2.7.2	Deputy Chief Engineer	1 To invite tenders for purchase of stock/store articles or other materials up to Rs.10 Lakh at a time subject to Store Purchase Rules and budget provision limited to Rs.1 crore per year  2 To purchase all stock articles on DGS&D/ State/Board/ Running contract rates subject to budget provision.
Note:	materials required and generating st directly, charged t provision  2(a) The Deputy Chief steel items for fab  2(b) The Deputy Chief steel items require SAIL/VSP for upto dealer to avail cer condition that	of Rs.75 Lakh fixed will not be applicable for purchase of spares and I for capital works as well as replacement of installation or substations ations. In those cases, Deputy Chief Engineer shall make the purchase to the estimate sanctioned by competent authority and subject to budget Engineer (Civil) of manufacturing facilities shall purchase iron and orication works from SAIL/VSP without limit subject to budget provision Engineer (Civil) of manufacturing facilities shall purchase iron and end for fabrication works at Mechanical facilities and not available with the Rs 50 lakh at a time through open tender from manufacturers/ first in VAT benefits with an annual limit of Rs.5 Crore subject to the
		f the Financial Adviser shall be obtained
2.7.3	Executive Engineer	To accept tenders for purchase of stock/store articles or other materials up to Rs.3 Lakh at a time subject to Store Purchase Rules and budget provision limited to Rs.15 Lakh per year      To purchase all materials on DGS&D/ State/Board/Running
		To purchase all materials on DGS&D/ State/Board/Running contract rates subject to budget provision.
2.7.4	Asst. Exe. Engineer	To accept tenders for purchase of stock/store articles or other materials up to Rs.20,000 at a time subject to Store Purchase Rules and budget provision,limited to Rs.1 Lakh per year
2.7.5	Assistant Engineer	To accept tenders for purchase of stock/store articles or other materials up to Rs.10,000 at a time subject to Store Purchase Rules and budget provision,limited to Rs.50,000 per year
2.8	Waiver of Tender Cal	s (Works & Purchase on Quotation)
2.8.1	Chief Engineer	To sanction waiver of tender calls up to Rs.10 Lakh, for reasons to be recorded
2.8.2	Deputy Chief Engineer	To sanction waiver of tender calls up to Rs.5 Lakh, for reasons to be recorded
2.8.3	Executive Engineer	To sanction waiver of tender calls up to Rs.1 Lakh, for reasons to be recorded
2.8.4	Asst. Exe. Engineer	To sanction waiver of tender calls up to Rs.20,000, for reasons to be recorded



2.9	Purchase Witho	ut G	Quotations
2.9.1	Chief Engineer	1	To sanction purchase without quotation up to Rs. 10,000/- at a time subject to annual limit of Rs. 1 Lakh
		2	To sanction purchase without quotation spares/ accessories for urgent repair works up to Rs.25,000 at a time within the annual limit as specified insection 2.9.1.1
		3	To sanction purchase of proprietary spare parts for Generators/ transformers /Control panels etc directly from the manufacturers or authorised dealers up to Rs 10 lakh at a time
2.9.2	Deputy Chief Engineer	1	To sanction purchase without quotation up to Rs.5,000 at a time subject to annual limit of Rs.75,000
		2	To sanction purchase with out quotation spares/ accessories for urgent repair works up to Rs.15,000 at a time within the annual limit as specified in section 2.9.2.1
		3	To sanction purchase of proprietary spare parts for Generators/ transformers / Control panels etc directly from the manufacturers or authorised dealers up to Rs 5 lakh at a time
2.9.3	Executive Engineer	1	To sanction purchase without quotation up to Rs.3,000 at a time subject to annual limit of Rs.50,000
		2	To sanction purchase without quotation spares/ accessories for urgent repair works up to Rs.10,000 at a time within the annual limit as specified in section 2.9.3.1
2.9.5	Assistant Engineer		To sanction purchase without quotation up to Rs.2,000 at a time subject to annual limit of Rs.25,000
2.9.5	Assistant Engineer		To make purchase after personal enquiry at the lowest offered rate up to Rs.1,000 at a time subject to annual limit of Rs.10,000
2.10		Pu	rchase of Tools & Plant, Furniture and Office Equipments
		1	To sanction purchase of tools & plant, furniture and office equipments up to Rs.20 Lakh at a time subject to norms and budget provision or where the items are included in the sanctioned estimate
2.10.1	Chief Engineer	2	To sanction purchase / replacing of office furniture in existing offices up to Rs. 1 Lakh per annum
		3	To sanction purchase of computer peripherals and accessories up to Rs.50,000 at a time subject to an annual limit of Rs. 5 Lakh
	Note: For purchas	se o	f furniture for new offices this limit will not apply
		1	To sanction purchase of tools & plant, furniture and office equipments up to Rs.3 Lakh at a time subject to norms and budget provision or where the items are included in the sanctioned estimate
2.10.2	DeputyChief Engineer	2	To sanction purchase / replacing of office furniture in existing offices up toRs. 50,000 per annum
		3	To sanction purchase of computer peripherals and accessories up to Rs.25,000 at a time subject to an annual limit of Rs. 1.5 Lakh
2.10.3	Executive Engineer	1	To sanction purchase of tools & plant, furniture and office equipments up to Rs.1 Lakh at a time subject to norms and budget provision or where the items are included in the sanctioned estimate
		2	To sanction purchase / replacing of office furniture in existing offices up to Rs.25,000 per annum
		3	To sanction purchase of computer peripherals and accessories up to Rs.10,000 at a time subject to an annual limit of Rs. 1 Lakh



2.10.4	Asst. Exe. Engineer		sanction purchase of tools & plant, furniture and office equipments up to	
			Rs.20,000 at a time subject to norms and budget provision or where the tems are included in the sanctioned estimate	
2 10 5	Assistant Engineer		sanction purchase of tools & plant and office equipments up to Rs.5,000	
2.10.5	Assistant Engineer		a time subject to norms and budget provision or where the items are	
			uded in the sanctioned estimate	
Note:	Exe. Engineers sh		allocate budget provision for the above to the AEEs and AEs under their	
	jurisdiction			
2.11	Repairs of Vehic	les		
2.11.1 (	Chief Engineer	To	sanction all kinds of repairs to vehicles	
2.11.2 [	Deputy Chief Engineer		o sanction repairs to vehicles up to Rs.45,000 at a time subject to rules and udget provision.	
2.11.3	Executive Engineer		o sanction repairs to vehicles up to Rs.35,000 at a time subject to rules and budget provision	
2.11.4	Asst. Exe. Engineer		o sanction repairs to vehicles up to Rs.6,000 at a time subject to rules and budget provision	
2.12	Re-appropriation			
2.12.1	Chief Engineer		sanction re-appropriation of funds within the same service and account eads for which he/she is the controlling officer	
2.12.2	Deputy Chief Enginee		o distribute budget grant for TA and contingencies to his/her office and subordinate offices within the grant allotted to the respective Circles	
2.13	Operation, Repair	& M	aintenance Expenses (Subject to budget provision)	
2.13.1.	Chief Engineer	1.	To sanction, repair & maintenance works of all equipments such as	
			generator, transformer, switchgear, transmission /distribution / communication line etc. limited to Rs. 1 crore in each case	
		2	To sanction repair and maintenance of buildings, tools & plant, furniture and	
		-	office equipments including IT equipments	
		3	To sanction repairs & maintenance as well as running & maintenance of	
			dams and appurtenant structures, repair & maintenance of roads and other	
			civil engineering structures, running & maintenance of H&M stations, seismic	
		1	stations, colonies, IBs etc	
		4	To sanction payment up to Rs.5 Lakh at a time to manufacturer's service engineers/technicians towards service charges	
		5	To sanction repairs/ maintenance of plant and equipments with the principal suppliers or their authorized agents up to Rs. 5 lakh in each case	
2.13.2	Deputy Chief Enginee	er 1	To sanction all repair & maintenance works including civil works up to Rs.10 Lakh	
		2	To sanction repairs to tools & plant other than vehicles up to Rs. 35,000	
			including IT equipments	
		3	To sanction payment up to Rs.2 Lakh at a time to manufacturer's service	
			engineers/technicians towards service charges	
		4	To sanction all modification works of temporary nature (for customer	
			amenities like Enquiry counter, cash counter, parking area etc.)in model	
		$\perp$	sections. up to Rs.50,000 at a time subject to annual limit of Rs. 3 Lakh	
		5	To sanction repair to gates and embedded parts etc provided in dams and	
			for repair of water conductor systems upto Rs 25 lakh	



2.13.3	Executive Engineer	1 To sanction all repair & maintenance works including civil works up to			
		Rs.5 Lakh 2 To sanction repairs to tools & plant other than vehicles up to Rs.15,000 at			
		a time including IT equipments subject to annual limit of Rs.1.5 Lakh			
		3 To sanction payment up to Rs.15,000 at a time to manufacturer's service			
		engineers/ technicians towards service charges			
		4 To sanction repair to gates and embedded parts etc provided in dams and for repair of water conductor systems upto Rs 10 lakh			
2.13.4	Executive Engineer	1 To sanction all repair & maintenance works up to Rs. 50,000			
		2 To sanction repairs to tools & plant other than vehicles up to Rs.5,000 including IT equipments			
2.13.5	Assistant Engineer	1 To sanction all repair & maintenance works up to Rs.20,000			
		2 To sanction repairs to tools & plant other than vehicles up to Rs.1,000 subject to annual limit of Rs.5,000 including IT equipments			
2.14.	Survey Reports a	nd Deposals			
2.14.1	Chief Engineer	To sanction all disposals of unserviceable items such as buildings, furniture, dismantled materials surplus stores and materials at site, unserviceable equipment, vehicles more than 15 years old etc. whose life is over (except imported items and those delegated to Scrap Disposal Committee) upto book Value or Rs. 5 Lakh subject to rules.			
2.14.2	Deputy Chief Engineer	To sanction all disposals of unserviceable buildings, furniture, dismantled materials, surplus stores and materials at site, unserviceable materials etc (except imported items and those delegated to Scrap Disposal Committee) upto Book Value of Rs.1 Lakh			
2.14.3	Executive Engineer	To sanction all disposals of unserviceable buildings, furniture, dismantled materials, surplus stores and materials at site, unserviceable materials etc (Except imported items and those delegated to Scrap Disposal Committee) upto Book Value of Rs.25,000/-			
2.14.4	Asst. Exe. Engineer	To sanction all disposals of unserviceable buildings, furniture, dismantled materials, surplus stores and materials at site, unserviceable materials etc (Except imported items and those delegated to Scrap Disposal Committee) upto Book Value of Rs.5,000/-			
Note:	In the case of fus	ed bulbs and tubes and damaged insulators, the Executive Engineers			
	concerned are em	powered to sanction disposal irrespective of the amount involved			
2.15	Write-off Bad D	ebts and Losses			
2.15.1	Chief Engineer	To sanction write-off of bad debts covering irrecoverable arrears from consumers and losses due to thefts, damages, accidents and natural causes up to Rs.75,000 at a time subject to rules			
2.15.2	Deputy Chief Engine				
2 15 2	Executive Engineer	To sanction write-off of bad debts covering irrecoverable arrears from			
2.10.3	LAGOUUVG ENGINGER	consumers and losses due to thefts, damages, accidents and natural causes up to Rs.5,000 at a time subject to rules			
Note:	Note:The concerned officers should obtain remarks of DA/FO/FA of the concerned ARU before				
	writing off the bad debts				
	· ·				



2.16 F	Refund		
2.15.1	Chief Engineer	1	To sanction refund of revenue, for valid reasons to be recorded
	Ĭ	2	To sanction refund of penalty levied, for valid reasons to be recorded
		3	To sanction refund of earnest money deposit**/security deposit collected for
			works/purchase
		4	To sanction refund of excess amount collected towards estimated cost of
			distribution works/ Deposit work above the limit of Dy. Chief Engineer
2.16.2	DeputyChief Engineer	1	To sanction refund of penalty levied, for valid reasons to be recorded
		2	To sanction refund of earnest money deposit**/security deposit collected for
			works/purchase
		3	To sanction refund of excess house rent collected from employees
		4	To sanction refund of excess amount collected towards estimated cost of distribution works/ Deposit work within competency*.
2.16.3	Executive Engineer	1	To sanction refund of earnest money deposit**/security deposit collected for works/purchase
		2	To sanction refund of excess house rent collected from employees
		3	To sanction refund of excess amount collected towards estimated cost of distribution works/ Deposit work within competency*
			* The next higher authority who has powers to sanction the estimate will be
			competent to sanction refund as above
			** The EMD received shall promptly be remitted to Boards account.
2.17	Expenses for Med	etin	gs, Seminars and Training
2.17.1	1 Chief Engineer		To incur expenditure from office contingency for publicity and expenses for meeting up to Rs.10,000 at a time for conferences, seminars etc. and for taking photographs up to Rs.4,000 at a time subject to budget provision
2.17.2	Deputy Chief Engineer		To incur expenditure from office contingency for publicity and expenses for meeting up to Rs.5,000 at a time for conferences, seminars etc. and for taking photographs up to Rs.3,000 at a time subject to budget Provision
2.17.3	Executive Engineer		To incur expenditure from office contingency for publicity and expenses for meeting up to Rs.2,000 at a time for conferences, seminars etc. and for taking photographs up to Rs.1,000 at a time subject to budget Provision
2.17.4	Asst.Exe. Engineer		To incur expenditure from office contingency for publicity and expenses for meeting up to Rs.1000 at a time for conferences, seminars etc. and for taking photographs up to Rs.500 at a time
2.17.5	Assistant Engineer		To incur expenditure from office contingency for publicity and expenses for meeting up to Rs.750 at a time for conferences, seminars etc. and for taking photographs up to Rs.500 at a time.
2.18	Advances		
2.18.1	Chief Engineer	1	To sanction emergency medical advances up to Rs.2 Lakh in each case
			To sanction advance payment for purchase from SAIL/VSP. etc
			To sanction all statutory payments due to Government / PSUs (Such as road restoration fees / PTCC charges etc.)
	Deputy Chief Engineer	co	sanction emergency medical advances in the case of accidents during the urse of work up to Rs.50,000 in each case
2.18.3	Executive Engineer	To the	sanction emergency medical advances in the case of accidents during course of work up to Rs.20,000 in each case



Purchase of Sta	tionery & Printing (Subject to budget provision)
Chief Engineer	Purchase of stationery up to budget limit subject to rules
	Printing: subject to rules upto Budget limit
Deputy Chief Engineer	Purchase of stationery up to Rs.20,000 at a time
Sopaty Sinor Engineer	Printing: Rs. 50,000/- at a time
Executive Engineer	Purchase of stationery up to Rs.10,000 at a time
	Printing: Rs.10,000/- at a time
Asst. Exe. Engineer	Purchase of stationery and incurring printing charges up to Rs.5,000 at a time subject to rules
Assistant Engineer	Purchase of stationery and incurring printing charges up to Rs.1,000 at a time subject to rules
Telephone and	Fax
Chief Engineer	To sanction land phone connection and internet connection to offices under him as per the approved pattern fixed by the Board
Reimbursement	of Medical Charges
Chief Engineer (HRM)	All cases of eligible reimbursement. These powers are delegated to all Chief Engineers with ARU
Deputy Chief Engineer	Rs.20,000 in each case.
(HRM-II)	(The same powers are delegated to all Dy. Chief Engineers with ARU)
Executive Engineer	Rs.2,000 in each case
Purchase of Med	dicines (Subject to budget provision)
Chief Engineer	Limited to budget provision
1 , 0	Rs.50,000
To sanction Rent for	or Buildings and in renting out KSEB Buildings to 3rd parties (Subject to rules)
	as per PWD norms.
Chief Engineer	1 Office buildings - up to Rs. 15,000 per month in each case
	2 Godowns up to 100 sq.m. as per PWD Schedule of Rates
	Office buildings - up to Rs.10,000 per month in each case  Office buildings - up to Rs.7,500 per month in each case
	• .
· ·	
Deputy Chief Engineer	To sanction payment of workmen's compensation as fixed by the Commissioner for Workmen's Compensation/Regional Personnel Officer/ PersonnelOfficer/ Chief Personnel Officer as per stipulation in the Workmen's Compensation Act, 1923
Executive Engineer	To sanction payment of workmen's compensation as fixed by the Commissioner for Workmen's Compensation/ Regional Personnel Officer/ Personnel Officer/ Chief Personnel Officer as per stipulation in the Workmen's Compensation Act,1923
Withdrawal from F	Provident Fund
Chief Engineer	To sanction temporary withdrawals from Provident Fund to all employees working in his/her establishment
	2 To sanction temporary / non-refundable advances to all employees up to and including the rank of Deputy Chief Engineer
Deputy Chief Engineer	To sanction temporary withdrawals from Provident Fund to all employees working in his/her establishment
Executive Engineer	To sanction temporary withdrawals from Provident Fund to all employees working in his/her establishment
	Chief Engineer  Deputy Chief Engineer  Executive Engineer  Asst. Exe. Engineer  Assistant Engineer  Telephone and Chief Engineer  Reimbursement Chief Engineer (HRM)  Deputy Chief Engineer (HRM-II)  Executive Engineer  Purchase of Medical Chief Engineer  Deputy Chief Engineer  To sanction Rent for Rent shall be fixed Chief Engineer  Deputy Chief Engineer  Workmen's Comp  Deputy Chief Engineer  Executive Engineer  Executive Engineer  Workmen's Comp  Deputy Chief Engineer  Executive Engineer



2.26	Purchase of Statio	nery & Printing (Subject to budget provision)
2.26.1	Chief Engineer	Limited to budget provision
2.26.2	Deputy Chief Enginee	r Up to Rs.10,000 per annum
2.26.3	Executive Engineer	Up to Rs.5,000 per annum
2.26.4	Asst. Exe. Engineer	Up to Rs.3,000 per annum
2.26.5	Assistant Engineer	Up to Rs.500 per annum
2.27	Power Feasibility	
2.27.1	Chief Engineer (Ele) Distribution	To issue power feasibility of EHT connections subject to the concurrence from the transmission wing
2.27.2	Deputy Chief Enginee (Ele)	To issue power feasibility of HT connections upto 1000 kVA subject to concurrence from the concerned transmission wing for loads above 500 kVA
2.27.3	Executive Engineer (Ele	To issue power feasibility of LT connections upto 250 kVA
2.27.4	Asst. Exe. Engineer (Ele	To issue power feasibility of LT connections up to 100 kVA
2.27.5	Assistant Engineer (Ele)	To sanction all LT single phase temporary and permanent Service connections & 3 phase service connection upto 20 KW except industrial and agricultural connections and to sanction additional points to be connected upto existing installations of consumers subject to rules, where specific power feasibility not necessary
Note:	Supply of Power will be sanctioned by the authority depending on Delegation of Power to sanction the estimate. However in case of HT service connections the same will be sanctioned by officers of and above the rank of Dy.CE (depending on AS limit). In case of Supply of Power to power intensive units, prior sanction has to be obtained from the Board.	
2.28	Power Supply Agr	
2.28.1	Chief Engineer (Ele)	In the case of EHT consumers (licensees), Chief Engineer (Trans.) will execute the connectivity agreement and Chief Engineer (Commercial & Tariff) will execute the power supply agreement  In the case of EHT consumers (other than licensees), Chief Engineer (Trans.) will execute the connectivity agreement and Chief Engineer (Distn.) will execute the power supply agreement
2.28.2	Dy. Chief Engineer (Ele)	To execute agreement with HT consumers
2.28.3	Executive Engineer (Ele)	To execute agreement with public lighting consumers
2.28.4		To execute agreement with all LT consumers above the AS limit of Asst.  Engineer and all LT industrial and agricultural consumers
2.28.5		To execute agreement with all LT consumers except agricultural and industrial consumers subject to AS limit
2.29	Hiring of Vehicles	
2.29.1	Chief Engineer	To arrange hire of vehicles and to execute agreement for the same as per relevant Board orders  To sanction rate of hire charges above the limit of Deputy Chief Engineer as per relevant Board orders
2.29.2	Deputy Chief Engineer	To arrange hire of vehicles and to execute agreement for the same as per relevant Board orders
2.29.3	Executive Engineer	To sanction payment of hire charges to vehicles
2.29.4	Asst. Exe. Engineer	To sanction hire charges of vehicles not exceeding Rs.2,000 at a time for hiring vehicles in emergent cases
2.29.5	Assistant Engineer	To sanction hire charges of vehicles not exceeding Rs.1,000 at a time for hiring vehicles in emergent cases



2.30	Permanent Impi	rest	
2.30.1	Chief Engineer	To hold permanent imprest of Rs.15,000	
	(with or without ARU)		
2.30.2	Deputy Chief Engineer	To hold permanent imprest of Rs.10,000	
2.30.3	Executive Engineer	To hold permanent imprest of Rs.10,000	
2.30.4	Asst. Exe. Engineer	To hold permanent imprest of Rs.10,000	
2.30.5	Assistant Engineer	To hold permanent imprest of Rs.10,000	
2.31	Advertisement Cha		
2.31.1	Chief Engineer	To sanction payment of advertisement charge for advertisements issued by him/her	
2.31.2	Deputy Chief Engineer	To sanction payment of advertisement charge for advertisements issued by him/her subject to budget provision	
2.31.3	Executive Engineer	To sanction payment of advertisement charge for advertisements issued by him/her	
		subject to budget provision	
2.32	Demurrage Charge	es	
2.32.1	Chief Engineer	To sanction demurrage charges not exceeding Rs.10,000 at a time	
2.32.2	Deputy Chief Engineer	To sanction demurrage charges not exceeding Rs.5,000 at a time	
2.32.3	Executive Engineer	To sanction demurrage charges up to Rs.1,000	
Note:	For all Stores Division	ns, the limit is up to Rs.5,000 at a time, for reasons to be recorded	
		g and other structures (Applicable to Civil Engineers)	
	Chief Engineer	Unlimited	
_	Deputy Chief Engineer	Rs. 50 Lakh	
	Executive Engineer	Rs. 15 Lakh	
	Asst. Exe. Engineer	Rs. 5 Lakh	
	Assistant Engineer	Rs. 2 Lakh	
		on shall be done as per the approved rates published in PWD technical circular from time to time	
	Miscellaneous		
2.34.1	Chief Engineer	1 To sanction hire of plants subject to rules	
		2 a) To sanction investigation of arrear claim	
		b) To sanction investigation of work bill up to Rs.25000 in each case	
		3 To condone delay in supply of materials subject to the following conditions:	
		a) that no loss has been caused to the Board due to the belated supply	
		b) that there has been no fall in prices during the extended period of supply	
		c) that the delay was beyond the control of suppliers	
		4 To sanction expenditure towards registration of land such as registration charges, stamp duty, documentation fee, charges for legal scrutiny etc at prevailing rates for which the land value is approved by the Board	
		To sanction preliminary expenses up to Rs 2 lakh to the Revenue Department for meeting preliminary expenses for land acquisition activities such as cost of preparation of survey records, advertisement etc for acquisition of land under LA Act,for which land acquisition proposal has been approved by the Board/Government	
		6 To waive security deposit upto to Rs.10,000/- in the case of purchase of	
		proprietary materials/urgent works	
		7 To sanction ex -gratia payment upto Rs.5000/- in genuine cases of damages	
		caused due to conductor snapping etc at their discretion	



2.34.2	Deputy Chief Engineer	1	To sanction advocate's fees and expenses including allowable advances as per norms for conduct of cases except in respect of arbitration cases and cases filed before the High Court and Supreme Court and subordinate Courts outside Kerala
		2	To condone delay in supply of materials for which orders were placed by him/her subject to the following conditions:
			a) that no loss has been caused to the Board due to the belated supply     b) that there has been no fall in prices during the extended period of supply
			c) that the delay was beyond the control of suppliers
		3	To draw and disburse all establishment, T.A, and contingent bills for employees in his/her establishments. The Dy. Chief Engineer or any other authorized officer in the Chief Engineer's office and Technical Assistant in Circle/Division offices are authorised for the same in respect of all employees in the respective offices and subordinate offices
2.34.3	Executive Engineer	1	To sanction and disburse all establishment, T.A & contingent bills in his/he restablishment. The Technical Assistants are authorized to exercise the same in respect of employees in their offices and subordinate offices
		2	To lease usufructs
		3	To sanction ex-gratia payment in connection with electrical accidents
		4	To sanction installments for remittance of current charge arrears due from
			LT consumers (subject to realization of applicable surcharge)
		5	To execute lease agreements in respect of premises taken on rent
2.34.4	Asst. Exe. Engineer		To sanction installments for remittance of current charge arrears up to Rs. 1 Lakh due from LT consumers to a maximum of 6 monthly installments (subject to realization of applicable surcharge)
Note:	Divisions, Executive officer in the rank o	En f Ex of a	is (Asst. Executive Engineers) in Circles (where there are no Executive Engineers)/ gineer in Circles and Deputy Chief Engineer (Admn) in Chief Engineer's Office or any ecutive Engineer as authorised by the Chief Engineer will draw and disburse all Ill employees and Officers in the respective offices and subordinate offices and T.A.

Hydel Bullet July 2014



### KERALA STATE ELECTRICITY BOARD LTD

(Incorporated under the Indian Companies Act, 1956)
Registered Off: Vydhuthi Bhavanam, Pattom, Thiruvananthapuram - 695004

ABSTRACT

Adoption of KSEB Data Book in Kerala State Electricity Board Ltd-Sanctioned-Orders issued.

### Corporate Office (SBU-G/C)

B.O (DB) No. 1772/2014 (DGC/AEE-II/Data & SoR/2014) Thiruvananthapuram dated, 28. 06 . 2014

#### **ORDER**

Kerala State Electricity Board Ltd is following the Kerala PWD data book and PWD Schedule of Rates for preparation of estimates and currently SoR 2012 is following for preparation of estimates of civil and electrical works as sanctioned vide B.O read as 1st paper above.

Earlier, as decided by the Full Board vide B.O read as 2nd paper above, the Board had taken up the matter regarding exemption of KSE Board from implementing the Government order G.O.(Rt) No. 1226/2010/PWD dated 30.07.2010 which ban tender excess, as the SOR was prepared taking into the market realities and conditions. Since the Government decision/ sanction requested was not received, the Full Time Members while considering the request for awarding the work of Chimmony SHEP in its meeting held on 24.05.2011 had decided to place the matter regarding exemption of hydel projects from tender excess before the Full Board. Accordingly, the matter was placed before the meeting of the Full Board held on 14.06.2011 and the Board observed as follows.

"Most of the works in KSEB have to be carried out in hilly and remote area. The nature of works is also risky, difficult and different than the works as per PWD Data Book which is being now followed in KSEB. These works are specialised works, for which seperate Data Book is required."

After examining the matter in detail, the Board vide B.O read as 3rd paper above decided tohave seperate Data Book for KSEB works onwards and vide B.O read as 4th paper above, a committeewas consitituted for preparing the KSEB Data Book for preparation of estimate for Civil works. The Board also decided that the team shall work under the guidance of Chief Engineer(CC-North) and Chief Engineer(CC-South) and to submit the Data book through the Chief Engineer (CC-North/South) for its approval.



Accordingly, the Deputy Chief Engineer(Civil), O/o the Chief Engineer(CC) North who is the Chairman of the committee vide letter read as 5th paper above submitted KSEB Data Book to the Chief Engineer(CC-North) and Chief Engineer(CC-South). The Chief Engineer(CC-North) vide letter cited 6th paper recommended to approve the Data Book with some corrections and the Chief Engineer(CCSouth) vide note read as 7th paper above suggested some modifications and inclusions in the Data Book. The Deputy Chief Engineer(Civil), O/o the Chief Engineer(CC) North vide letter read as 8th paper submitted the KSEB Data Book for Civil works after incorporating the suggestions, modifications and inclusions for approval of Board.

After examining the matter in detail, the Board of Directors in its meeting held on 29.05.2014 resolved to approve and adopt the KSEB Data Book for Civil Works in Kerala State Electricity Board Ltd prepared by the committee constituted vide B.O (FM) No. 1787/2011 (MG/General/2003) dated 19.07.2011 for preparation of estimates of Hydro Electric Projects and other civil works wherever mechanised work is possible.

In view of the above decision of the Board of Directors, orders are issued accordingly.

By order of the Board of Directors
Sd/(M. Shahul Hameed)
Secretary (Administration)



## KERALA STATE ELECTRICITY BOARD LTD.

#### **Abstract**

Kerala Electricity Supply Code, 2014 – implementation – providing clarifications – orders issued.

### Corporate Office (Tariff and Regulatory Affairs Cell)

B.O.(FTD) No. **1819 /2014** (KSEB/TRAC/SupplyCode2014/R2/2014) Thiruvananthapuram dated **02-07-2014** 

#### ORDER

Kerala State Electricity Regulatory Commission notified the Kerala Electricity Supply Code, 2014 after due process vide notification dated 13-02-2014. The new Code came into force with effect from the first day of April, 2014 as per regulation 1(3) of the Code.

In view of systemic changes introduced through the Supply Code 2014 and subsequent difficulties reported from the field on the implementation of the same, Board feels that necessary clarity on various matters needs to be provided to field officers. Also, necessary monitoring and control measures need to be put in place during the initial phase of the changeover.

Having considered the note of the Chief Engineer (Commercial & Tariff) read as 4th paper above, Board hereby issues the following directions to provide clarity and uniformity of approach while implementing the Kerala Electricity Supply Code 2014 on various issues brought to the notice of the Board.

### 1. Certificates to be produced for availing New Connection to Buildings:

Filed officers are directed to continue accepting any of the following documents in addition to those specified in the Regulation 45 of Supply Code 2014, subject to the conditions specified in the B.O.s dated 18-08-2011 and 18-12-2012 read as (2) & (3) above.

- (i) Residential Certificate issued by local body
- (ii) Voters ID card
- (iii) Ration card
- (iv) NREGP card and
- (v) Temporary Residential Certificate issued by local body (for residential building with less than 100 square meter area)

## 2. Electric connection for construction of new buildings:

In cases where demolition of building is not involved, a permanent connection may be allowed at the option of the applicant, for construction purpose in LT VII (A) tariff by following due procedure, as per the present practice.

## 3. Methodology for calculation of Security Deposit:

While assessing the security deposit in respect of new applicants, the existing practice may be followed limiting the upper ceiling of security deposit to a value arrived as per the methodology prescribed in Annexure -3 to the Supply Code, 2014.

## 4. Shifting and alteration of electric lines and plants:



- a. In case of shifting of any line, if the work involved is shifting of existing lines alone (i.e., no additional construction of lines using additional material is required), the same may be carried out by recovering the labour charges for such works as per regulation 95 of the Code.
- b. When the work involved is alteration of overhead lines, necessitating additional construction of line using additional material, the applicant shall remit the charges including cost of materials as per the methodology specified under Regulation 63 of the Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations, 2010.

### 5. Processing applications for consumers requiring supply at EHT voltage:

At present applications from consumers requiring supply at EHT voltage are received and processed in transmission offices. Based on provisions on Supply Code, the applications for supply at EHT level are also to be processed in the distribution wing and the estimate of works required in the transmission side is to be obtained by the distribution wing for collection from the applicants. Further, a connectivity agreement is to be executed between the transmission wing and the applicant, which shall include the site responsibility schedule as envisaged in the Grid Code and connectivity regulations.

## 6. Publishing details such as waiting list of applicants, list of authorised and inspecting officers etc in section offices:

Field Officers are directed to ensure that all the above required details are published and updated regularly in the notice boards of Section offices.

### 7. Applying change in due date in respect of spot billed consumers:

In respect of spot billed consumers 10 days need to be provided from the bill date, since meter reading date and bill date are same for such consumers. Chief Engineer (IT) shall ensure necessary changes are incorporated in the Billing software application (ORUMA) on account of this.

## 8. Recovering fixed charges for a limited period from applicants not availing supply:

The Chief Engineer (Commercial & Tariff) is authorized to submit a proposal before the Hon'ble Commission under regulation 179 of the Code for amendment in Regulation 58 and 59, for recovering fixed charges for a period of six / twelve months from applicants who fail to avail supply for whom distribution system is extended or upgraded using funds of KSEB.

## 9. Approval of new formats and procedure to be followed until new formats are made available:

The Distribution Advisory Committee, based on directions of the Board has submitted various formats based on model formats provided in the Supply Code. The approval of KSERC is being sought for the same. Until the new formats are got approved from the Commission, the field officers are directed to use the existing formats to avoid undue hardships to the consumers.

By order of the FTD

Sd/-

M. Shahul Hameed Secretary (Administration)



## KERALA STATE ELECTRICITY BOARD LTD.

(Incorporated under the Indian Companies Act, 1956) Registered Office: Vydyuthibhavanam, Pattom, Thiruvananthapuram – 695 004.

#### Abstract

Providing Grid Connectivity to Solar Power Generating Systems in Kerala- interim procedureguidelines - Orders issued.

### Corporate Office (Planning)

B.O (CMD) No.1892/2014(CP/RE/Solar Genl/2014-15) Thiruvananthapuram, dated 09.07.2014

#### Read:

- 1. Kerala State Electricity Regulatory Commission (Grid Interactive Distributed Solar Energy System) Regulation, 2014.
- 2. No.CECP/RE/Solar Genl/2014-15/53 dtd 11.06.2014 of the Chief Engineer (Corporate Planning) and Safety Commissioner.
- 3. No.CECP/RE/Solar Genl/2014-15/62 dtd 03.07.2014 of the Chief Engineer (Corporate Planning) and Safety Commissioner.

#### **ORDER**

Kerala State Electricity Regulatory Commission (KSERC) has notified the regulationnamely Kerala State Electricity Regulatory Commission (Grid Interactive Distributed Solar Energy System) Regulation, 2014 on 10.06.2014, vide paper read as 1st above.

Even while the regulation was in the draft stage, many applicants approached KSEBL for grid connectivity for their 'grid tied' plants, which cannot function without connection to the utility grid. The Board, considering that lack of procedure shall not be a delaying factor in providing connectivity in deserving cases, had been issuing separate orders in each case considering its merit as recommended by a team of officers entrusted to this task.

In order to avoid the wastage of time involved in issuing separate orders for each case, based on the recommendation of Chief Engineer (Corporate Planning) and Safety Commissioner, the Full Time Directors on 24.06.2014 gave consent to issue a generalized procedure to deal with the connectivity requests, to be followed till such time a formal arrangement shall be effected as KSERC notifies the regulation. Accordingly the procedure as recommended by the Chief Engineer (Corporate Planning) and Safety Commissioner vide paper read as 2nd above, and as given below was approved-

- 1. Applicants seeking connectivity of Solar PV plants may forward an application to the Chief Engineer (Corporate Planning) and Safety Commissioner.
- 2. Copy of the application shall be forwarded to the Executive Engineer of the Electrical Division and Deputy Chief Engineer, Electrical Circle of the area concerned in which the solar plant is located.



- 3. Chief Engineer (Corporate Planning) and Safety Commissioner shall intimate the applicant on the necessities to be made ready and directing to take further instruction in this regard from the concerned Executive Engineer.
- 4. On receipt of the direction from the Chief Engineer (Corporate Planning) and Safety Commissioner, a committee headed by the Executive Engineer of the Electrical Division and Assistant Executive Engineers from Relay wing, Meter Testing wing & Transmission wing concerned as members should visit the plant on an urgent basis.
- 5. The committee shall inspect the plant for its conformity with the Central Electricity Authority standards of connectivity and shall arrange to conduct the precommissioning tests in consultation with the owner of the plant.
- 6. On the successful completion of the tests, Executive Engineer as the head of the committee may issue orders allowing connectivity. First time connection shall be made only at the presence of the committee.
- 7. After effecting the connection, copy of the order of the Executive Engineer effecting the same may be send to the Chief Engineer concerned and to the Chief Engineer (Corporate Planning) & Safety Commissioner.

The above procedure was intended only for a interim period till the notification of the KSERC regulation, and hence it should become void on 10.06.2014, being the date on which KSERC notified the regulation.

Whereas, the Chief Engineer (Corporate Planning) and Safety Commissioner vide note read as 3rd paper above has brought to the attention of the Board that as per the published KSERC regulation, the Assistant Engineer of the concerned section is the officer responsible for giving solar connectivity. Training is required for the Assistant Engineers to carry out this responsibility, for which time is required. Further Board feel the KSERC is to be approached in incorporating few suggestions in the Regulation. As the Regulation cannot be readily put into practice because of the above said reasons, the procedure decided earlier may have to be continued for some more time.

Having considered the recommendation of Chief Engineer (Corporate Planning) and Safety Commissioner, Chairman & Managing Director has accorded sanction for the following.

- 1. The procedure set above shall be adopted in providing grid connectivity to the solar plants and till the Regulation from Kerala State Electricity Regulatory Commission is modified to remove the difficulties.
- 2. The Chief Public Relation Officer shall be authorized to bring the above information to the public attention through press releases and publishing in the KSEBL website. Orders are issued accordingly.

By order of the Chairman & Managing Director Sd/-(M.Shahul Hameed ) Secretary (Administration)



## KERALA STATE ELECTRICITY BOARD LIMITED

### **Abstract**

Establishment- Promotions and postings of Assistant Executive Engineer (Ele) to the Cadre of Executive Engineer (Ele) and Transfers and postings of Executive Engineers (Ele) -Sanctioned-Orders issued

### CORPORATE OFFICE (ADMINISTRATION)

BO(FTD)No.1977/2014 (Estt.III.900/2012) dated Thiruvananthapuram, 21.07.2014 Read:-.B.O FTD No1557(EsttIII/CR Rules-2006 dated ,Thiruvananthapuram2.06.2014). ORDER

I. The following promotions of Assistant Executive Engineers (Ele.) to the cadre of Executive Engineers (Ele.) are ordered:

SI. No.	. Name	Present Office	Promoted and posted as
1	Shoby Davis	Assistant Executive Engineer, PET Sub Division, Madakathara	Executive Engineer, Relay Division, Kannur
2	Sharafudeen C P	Assistant Executive Engineer, Transmission Sub Division, Edarikode	Executive Engineer, Electrical Division,Thirurangadi
3	Reghunath P B	Assistant Executive Engineer, Transmission Sub Division, Kasaragode	Executive Engineer, Generation Division,Kakkayam
4	Prasad K	Assistant Executive Engineer, Electrical Sub Division, Pazhyangadi	Executive Engineer, Tramsmission Division,Kanjirode
5	James George	Assistant Executive Engineer, Electrical SubDivision, Gandhi Nagar, Kottayam	Executive Engineer, Electrical Division,Pallom
6	Benkumar Babu	Assistant Executive Engineer, Control Room,Ernakulam	Executive Engineer, Electrical Division,Vatakara

2. The promotions ordered above are purely provisional as per relevant rules as adopted by the Board and without prejudice to the claim of seniors, if any. If the officer promoted does not join duty within 15 days from the date of order, it shall be presumed that the officer has not accepted the promotion and the promotion order with respect to such officer will stand cancelled and the financial benefits, if any, availed by such officer on account of grade promotion to the grade of Executive Engineer shall be recovered in lump, as per rules.

3. The following transfers and postings of Executive Engineers (Ele.) are ordered:

SI.No	. Name	Present Office	Transferred and posted as
1	Sunil Babu S.	Executive Engineer,	Executive Engineer,
		RPTI, Kozhikode	Electrical Division, Nedumangad
2	Muhammed E.	Executive Engineer,	Executive Engineer,
		RMU Division, Moozhiyar	APTS,Thiruvananthapuram
3	Philip Abraham	Executive Engineer,	Executive Engineer,
		APTS,Thiruvananthapuram	Communication Division,
			Thiruvananthapuram



4	Manoj D.	Executive Engineer,	Executive Engineer,
_	Da I/ 0	Regional IT Unit,Kozhikode	Relay Division, Thiruvananthapuram
5	Dawn K.S.	Executive Engineer	Executive Engineer, (Project Manager),
	Company N	Transmission.Circle,Kannur	TC Division, Kattakada
6	Suresh N.	Executive Engineer,	Executive Engineer,
		Generation Division, Moozhiyar	Transmission Division,
7	Sudheer G.	Executive Engineer O/o CE (SCM)	Thiruvananthapuram
′	Sudfleet G.	Executive Engineer, O/o CE (SCM)	Executive Engineer,
8	Raju P.	Thiruvananthapuram Executive Engineer, APTS, Aluva	Electrical Division,Ponkunnam Executive Engineer,
0	Naju F.	Executive Engineer, AF 13, Aluva	TC Division, Kottarakara
9	Sophiya Vincent	Executive Engineer,	Executive Engineer (TA)
3	Soprilya villoent	Electrical Circle, Harippad	O/o Director (D & GE)),
		Liectrical Officie, Harippad	VB, TVPM
10	Pradeep B.	Executive Engineer,	Executive Engineer,
	Tradoop B.	Generation Division, Kallarkutty	O/o CE (CP), VB,
		Soliciation Division, Randinate	Thiruvananthapuram
11	Sreekala K.	Executive Engineer,	Executive Engineer.
		Electrical Division,Pala	Transmission Circle
			Alapuzha
12	Chandrasekharan V	Executive Engineer,	Executive Engineer,
		Electrical Division, Vatakara	Relay Division,
		,	Kalamassery
13	Prasannakumari A.	Executive Engineer.	Executive Engineer,
		Transmission Circle, Thrissur	Electrical Circle, Alapuzha
14	Anu Paul	Executive Engineer,	Executive Engineer,
		O/o the CE (D-C),Ernakulam	Electrical Division,
			Changanachery
15	Vasavan N.	Executive Engineer,	Executive Engineer,
		Transmission Circle, Thodupuzha	RPTI, Pallom,Kottayam
16	Narayanan M.K.	Executive Engineer,	Executive Engineer,
		Electrical Maintenance Division	T M R Division,Angamally
		Moolamattom	
17	Beena Coilo	Executive Engineer,	Executive Engineer,
		Electrical Division, Cherthala	Electrical Division,
4.0	Dissal D	Evenitive Engineer	Mattanchery
18	Bimal B.	Executive Engineer,	Executive Engineer,
19	Annie Job E.J.	Electrical Division, Thirurangadi	Regional IT Unit, Ernakulam
19	ATTITIE JOD E.J.	Executive Engineer, Transmission Division,	Executive Engineer, O/o CE (D-C), Ernakulam
		Irinjalakuda	O/O CE (D-C), Emakulam
20	Satheesh G.	Executive Engineer, TMR Division,	Executive Engineer,
20	odineesii O.	Shornur	Transmission Division,
		Chomai	Ernakulam
21	Issac C.P.	Executive Engineer,	Executive Engineer,
	.5000 0.1 .	Transmission Division, Kasaragod	Electrical Division, Perumbavoor
		Transmission Division, Rasaragoa	Elocation Dividion, i diambavooi



22	Remy George	Executive Engineer,	Executive Engineer,	
	, ,	Transmission Circle	O/o CE (SO),Kalamassery	
		Alappuzha	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
23	Shaji K.A	Executive Engineer,	Executive Engineer,	
20	Onaji N.A		Electrical Division, Cherthala	
		Transmission Division,	Electrical Division, Cherthala	
اررا	- · · · · · ·	Kanjirode		
24	Rahim A.M.	Executive Engineer,	Executive Engineer,	
		Electrical Division, Ponnani	LD Station,Kalamassery	
25	Seena K.	Executive Engineer,	Executive Engineer,	
		O/o the CE (D-N),Kozhikode	Transmission Stores Division,	
		,,, -	Angamally	
26	Radhakrishnapillai G.	Executive Engineer,	Executive Engineer,	
[20]	Nadriaki Sililapiliai O.	Transmission Division, Vatakara		
		mansinission division, valakara	Transmission Division,	
			Brahmapuram	
27	Raveendran A.K.	Executive Engineer,	Executive Engineer,	
		Transmission Division, Tirur	Electrical Division,	
			Vadakkanchery	
28	Manoj K.D.	Executive Engineer,	Executive Engineer,	
	,	Generation Division, Kakkayam	Transmission Division, Chalakudy	
29	Littymol P.M.	Executive Engineer,	Executive Engineer,	
29	LILLYTHOL F.IVI.			
	D	Electrical Circle, Tirur	Transmission Circle, Thrissur	
30	Bhagya Lakshmi S.	Executive Engineer,	Executive Engineer,	
		Electrical Division,Manjeri	Electrical Circle,Irinjalakuda	
31	Saudamini T.P.	Executive Engineer,	Executive Engineer,	
		Electrical Division, Tirur	Electrical Division, Kunnamkulam	
32	Sidhardhan P.B.	Executive Engineer,	Executive Engineer,	
		Electrical Circle	LD Station, Kalamassery	
		Sreekantapuram	25 Station, relating 550 y	
33	Abdul Hameed	Executive Engineer,	Executive Engineer,	
33				
امرا	Vallarampara	Electrical Circle, Kasaragod	Transmission Circle, Malappuram	
34	Sheela R Pillai	Executive Engineer,	Executive Engineer,	
		Electrical Circle,Alappuzha	O/o the CE (SCM),	
			Thiruvananthapuram	
35	Beena Pious	Executive Engineer,	Executive Engineer,	
		Electrical Division, Alappuzha	Electrical Division,Kollam	
36	Shaji Thomas P	Executive Engineer,	Executive Engineer,	
	onaji momao i	Electrical Division,Kollam	Electrical Division,	
		Electrical Division, Rollani		
27	Johnson D	Evenutive Engineer	Karunagapally	
37	Johnson B	Executive Engineer,	Executive Engineer,	
		Electrical Division, Karunagapally	Electrical Division, Alappuzha	
38	Suresh Chand C	Executive Engineer,	Executive Engineer,	
		Electrical Division,Ponkunnam	Mechanical Maintenance	
39	Jacob Alexander	Executive Engineer,	Executive Engineer,	
		Mechanical Maintenance	Generation Division, Moozhiar	
		Division, Moolamattom		
 _		sioni moolamattom		_



40	Uma Maheswaran K S	Executive Engineer,	Executive Engineer,
		Electrical Division,	Electrical Division, Vaikom
		Changanachery	,,,
41	Naushad K A	Executive Engineer,	Executive Engineer
	radonad rez	Electrical Circle,Kozhikode	Electrical Maintenance
		Division, Moolamattom	Electrical Maintenance
42	Vincent Varghese	Executive Engineer,	Executive Engineer,
74	villociti vargitese	Electrical Division, Adimaly	Transmission Circle,
		Thodupuzha	Transmission once,
43	Asha V	Executive Engineer,	Executive Engineer,
43	ASIIA V	Relay Division,	Electrical Circle,Pala
			Electrical Circle, Fala
11	Curios Luksos	Thiruvananthapuram	Evenutive Engineer
44	Cyriac Lukose	Executive Engineer,	Executive Engineer,
45	Manimala	Electrical Division, Vaikom	Electrical Division, Adimaly
45	Remony R	Executive Engineer,	Executive Engineer,
40	0	T C Division, Kottarakkara	Electrical Circle, Haripad
46	Meena S	Executive Engineer,	Executive Engineer,
		Electrical Circle,Pala	Electrical Division, Pala
47	Mary Jose	Executive Engineer,	Executive Engineer,
		Electrical Division,Mattanchery	Electrical Division, North Paravur
48	Jose M V	Executive Engineer,	Executive Engineer-II,O/o CE (SO),
		Electrical Division,North Paravur	Kalamassery
49	Mathew P Kurian	Executive Engineer,	Executive Engineer,
		APDRP Division, Ernakulam	BDPP, Ernakulam
50	George V James	Executive Engineer- II,	Executive Engineer,
		O/o CE (SO), Kalamassery	APDRP Division, Ernakulam
51	Martin C S	Executive Engineer,	Executive Engineer,
		Relay Division, Kalamassery	LD Station, Kalamassery
52	Shamitha R	Executive Engineer,	Executive Engineer,
		Transmission Division, Ernakulam	Electrical Division, Thripunithura
53	Sreelatha S	Executive Engineer,	Executive Engineer,
		Transmission Division,	LD Station, Kalamassery
		Brahmapuram	
54	Prasanna P	Executive Engineer,	Executive Engineer,
		LD Station,Kalamassery	Transmission Division,
		·	lrinjalakuda , , , , , , , , , , , , , , , , , , ,
55	Bijoy N L	Executive Engineer,	Executive Engineer,
	-,-,	Electrical Division, Kalpetta	Electrical Circle, Vatakara
56	Samsuddin	Executive Engineer,	Executive Engineer,
	Kandanthodika	Electrical Division,Kondotty	Electrical Division, Kalpetta
57	Rajan P	Executive Engineer,	Executive Engineer,
0,	. wjani	Electrical Circle, Manjeri	Electrical Division, Mannarkad
58	Mohan Kumar B	Executive Engineer,	Executive Engineer,
00	Monan Ramar D	(Project Manager),	Transmission Division, Tirur
		T C Division, Kattakada	Transmission Division, thui
		i o bivioloti, nattanada	



_			
59	Prasad V	Executive Engineer,	Executive Engineer,
		O/o CE (CP), VB,	Generation Division,
60	Viiovoroi C T	Thiruvananthapuram	Kallarkutty
00	Vijayaraj S T	Executive Engineer,	Executive Engineer,
		Transmission Division,	Electrical Division,Ponnani
61	lvothi DV	Thiruvananthapuram	Evenutive Engineer
ויס	Jyothi P V	Executive Engineer,	Executive Engineer,
62	Shelvymol T R	Electrical Division, Pallom	Electrical Circle, Kozhikode
02	Shelvyilloi i K	Executive Engineer, RPTI, Pallom	Executive Engineer, O/o CE (Generation),Moolamattom
63	Anil S		Executive Engineer,
03	Allii S	Executive Engineer,	RMU Division, Moolamattom
		O/o CE (Generation), Moolamattom	·
64	Sreekumar B		(place shifted from Moozhiyar)
04	Sieekuillai D	Executive Engineer,	Executive Engineer, TMR Division,Shornur
65	Beena Beevi M K	Electrical Division, Thripunithura	Executive Engineer,
03	Deella Deevi IVI K	Executive Engineer, O/o the CE (SO), Kalamassery	Electrical Circle, Tirur
66	Jayaraj A	Executive Engineer,	Executive Engineer,
00	JayarajA	Generation Division,Idamalayar	Generation Division,
		Generation Division, Idamaiayai	Lower Periyar, Karimanal
67	Jose Mathew	Executive Engineer,	Executive Engineer,
0'	JUSE Maniew	Generation Division,	Generation Division,
		Lower Periyar, Karimanal	Idamalayar
68	Suresh Kumar S B	Executive Engineer,	Executive Engineer,
00	Sulesii Kulliai S D	TMR Division, Angamally	Division, Tirur
69	Rajashree R	Executive Engineer,	Executive Engineer,
03	rajasiiice r	LD Station, Kalamassery	Electrical Circle, Manjeri
70	Simon A Akkara	Executive Engineer,	Executive Engineer,
<sup>' °</sup>	Olifioti / Wikidia	Regional IT Unit,Ernakulam	Regional IT Unit,Kozhikode
71	Santhosh K	Executive Engineer,	Executive Engineer,
l' '	Cartaloon IX	BDPP,Ernakulam	Electrical Division, Manjeri
72	Judson K Raphael	Executive Engineer,	Executive Engineer,
-	vadoon it raphaoi	LD Station, Kalamassery	Transmission Circle, Kannur
73	Alfred Swatzer K M	Executive Engineer,	Executive Engineer,
	7 III G G G W G (201 1 C III	Transmission Stores Division,	Electrical Circle,
		Angamaly	Sreekantapuram
74	Sabu S	Executive Engineer,	Executive Engineer,
	00.000	LD Station, Kalamassery	Electrical Division, Kondotty
75	Syamprasad G P	Executive Engineer,	Executive Engineer,
	оуар. асаа с .	Electrical Division, Thrissur West	Transmission Division,Vatakara
76	Nisha P	Executive Engineer,	Executive Engineer,
		Electrical Division,	RPTI,Kozhikode
		Kunnamkulam	,
Ш			



77	Radha N N	Executive Engineer,	Executive Engineer,
		Transmission Division, Chalakudy	
78	Narayanan M	Executive Engineer,	Executive Engineer,
		Electrical Circle,Irinjalakuda	Transmission Division, Kasaragode
79	Jinadevan T S	Executive Engineer,	Executive Engineer,
		Electrical Division, Vadakkanchery	
80	Pradeep C	Executive Engineer,	Executive Engineer,
		Electrical Circle,Vatakara	Electrical Division,Wandoor
81	Dolly Paul	Executive Engineer,	Executive Engineer,
		Transmission Circle, Malappuram	Electrical Division,Thrissur (West)
82	Rethi Devi O	Executive Engineer,	Executive Engineer,
		O/o CE (Transmission- South),	O/o CE (Commercial&Tariff),
		Thiruvananthapuram	Thiruvananthapuram
83	Satheesh Kumar G	Executive Engineer,	Executive Engineer,
		O/o CE (Commercial&Tariff),	Transmission Circle,
		Thiruvananthapuram	Thiruvananthapuram
84	Ambili B	Executive Engineer,	Executive Engineer,
		Transmission Circle	O/o CE (Transmission -South),
		Thiruvananthapuram	Thiruvananthapuram
85	Silvester Peter P	Executive Engineer,	Executive Engineer,
		TransmissionCircle,Kalamassery	
86	Soudamini B	Executive Engineer,	Executive Engineer,
		LD Station,Kalamassery	Transmission Circle,
		Kalamassery	
87	Sudha K	Executive Engineer,	Executive Engineer,
		Transmission Circle, Palakkad	Electrical Circle, Palakkad
88	Geetha M S	Executive Engineer,	Executive Engineer,
		Electrical Circle, Palakkad	Transmission Circle, Palakkad
89	Mohammed Kasim	<b>5</b> ,	Executive Engineer,
		Electrical Division, Perumbavur	APTS Unit, Aluva
90	Shahul E P	Executive Engineer,	Executive Engineer,
		Transmission Division, Shornur	Electrical Division, Pattambi
91	Varghese M E	Executive Engineer,	Executive Engineer,
		Electrical Division,Pattambi	Transmission Division,Shornur

By order of the Full Time Directors Sd/-M.SHAHUL HAMEED SECRETARY(ADMINISTRATION)

<sup>4.</sup> The transferees may be relieved forthwith.5. The transfers and postings ordered above are in the exigency of service and in public interest.