



# Hydel Bullet

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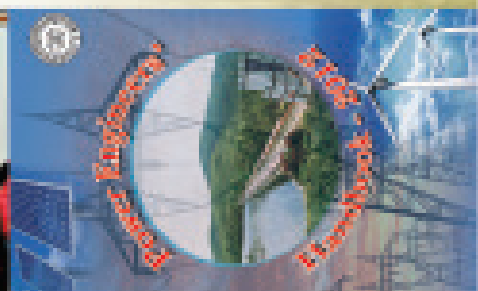
November 2014

## JUSTICE PREVAILS ...

The Appellate Tribunal for Electricity (APTEL) in its order dated 10.11.2014 have directed the Kerala State Electricity Regulatory Commission(KSERC) to true-up the employees cost from FY 2010-11 to FY 2012-13. This order is appreciated by all in power sector and at the same time it should be an eye opener to the ERCs in dealing employee cost. In the case of KSEB, the KSERC has been arbitrarily resorting to cut in employee cost over the years. The Tribunal has through its order struck down this as well as some other findings of the SERC.

The KSERC often put hurdles in allowing the employee cost projected by KSEB in its ARR&ERC petitions and even in truing up petitions this has been disallowed. Thus KSERC had disallowed Rs.567.80 crore from the employees expenses projected by the KSEB for FY 2012-13. The deduction had been made in the basic pay, DA, other allowances, earned leave surrender, provision for pay revision and pension liabilities. The elimination of a considerable amount from our account sheets have endangered the position of employees in the organisation. So KSEBL in its appeal had indicated that the Commission had adopted a wrong methodology for arriving at the calculation of employee cost. The tribunal had subsequently observed that the increase in DA was as per the government orders and it should have been accommodated in the ARR. Also the pay revision expenses, which is a result of the agreement reached between the management and the unions through a process have to accommodated in the ARR and also the terminal benefits which are guaranteed by the statutes should be honoured.

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The authority of the Commission in intervening in the process of pay revisions, allowances and terminal benefits needs a relook. Of late, the Commission is seen in the habit of intruding into the activities of the KSEBL, especially in areas which are outside the domain of the Commission and not envisaged by the Electricity Act 2003.

The revised truing up of ARR-ERC from 2010-11 to 2013-14, will help KSEBL in accomodating the increased employee costs and which can be claimed through appropriate tariff revision. The APTEL also directed the Commission to allow Return on Equity at the rate of 15.5% as per the Central Commission's Regulations, to true up Interest and Finance charges for the FY 2012-13 based on the audited accounts, to review and consider the actual generating cost of the LSHS based power plant, the energy sales and Power Purchase Cost after prudence check and also allow carrying cost on the excess cost of power purchase over the approved level. The order to adopt the CERC's rate for RoE is indeed a welcome move and infact this should have already been adopted even otherwise. We strongly feel that had the Commission analysed the ARR&ERC in an unbiased and prudent manner, the embarrassment by virtue of the APTEL order could have been averted. At the same time , the APTEL

order also upholds many findings of the KSERC which were put up in appeal by the KSEBL and this should force the Board management to adopt a more professional and realistic methodology for the preapration of ARR & ERC. The concern of Commission regarding the recruitment of employees without conducting any manpower study or without assessing the professional competencies of existing employees is known to all. We also share the same concerns, but this should not be at the cost of the pay and allowances of the existing employees since it affects their morale and their commitment and also have the ill effect that this will not attract sufficient talent from the employment market. To retain talented human resource in any organisation , attractive pay structure and career growth is a must. The greatest challenge that many PSUs are facing today is the attrition of talented employees. The malfunctioning or passive attitude of ERCs in someway or other paves the way to privatise the sector which is salient when the proposed amendments in Electricity Act 2003 are analysed. In short, the onus is now on the Board mangement to submit a more thoroughly analysed and professionally prepared ARR & ERC and this will naturally force the KSERC to mend its approach and to pass orders more diligently that will stand any test of law.

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## The wounded innocents

*U.S. Ravindran Rtd. E.E.*

It has been some peaceful days in Gaza while scripting this article. It is not certain that for how many days this peace will last, because Hamas may start some heroic act of firing rockets towards Israel. During July & August around 2100 Arab lives have been taken off by Israeli attack. It is heart breaking to see people running helplessly here and there through the debris of their life time possession, homes, and through the dead bodies of their beloved ones. Media project the cruelty of Israel all over the world. The deaths and damages and brutality of Israelis are condemned through media world wide. Now Hamas can claim to be rank I in the self proclaimed Saviour's list. Hamas was smart enough to abduct and kill 3 Israeli boys in the first week of July and provoke Israeli to initiate retaliation process which finally resulted in the death of 2100 Arabs. Hamas succeeded in getting the sympathy for wounded innocents from different countries. Even after firing more than 3000 rockets to Israel the death toll was only less than hundred. If the death toll would have been higher at the order 2000 on Israeli side Hamas would have been praised for their heroic activity by the Arabs, because according to them Jews does not deserve to exit.

During Gulf war I there used to be Daily firing of scud missile from Iraq towards Israel to patronize the arab world and to dilute arab's hatred towards Saddam Hussein for attacking Kuwait. The Scud never reached its destination in Israel due to interception in the mid way by patriot antimissile system installed in

1991 Mr. Benjamin Nethyanahu - the present Prime minister of Israel was defense minister. In an interview with CNN correspondent Mr. Benjamin Nethyanahu expressed his views regarding peace process in the middle east. The CNN correspondent asked " Mr. B.N. why you give sleepless Nights to Palestine?" BN took map of Asia spreaded wide his right palm and put on the map covering all Arab countries and told " " You see Arab world is spreaded all over here". Then he put half of his small finger tip on Israel area and told" Israel is only less than this. In the maps available in arab countries you cannot find a place named Israel. Arabs don't recognize our existence. We Jews are the minority in the minority of the world population. We are scattered all over the world. We are also human beings. We want to exist. We want to survive. We have right to defend ourselves. Palestines find heroism in killing Jews. Every time we sign a peace pact and return, immediately they fire rockets to Tel Aviv killing or wounding Jews. They feel some complex in keeping silence as if they are surrendering. Arab Countries encourage them by giving money and arms. After many instances we studied peace will only be there only when they put their arms down not us. You see if you put terrorism in one tray of a common balance, it will be horizontal if you put only terrorism in the other tray. You cannot balance terrorism by peace. Terrorism can be balanced only by terrorism. Death can be confronted by death only. Hence we decided if they kill one jew we will kill 5

palestinees. Let them learn to recognize Jews. Let them learn the act of coexistence. Then only they can live peacefully there". Israelis are intelligent and smartest human beings on earth and stupidity cannot be demonstrated in a better way by Hamas by attacking them. Hamas should leave the profile of a heroic saviour and develop an attitude for coexistence & tolerance.

There is a popular story about a monkey hunter commonly told among company of parents and children in Arab & African countries. The monkey hunter was sitting in the shade of a tree. He saw a monkey sitting in the nearest branch enjoying the shade. The hunter took the gun and was about to pull the trigger. Then the monkey told the hunter "If you shoot me your mother will die, if you don't shoot me your father will die". Now the story teller will ask a question to the children if you were the hunter what you will do? Children will not answer the question, maybe because they do not want to tell the answer in the presence of their parents. One boy answered I will not hunt monkeys I will hunt only other animals. But it is not the specific answer for the monkey hunter. After two days one boy answered "I will shoot the monkey. Any way any one of my parents is going to die if I shoot or not shoot. If I shoot the monkey my mother will die but another monkey hunter need not have to face such a problem. Prime Minister BN might have thought like that boy. Another Jew Prime Minister need not have to face such a situation if Hamas is terminated.

We hear about various self-proclaimed saviors like Hamas operating at different parts of the world namely Boko Haram, ISIS Al Qaeda, Lashkar-e Toiba,

Hisbulla Thaliban, Simi Al Sabab, Ahrar Al Shyam, Al Nusra etc. Their "greatness, organizational and executional skills" are judged by the extent of death toll and volume of damages done to humanity. A newly formed caliphate in Iraq has terminated Yazidi's and Chaldean Christians. An army is said to be sent to India by the new caliph.

Nowadays it has become a fashion to talk about human rights, secularism along with condemning of Gaza attacks. 2 million people were killed in Syria and thousands in Iraq in recent developments. Nobody condemns these killings. One Indian scholar recently criticized the Indian Government for its silence in Gaza killing and for not condemning Israel's act. Bomb making, blasting, parliament attacking, putting utilities on fire, raping etc. seems to be human rights in the Indian constitution. Hence the government protects these "innocents" spending crores of rupees for maintenance and security of them till they get the last drop of justice whereas immediate beheading is the punishment for such crimes in other countries.

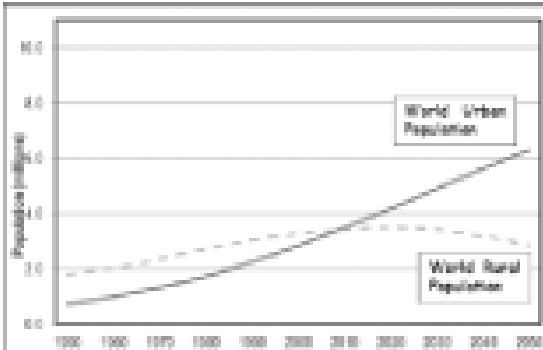
Democracy prevails in India because our culture is based on principles of Sanathana Dharma, tolerance and coexistence. Tolerance has reached its limits in a northern State where Indian Citizens sacrifice their freedom of worship to avoid confrontation with some self-styled saviors. For political publicity sake we see people boycotting Israeli products and condemning Gaza incidents. Govt. cannot condemn for the consequences of the stupidity of Hamas. India has to keep good relations with all countries. Being victims of terrorism India and Israel are sailors of the same boat.

## Smart Cities and its role in the growth of the Indian Power Sector

AIPEF

Prime Minister on 15<sup>th</sup> August 2014 unveiled his dream project of establishing 100 smart cities in India. The concept of smart cities revolves around the features like smart energy, smart transport, smart water, smart buildings etc. However, to keep these systems running, ensuring a sustainable power supply is of prime importance. So, how will India power these 100 smart cities?

The country is moving from the era of agrarian to industrial and service sector. As the global population is increasing at steady pace, more and more people are moving to the cities. The trend of the urbanization continues to take place as depicted in figure below.



### Urbanization Trends

(Source: - Draft concept note on smart cities scheme, MoUD, 14<sup>th</sup> Oct, 2014)

In India, the urban population is currently 31% of the total population and contributes towards 60% of the India's GDP. The global experience says that a country's urbanization up-to a 30% level is relatively slow but the pace of urbanization speeds up thereafter, till it

reaches about 60-65%. India is at a point of transition where the pace of urbanization will speed up and for this reason we need to plan our urban areas well and cannot wait any longer to do so.

Smart City is the intersection between competitiveness, capital and sustainability. The smart cities should be able to provide good infrastructure such as water, sanitation, reliable utility services, health care; attract investments; transparent processes that make it easy to run commercial activities; simple and on line processes for obtaining approvals, and various citizen centric services to make citizens feel safe and happy. IBM defines smart city as "one that makes optimal use of all the interconnected information available today to better understand and control its operations and optimize the use of limited resources".

Among the physical infrastructure, power requirement is one of the most important feature. For a city to be smart, there should be a universal 24x7 electricity access. To have a rough idea about the growth in electricity demand and generation capacity, consider the residential, commercial and industrial/service sector under the same belt of smart cities. A single city would consume a minimum of 6000MW (considering Delhi peak consumption is 5653 MW). There will be the requirement of  $6000 \times 100 = 600000$  MW (100 smart cities planned) i.e. an addition of 600 GW electricity in the near future (say in next 10-15 years), only for the smart cities.

Round-the-clock supply of the electricity is not possible with the present transmission and distribution system. The concept of smart-grid along with the

implementation of the IT into the electricity sector will help to achieve the reliable and quality supply. The government strives to implement the IT system in the Indian power sector under R-APDRP Part A which thrives to establish the baseline data and IT applications for energy accounting/auditing & IT based consumer service centres. According to Ministry of urban development draft on smart cities, it should have 3D maps on GIS of all the assets and services. The electricity pilferage reduction can be possible, if GIS mapping along with smart grid is used in the electricity sector. The distribution losses can be managed by using the meters like Prepaid meters, smart meters etc. The cities should shift towards smart metering at the household level. Along with IT implementation, focus is on the establishment of smart grid with its integration to the renewable sources to meet the demand such as solar and wind energy.

As per WHO, India is among the top 10 most polluted countries globally. This is confirmed by the India's Centre of Science and Environment (CSE), which says that pollution in Delhi is 6 times higher than the safe level. So, smart cities are propelling to use 10% of the electricity consumption in the city from renewable energy sector. Installing of rooftop solar panel on all public toilets, institutional and commercial building as well as multi-storied residential houses is also proposed for the smart cities.

There are certain traits of the Smart cities which are in draft stage:

1. *Energy efficiency*: Energy efficient technologies are promoted to be used in the lighting and in other dimensions like LED's, solar street lights, air-conditioning system and energy consumption in buildings.
2. *Smart Grid*: A smart grid is an electricity network that uses digital and other

advanced technologies to monitor and manage the transport of electricity from all generation sources to meet the varying electricity demands of end-users.

3. *Demand Management*: Smart cities shall be able to use the electricity supply efficiently by laying emphasis on the demand side management. It can be done either by giving incentives for savings or disincentives for wastage of the power.

To create a more liveable and healthy environment, it is important that smart cities that are planned, are environmentally sustainable. This would mean to improve the air quality and also reduce wastage of water, electricity, fuel etc. Steps have already been taken in this regards, however much more needs to be done. Star rating is being done for electrical appliances and in the building industry, it is going on with the BEE/MoP plan of energy efficiency. It is planned that all documents that are prepared for funding as part of the scheme, i.e. plans, policy documents, DPRs etc. should be vetted by a professional agency for environment sustainability like TERI, before any financial sanctions are given. The sum of 7,060 crore has been allocated for the development of the smart cities in the recent budget.

The proposal for the establishment of the 100 smart cities with all the modern facilities will help the electricity sector to reshape itself which is dented by the recent coal ruling by the honourable supreme court of India. The development of the smart city will be helpful in reviving all the market related to power: - generation, transmission, distribution, energy efficiency market, smart grid, metering and billing etc. The concept stated will bring Indian power sector to the verge of using electricity sensibly and efficiently.

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# നേതൃ ദാരിദ്ര്യത്തിന്റെ പ്രശ്നങ്ങൾ

Er. വി. രാജൻ

മനുഷ്യൻ കൂട്ടമായി സമൂഹമായി ജീവിക്കാൻ തുടങ്ങിയതു മുതൽ പൊതുപ്രശ്നങ്ങളിൽ അവരെ നയിക്കാനും തീരുമാനങ്ങൾ എടുക്കാനും ചില വ്യക്തികൾ അവരിൽ നിന്നുതന്നെ ഉയർന്നു വന്നിരുന്നു. ജാതി(മത) - സാമ്പത്തിക അടിസ്ഥാനത്തിലായിരുന്നു ഈ സ്ഥാനം ലഭ്യമായിരുന്നത്. ഫ്യൂഡൽ വ്യവസ്ഥിതിയിൽ ഇത് രാജാവ് പ്രഭുക്കന്മാർ, നാടുവാഴികൾ, നാട്ടുപ്രമാണികൾ എന്ന രീതിയിലാണ് കാര്യങ്ങൾ നടന്നിരുന്നത്. കേരളത്തിൽ ഈ എല്ലാതലങ്ങളും പല സ്ഥലത്തും ഇല്ലായിരുന്നു. രാജാവ് കഴിഞ്ഞാൽ പിന്നെ ചില നമ്പൂതിരി ഇല്ലങ്ങളും നാട്ടുപ്രമാണിമാരുമായിരുന്നു കാര്യങ്ങൾ നടത്തിയിരുന്നത്. എന്തു രീതിയിലായാലും ഒരു നേതൃത്വം സമൂഹത്തിൽ എന്നും ഉണ്ടായിരുന്നു.

സ്വാതന്ത്ര്യാനന്തരം നമ്മൾ ജനാധിപത്യ സോഷ്യലിസ്റ്റ് രാജ്യമായപ്പോൾ രാഷ്ട്രീയ പാർട്ടികളും അതിന്റെ നേതാക്കളുമാണ് പിന്നെ നമ്മെ നയിച്ചത്. നയിക്കുന്നത് കേന്ദ്ര ഗവൺമെന്റ്, സംസ്ഥാന സർക്കാർ, തദ്ദേശ ഭരണ സ്ഥാപനങ്ങളായ കോർപ്പറേഷൻ, മുനിസിപ്പാലിറ്റി, പഞ്ചായത്ത് എന്നിവയാണല്ലോ അതിന്റെ ഭരണതലങ്ങൾ. ആദ്യകാലത്തെ പ്രധാന പാർട്ടികൾ കോൺഗ്രസ്സ്, ജനസംഘം, കമ്മ്യൂണിസ്റ്റ് എന്നിവ ആയിരുന്നു. പക്ഷെ, വിദേശ അടിമത്വത്തിൽ നിന്നും മോചനം നേടിത്തന്ന പാർട്ടിയെന്ന പേരിൽ കോൺഗ്രസ്സ് ആയിരുന്നു മുന്നിൽ. ആദ്യകാലങ്ങളിൽ പാർട്ടികളിൽ പ്രഗത്ഭരായ നേതാക്കളുടെ നിരതനെ ഉണ്ടായിരുന്നു.

കാലം കഴിഞ്ഞതോടെ ഈ പാർട്ടികളിൽ പലവട്ടം നെടുകേയും കുറുകേയും പിളർന്ന് കൂടാതെ ജാതി-മത- പ്രാദേശിക കക്ഷികൾ പല സംസ്ഥാനത്തും പ്രബല പാർട്ടികളായി. അങ്ങനെ കേന്ദ്രത്തിലും പല സംസ്ഥാനങ്ങളിലും മുന്നണി ഭരണം നിലവിൽ വരുകയും ചെയ്തു. ദേശീയ കാഴ്ചപ്പാടില്ലാത്ത ചെറു പാർട്ടികൾ രാജ്യത്തിന്റെ അവണ്ഡതക്കുത്തനെ ഭീഷണി ആകുന്ന രീതിയിൽ ഭരണത്തിൽ ഇടപെടാനും ഇത് കാരണമായി. അതിന്റെ ദുഷ്ഫലങ്ങൾ രാജ്യവും ജനങ്ങളും അനുഭവിക്കുകയും ചെയ്യുന്നു.

ഇതിനിടയ്ക്ക് ഏതാണ്ട് എല്ലാപാർട്ടികളിലും കുടുംബ വാഴ്ചയും മക്കൾ രാഷ്ട്രീയവും നിലവിൽ വന്നു. ഇതിനൊരു അല്പം അപവാദമുള്ളതു ബിജെപിയും ഇടത് പാർട്ടികളുമായിരുന്നു. അങ്ങനെ അധികാരം അച്ഛനിൽ നിന്നും മകളിലേക്ക് അവിടെനിന്നും മകനിലേക്ക് വീണ്ടും മകനിലേക്ക് (മകളിലേക്ക്) അതല്ലെങ്കിൽ ഭർത്താവിൽ നിന്നും ഭാര്യയിലേക്ക്. ഇതൊന്നും പറ്റിയില്ലെങ്കിലും ഏറ്റവും വിശ്വസ്തനായ ആശ്രിതർ ഇങ്ങനെയാണ്. നേതാക്കൾ അധികാരം കുടുംബത്തിനകത്ത് നിലനിർത്തിയിരുന്നതു ഈ പ്രതിഭാസം നിലവിൽ വന്നതോടെ നേതൃത്വഗുണം ഇല്ലാത്ത പലരും പാർട്ടിയെ നയിക്കേണ്ട സാഹചര്യത്തിലെത്തി. മന്ത്രിമാരായവർക്ക് പലർക്കും ഫയലിൽ, പേപ്പറുകളിൽ ഒപ്പിടുന്ന ജോലി മാത്രമേയുള്ളൂ. അത് സർക്കാരിന്റെയും പാർട്ടിയുടെയും പ്രവർത്തനങ്ങളെ സാരമായി ബാധിക്കുകയും ചെയ്തു. ഇതൊക്കെ കാരണം കഴിവുള്ള നേതാക്കളെ ഭരണ



കർത്താക്കളാകട്ടെ ഒരു പാർട്ടിക്കും സാധിക്കുന്നില്ല. ഇന്ത്യയെപ്പോലെ സാംസ്കാരികമായും രാഷ്ട്രീയമായും വൈവിധ്യങ്ങളുള്ള ഒരു രാജ്യത്ത് ദേശീയ കാഴ്ചപ്പാടുള്ള കഴിവുള്ള നേതാക്കൾക്കൊക്കെ ജനങ്ങളെ വിശ്വാസത്തിലെടുത്തു പുരോഗതി കൈവരിക്കാൻ സാധിക്കും. പക്ഷെ ഏതാണ്ട് കാൽ നൂറ്റാണ്ടായി ഒരു നേതൃദാരിദ്ര്യം രാജ്യം അഭിമുഖീകരിക്കുന്നില്ലേയെന്നു നമ്മൾ ഗൗരവമായി ചിന്തിക്കണം.

ഈ പ്രതിഭാസം ഇപ്പോൾ സർക്കാർ പൊതുമേഖലാ സ്ഥാപനങ്ങളെയും കാര്യമായി ബാധിക്കുന്നുണ്ട്. ഇവിടെ ഇതിനുള്ള പ്രധാനകാരണം പി.എസ്.സി. ലിസ്റ്റിൽക്കൂടിയുള്ള സമയബന്ധിത സ്ഥാനക്കയറ്റമാണ്. ജീവനക്കാരുടെ കഴിവിന്, അറിവിന് ഒരു പരിഗണനയും നൽകുന്നില്ല. ചില സ്ഥാപനങ്ങളിൽ രാഷ്ട്രീയ ഇടപെടലാണ് പ്രശ്നം. (വിസിമാരുടെ നിയമനമാണ് മകുടോദാഹരണം). ഉയർന്ന സ്ഥാനങ്ങളിൽ ഇരിക്കുന്ന ഉദ്യോഗസ്ഥർക്ക് കഴിവും അറിവുമില്ലെങ്കിൽ അത് സ്ഥാപനത്തെ മുഴുവൻ ബാധിക്കും. സ്വകാര്യമേഖലയിൽ പ്രശ്നം അതിരുകഴമല്ല. അവിടെ പൊതുവെ ജീവനക്കാരുടെ കഴിവിനും അംഗീകാരം നൽകുന്നുണ്ട്. സ്ഥാപനത്തിനകത്ത് യോജിച്ചവരില്ലെങ്കിൽ അവിടെ പുറത്തുനിന്നും കൊണ്ടുവരും (ടാറ്റ, ഇൻഫോസിസ്, ഹിന്ദുജാസ് മുതലായവ. ഇൻഫോസിസിന്റെ സ്ഥാപകർ സാങ്കേതികമായി വലിയ മികവുള്ളവരായിരുന്നു. പക്ഷെ കമ്പനിയുടെ നടത്തിപ്പിനുള്ള ഭരണ - നേതൃപാടവം വളരെ കുറവായിരുന്നു. അത് മനസ്സിലായപ്പോഴാണ് വെളിയിൽ നിന്നും ആളിനെ കൊണ്ടുവന്നത്). ഇത് എല്ലാ സ്ഥാപനങ്ങൾക്കും ബാധകമാണ്. എന്നാൽ വലിയ സർക്കാർ സ്ഥാപനങ്ങളിൽ അതിനകത്തു തന്നെ കഴിവുള്ളർ ഉണ്ടാകും. അതെല്ലാ

പേർക്കും അറിയുകയും ചെയ്യാം. പക്ഷെ അവരുടെ കഴിവിനെ പ്രയോജനപ്പെടുത്താൻ സ്ഥാനക്കയറ്റ നിയമങ്ങൾ അതനുവദിക്കുന്നില്ല. നേതൃത്വ രൂപീകരണത്തിൽ പ്രത്യേകിച്ചു പ്രശ്നങ്ങൾ ഇല്ലാത്ത ഇടതു പാർട്ടികളിലും സ്ഥിതി അത്ര മെച്ചമല്ല. ദേശീയതലത്തിൽ നേതാക്കളെ കണ്ടുപിടിക്കാൻ അവരും പ്രയാസപ്പെടുന്നു. കേന്ദ്ര ഭരണത്തിൽ അവരുടെ പങ്കാളിത്വം വളരെ ഇല്ലാത്തതുകൊണ്ട് ഈ പ്രശ്നം അത്ര ശ്രദ്ധിക്കപ്പെടുന്നില്ല.

ഈ പ്രത്യേക സാഹചര്യത്തിൽ സർക്കാരും അതിന്റെ അനുബന്ധ ഘടകങ്ങളും സർക്കാരുകാര്യം മുറപോലെയാണെന്ന നിലയിൽ എത്തിയില്ലെങ്കിലെ അതിശയമുള്ളു. അപ്പോൾ നമ്മൾ നമ്മുടെതന്നെ ശവക്കുഴികൾ തോണ്ടുകയല്ലേയെന്നു ഗൗരവമായി ചിന്തിക്കണം. കുറേപ്പേരെങ്കിലും അത് മനസ്സിലാക്കിയതിന്റെ പ്രതിഫലനമാണ് കഴിഞ്ഞ പാർലമെന്റ് തിരഞ്ഞെടുപ്പിൽ കണ്ടത്. എല്ലാ വ്യവസ്ഥാപിത നിയമങ്ങളെയും തെറ്റിച്ചു കൊണ്ടാണ് ബിജെപിയിൽ ഒരു രണ്ടാംകിട നേതാവ് ദേശീയ നേതൃത്വത്തിലേക്ക് പൊങ്ങിവന്നത്. മൂന്നണി ഭരണത്തിലുള്ള ജനത്തിന്റെ എതിർപ്പുംകൂടി പ്രതിഫലിച്ചപ്പോൾ ആരും പ്രതീക്ഷിച്ച്ക്കാത്ത ഒരു ഭരണമുണ്ടായി. നേതൃപാടവമുള്ള നേതാവും മൂന്നണി കക്ഷികളുടെ സങ്കുചിത ഡിമാന്റുകളും ഇല്ലാത്ത ഒരു സർക്കാരിൽ നിന്നും ജനങ്ങൾക്ക് ഗുണകരമായ ഒരു ഭരണം പ്രതീക്ഷിച്ച്ക്കാമോ? പൊതുമേഖല സ്ഥാപനങ്ങളും സർക്കാർ വകുപ്പുകളും കാലത്തിനനുസരിച്ച മാറ്റങ്ങൾ ഉൾക്കൊള്ളാൻ തയ്യാറാകുമോ. അതാണ് പ്രസക്തമായ ചോദ്യം?.

✽

# മലിനപ്പെടുന്ന അന്തരീക്ഷവായുവും വർദ്ധിക്കുന്ന വാഹനപ്പെരുപ്പവും

Er. ഇ.എം. നസീർ

ചിറയിൻകീഴ്

(റിട്ട. എക്സി. എഞ്ചിനീയർ)

അനുനിമിഷം മലിമസമായിക്കൊണ്ടിരിക്കുന്ന അന്തരീക്ഷവായുവിന്റെ മാലിന്യത്തോടും ഗുണനിലവാര സൂചിക (National Air Quality Index) യും രേഖപ്പെടുത്താനുള്ള ഒരു പദ്ധതിക്ക് കേന്ദ്ര പരിസ്ഥിതി - വനം വകുപ്പ് തുടക്കം കുറിച്ചിരിക്കുന്നു. ഇതനുസരിച്ച് നാം ശ്വസിക്കുന്ന വായുവിലെ മാലിന്യ നിലവാരവും അതുണ്ടാക്കാവുന്ന ആരോഗ്യ പ്രശ്നങ്ങളും പഠിക്കാനുള്ള അവസരമാണ് സംജാതമായിരിക്കുന്നത്.

ഭാരതത്തിലെ 20 പ്രധാന നഗരങ്ങളിലെ അന്തരീക്ഷ വായു മാർകരോഗങ്ങൾക്കു കാരണമായേക്കാംവിധം വളരെയേറെ മലിനമായതാണെന്ന് ഈയിടെ ലോകാരോഗ്യ സംഘടന നടത്തിയ പഠനം കണ്ടെത്തിയിരുന്നു. ഇന്ത്യൻ നഗരങ്ങളിൽ ഡൽഹിയിലെ സ്ഥിതിയാണ് ഏറെ അപകടകരം. ഡീസൽ വാഹനങ്ങൾ ബഹിർഗമിക്കുന്ന പുക അന്തരീക്ഷത്തെ വിഷമയമാക്കിയത് ഡൽഹിയിൽ ഇതിനകം 3000 കുട്ടികളുടെ മരണത്തിനിടയാക്കിയിരുന്നു.

പ്രധാനമന്ത്രി ശ്രീ. നരേന്ദ്രമോഡിയുടെ “സ്വച്ഛ് ഭാരത് മിഷൻ” പദ്ധതിയുടെ തുടർച്ചയായാണ് വായുവിന്റെ ഗുണനിലവാര സൂചിക നിർണയിക്കാനുള്ള നടപടികളുണ്ടായത്. കേന്ദ്ര സംസ്ഥാന മലിനീകരണ നിയന്ത്രണ ബോർഡുകളുടെ സംയുക്താഭിമുഖ്യത്തിൽ രാജ്യത്തെ 240 നഗരങ്ങളിലെ അന്തരീക്ഷ വായുവിന്റെ ഗുണനിലവാരം നിരീക്ഷിച്ചുവരുന്നു.

വായുവിന്റെ നിലവാരത്തെ നല്ലത്, തൃപിതികരം, ഏറെക്കുറെ മലിനപ്പെട്ടത്, മോശം, വളരെ മോശം, ഗൗരവതരം എന്നിങ്ങനെ ആറിനങ്ങളിലായി തരംതിരിച്ചുള്ള വിവരങ്ങളാണ് ഈ പദ്ധതിമൂലം ലഭ്യമാക്കുക. അന്തരീക്ഷ വായുവിനെ മലിനപ്പെടുത്തുന്ന എട്ട് ഘടകങ്ങളുടെ (PM<sub>10</sub>, PM<sub>2.5</sub>, NO<sub>2</sub>, SO<sub>2</sub>, CO, O<sub>3</sub>, NH<sub>3</sub>, P<sub>6</sub>) സാന്നിധ്യം എത്രത്തോളമെന്ന് പരിശോധിക്കുകയാണ് ചെയ്യുന്നത്. മുൻകാലങ്ങളിൽ ഇവയിലെ മൂന്നിനങ്ങൾ മാത്രമേ പരിശോധിച്ചിരുന്നുള്ളൂ.

അന്തരീക്ഷ മലിനീകരണം നിയന്ത്രിക്കുന്നതിന്റെ ഭാഗമായി അതിനു കാരണമാകുന്ന പെട്രോളിനും ഡീസലിനും അധിക നികുതി ഏർപ്പെടുത്താനും ആലോചനയുണ്ട്. രാജ്യത്തെ 26 പ്രമുഖ നഗരങ്ങളിൽ ഉയർന്ന ഗുണനിലവാരമുള്ള യൂറോ-4 നിയമപ്രകാരമുള്ള ഇന്ധനമാണ് വിതരണം ചെയ്തുവരുന്നത്. മറ്റു നഗരങ്ങളിൽ നിലവാരം കുറഞ്ഞ ബി.എസ്-3 ഇന്ധനം ലഭ്യമാകുന്നു. രാജ്യം മുഴുവൻ ഉന്നത ഗുണമേന്മയുള്ള ഇന്ധനം ലഭ്യമാകണമെങ്കിൽ എണ്ണ ശുദ്ധീകരണ ശാലകൾ നവീകരിക്കേണ്ടതായി വരും. അതിനു വേണ്ടിവരുന്ന എണ്ണായിരം കോടി രൂപ സമാഹരിക്കാനാണ് അധിക നികുതിയെ കുറിച്ചാലോചിക്കുന്നത്.

ഉയർന്ന ഗുണനിലവാരമുള്ള ഇന്ധന ഉപയോഗത്തെക്കുറിച്ച് കേന്ദ്ര ആസൂത്രണ കമ്മീഷനംഗം സൗമിത്ര ചൗധരിയുടെ നേതൃത്വത്തിലുള്ള കമ്മിറ്റിയുടെ പഠന റിപ്പോർട്ടനുസരിച്ച് ഘട്ടംഘട്ടമായി യൂറോ-4,

# അരണ്യം

Er. പി. രാമചന്ദ്രൻ  
(റിട്ട. അസി. എഞ്ചിനീയർ)

കാട്ടിലെ മരങ്ങൾ  
 മരത്തിൻ ശിഖരങ്ങളിൽ  
 വള്ളിയുഞ്ഞാൽ !  
 ഇവിടെ സ്വർണ്ണത്തൊട്ടിലുകളില്ല  
 കാഞ്ചന പ്രഭയുമില്ല  
 വജ്രങ്ങളാൽ മനോജന്മമാം  
 വർണ്ണത്തൊട്ടിലുകളുമില്ല  
 ഉള്ളത് കീറത്തുണി കളിയുഞ്ഞാലുകൾ !  
 അതിൽ ആന്തോളനങ്ങളിൽ  
 ലയിച്ചുല്ലസിക്കും ബാല്യങ്ങൾ  
 താരാട്ട് പാടിയുറക്കും മാതൃത്വം !  
 മുകളിൽ അർക്കനും ചന്ദ്രതാരകങ്ങളും കാവൽ  
 താഴെ ദുമിദേവിയും !  
 സുഗന്ധം പേറും മന്ദമാരുതൻ  
 തലോടലേറ്റ് കുടാരങ്ങളിൽ  
 അന്തിയുറങ്ങും ജീവിതങ്ങൾ

ഇവിടെ ബാല്യവും, കൗമാരവും  
 യൗവനവും, വാർദ്ധക്യവും സുഖകരം !  
 "ഏസി"യും കണ്ണഞ്ചിക്കും പ്രഭാവലയങ്ങളും  
 ദീപാലങ്കാരങ്ങളുമില്ല,  
 ഉള്ളത്  
 ഇരുളും വെളിച്ചവും മാത്രം  
 അത് പ്രകൃതിയുടേതുമാത്രം  
 അതിന്റെ ഊർജ്ജം മാത്രം  
 ഊർജ്ജവും, സംരക്ഷിത ജീവിതവും  
 നിൻകാരുണ്യം മാത്രം !  
 അതിൽ നിർവൃതിയടയും ജീവിതങ്ങൾ

✱

യൂറോ - 5, യൂറോ - 6 നിയമങ്ങളനുസരിച്ചുള്ള ഗുണനിലവാരമുള്ള ഇന്ധനങ്ങളുടെ ലഭ്യത 2024 - ഓടുകൂടി കൈവരിക്കണം.

പെട്രോളിയം ഉൽപ്പന്നങ്ങളുടെ ഗുണനിലവാരം എത്രതന്നെ മെച്ചപ്പെടുത്തിയാലും നൂറുശതമാനം മാലിന്യമുക്തി ഒരിക്കലും കൈവരിക്കാനാകില്ലായെന്നതാണ് വസ്തുത. വാഹനപ്പെരുപ്പവും വാഹന

ഉപയോഗവും നിയന്ത്രിക്കുകയല്ലാതെ മറ്റു പോംവഴികളൊന്നുമില്ല. വൻഭീഷണിയായി കൊണ്ടിരിക്കുന്ന മാർകരോഗങ്ങളുൾപ്പെടെ യുള്ള ആരോഗ്യ പ്രശ്നങ്ങൾക്കും ആഗോള താപനത്തിനും കാലാവസ്ഥാ വ്യതിയാനത്തിനും മറ്റുയന്ത്രങ്ങൾക്കൊപ്പം വാഹനങ്ങളും പുറംതള്ളുന്ന ഹരിത ഗൃഹവാതകങ്ങൾക്ക് വളരെ വലിയ പങ്കുണ്ടെന്ന് വളരെ വൈകിപ്പോയെങ്കിലും നാം അറിയണം.

✱

## കുതിപ്പിലും കിതപ്പ് (ഭാഗം 3)

### പിരിച്ചെടുക്കാൻ കോടികൾ

ത്യശ്ശൂർ യൂണിറ്റ്

ഏതൊരു വ്യവസായമായാലും വാണിജ്യ സ്ഥാപനമായാലും സേവനാലയമായാലും അവിടെ ഉൽപ്പാദിപ്പിക്കുന്ന, സൂക്ഷിക്കപ്പെടുന്ന, നൽകപ്പെടുന്ന വസ്തുവിന്/സേവനത്തിന് നിരന്തര ആവശ്യകത ഉണ്ടായാൽ മാത്രമാണ് സ്ഥാപനം നിലനിൽക്കുകയോ അഭിവൃദ്ധിപ്പെടുകയോ ചെയ്യുകയുള്ളൂ. വൈദ്യുതി ബോർഡ് ഒരേ സമയം വ്യവസായവും വാണിജ്യസ്ഥാപനവും സേവനാലയവുമാണെന്ന് പറയാം. ഉൽപ്പാദിപ്പിക്കുന്ന വൈദ്യുതി മാത്രമല്ല പുറത്ത് നിന്ന് വാങ്ങുന്ന വൈദ്യുതിയും ബോർഡ് വിൽക്കുന്നുവല്ലോ. ഇതിനു പുറമെ കാലാ കാലങ്ങളിലുള്ള ഗവൺമെന്റ് നയങ്ങൾക്കനുസരിച്ച് സമൂഹത്തിലെ അവശതയനുഭവിക്കുന്ന വിഭാഗങ്ങൾക്ക് ഏറ്റവും മിതമായ നിരക്കിലോ അല്ലെങ്കിൽ സൗജന്യമായോ തന്നെ വൈദ്യുതി നൽകുന്നുണ്ട്.

സ്ഥാപനത്തിന്റെ നിലനിൽപ്പും സുഗമമായ മുന്നേറ്റവും അഭിവൃദ്ധിയും ആവശ്യകതയെമാത്രം ആശ്രയിച്ചല്ല വിൽക്കപ്പെടുന്നത്. (ഇവിടെ വൈദ്യുതി) എത്രയളവിലാണോ അതിനുള്ള ചിലവ് മുഴുവൻ സമയബന്ധിതമായി പിരിച്ചെടുക്കാനും സാധിക്കണം. വൈദ്യുതി ബോർഡിനെ എക്കാലവും അലട്ടുന്ന ഗുരുതര സ്ഥിതിവിശേഷമാണ് വിൽക്കുന്ന വൈദ്യുതിയുടെ മുഴുവൻ തുകയും സമയബന്ധിതമായി പിരിച്ചെടുക്കാനാകുന്നില്ല എന്നത്. സമയബന്ധിതം പോയിട്ട് അനിശ്ചിതമായി നീളുകയും ഒടുവിൽ കിട്ടാക്കടമായി എഴുതിത്തള്ളുന്നവയും സ്ഥാപനത്തിന്റെ

ആരോഗ്യത്തിനു തന്നെ ഹാനികരവുമാണ്; പണിയെടുക്കുന്നവരുടെ മനോവീര്യം തകർക്കുന്നവയാണ്. ഒരു വശത്ത് കോടികളുടെ കുടിശ്ശിക തുടരുമ്പോൾ തന്നെ വൈദ്യുതി ലഭിച്ചുകൊണ്ടിരിക്കുന്ന ഉപഭോക്താവും മറുവശത്ത് മൂന്നക്ക സംഖ്യയിലും താഴെയുള്ള തുകയ്ക്ക് കുടിശ്ശിക ഒരിക്കൽ വരുത്തുമ്പോൾ തന്നെ വൈദ്യുതി വിച്ഛേദിക്കപ്പെടുന്ന ഉപഭോക്താവും മുണ്ട്. എന്തൊരു വിരോധാഭാസം!

കുടിശ്ശിക തുടർന്നാലും വൈദ്യുതി ലഭിച്ചുകൊണ്ടിരിക്കുന്നവർ ആരൊക്കെയാണ് നമുക്ക് പരിശോധിക്കാം.

സർക്കാർ ഉപഭോക്താക്കൾ, വാട്ടർ അതോറിറ്റി, കൃഷിഭവൻ, ആനുകൂല്യം പറ്റുന്ന കൃഷി ഉപഭോക്താക്കൾ, വ്യവസായങ്ങൾ, ചില എച്ച്.ടി - ഇ.എച്ച്.ടി., ഒരു പരിധിവരെ എൽ.ടി.യും. ഇവരാണ് വൈദ്യുതി ബോർഡിന് അവകാശപ്പെട്ട പണമടയ്ക്കാതെ കഴിച്ചുകൂട്ടുന്നത്. ഇതല്ലാതെ വൈദ്യുതി മോഷണം, പ്രസരണ വിതരണ നഷ്ടങ്ങളും വൈദ്യുതി ബോർഡിന് നേരിടേണ്ടതുണ്ട്. കുടിശ്ശിക തുടരുന്ന ഉപഭോക്താക്കളുടെ നിസ്സംഗതകണ്ടാൽ തോന്നും ഇവരുടെ വാർഷിക ബഡ്ജറ്റിൽ വൈദ്യുതി ഉപയോഗത്തിനുള്ള ചിലവിന് യാതൊരു വകയിരുത്തലും ഇല്ലെന്ന്! അനാരോഗ്യകരമായ രാഷ്ട്രീയ സമവാക്യങ്ങളും വൈദ്യുതി ബോർഡിന്റെ പ്രവർത്തനങ്ങളിൽ അനാവശ്യ രാഷ്ട്രീയ ഇടപെടലുകളും കുടിശ്ശികകൾ കർശനമായി പിരിച്ചെടു

ക്കുന്നതിൽ നിന്ന് വൈദ്യുതി ബോർഡിനെ പിന്തിരിപ്പിക്കുന്നു.

ഇതിനെന്തു പോംവഴി? സർക്കാർ സ്ഥാപനങ്ങൾ, വാട്ടർ അതോറിറ്റി പമ്പ് ഹൗസുകൾ, കൃഷി ഉപഭോക്താക്കൾ, എച്ച്.ടി - ഇ.എച്ച്.ടി. ഉപഭോക്താക്കൾക്ക് എത്രയും വേഗം പ്രീപെയ്ഡ് മീറ്ററിംഗ് സംവിധാനം ഏർപ്പെടുത്തണം. ഇങ്ങനെയായാൽ മുൻകൂർ പണമടച്ച ശേഷമല്ലെ വൈദ്യുതി ഉപയോഗിക്കാൻ സാധിക്കുകയുള്ളൂ. അപ്പോൾ തോന്നിയ പോലുള്ള പാഴാക്കുന്ന തരത്തിലുള്ള ഉപയോഗം കുറയും. പ്രീ പെയ്ഡ് സംവിധാനമാക്കിയതിനു ശേഷമെങ്കിലും ലഭിക്കേണ്ടതായ കുടിശ്ശിക ഘട്ടംഘട്ടമായി പിരിച്ചെടുക്കുകയും ചെയ്യാം.

വൈദ്യുതി താരിഫ് വർദ്ധനയാവശ്യപ്പെടുമ്പോൾ സാധാരണ ജനങ്ങളും എന്തിന് റഗുലേറ്ററി കമ്മീഷനും പിരിച്ചെടുക്കാത്ത കോടികളെപ്പറ്റി വാചാലരാകാറുണ്ട്. പ്രതിഷേധിക്കാറുണ്ട്. ഇവരോട് എന്ത് മറുപടി പറയണമെന്നറിയാതെ വൈദ്യുതി ബോർഡ് പകച്ചു നിൽക്കുമ്പോൾ ജീവനക്കാരുടെ ആനുകൂല്യങ്ങൾ വെട്ടിച്ചുരുക്കണമെന്ന് ആവശ്യപ്പെടുന്നവർ ഏറെ.

കേരള സംസ്ഥാനത്തിലെ തനതായ ചിലവു കുറഞ്ഞ ജലവൈദ്യുത ശ്രോതസ്സുകൾ ഉപയോഗിക്കാൻ അനുവദിക്കില്ല, പ്രസരണ ലൈനുകൾ സ്ഥാപിച്ച് വൈദ്യുതി കൊണ്ടുവരാമെന്നുവെച്ചാൽ അതിനും തടസ്സം, വിറ്റ വൈദ്യുതിയുടെ കുടിശ്ശികയെങ്കിലും പിരിച്ചെടുക്കണമെന്ന് വെച്ചാൽ അതിനും തടസ്സങ്ങൾ, താരിഫ് വർദ്ധനയില്ലാതെ വൈദ്യുതിയന്വേഷ്ടം ലഭിക്കുകയും വേണം. ഇതെങ്ങനെ സാധിക്കും?

സ്ഥിര കുടിശ്ശികക്കാർ മാത്രമല്ല ഏത് ഉപഭോക്താവ് പ്രീപെയ്ഡ് സംവിധാനത്തിൽ പോകാൻ താല്പര്യപ്പെട്ടാലും അതിന് എല്ലാവിധ സൗകര്യവും ചെയ്യാൻ വൈദ്യുതി ബോർഡ് സജ്ജമായിരിക്കണം. പ്രീപെയ്ഡ് സംവിധാനത്തിൽ ഉപയോഗിക്കുന്ന യൂണിറ്റും അതോടൊപ്പം പരമാവധി ആവശ്യകതയും നിയന്ത്രിക്കപ്പെടും (നിശ്ചയിക്കപ്പെടും) എന്നതാണ് ഏറ്റവും ആകർഷക ഘടകം. ആവശ്യകത നിയന്ത്രിക്കപ്പെട്ടാൽ വിലകൂടിയ വൈദ്യുതി വാങ്ങലുകൾ കുറയ്ക്കാൻ സാധിക്കും. വൈദ്യുതി ബോർഡിന്റെ സാമ്പത്തിക രോഗ്യം മെച്ചപ്പെടുമെന്നും ഉറപ്പാണ്.

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**Letters to the Editor**

**കത്തുകൾ അയക്കേണ്ട വിലാസം**

**Chief Editor**

**Hydel Bullet, KSEB Engineers' Association**

**Panavila, Thiruvananthapuram - 01,**

**Phone : 0471 - 2330696**

**Email : [hydelbulletin@gmail.com](mailto:hydelbulletin@gmail.com)**

Letters by Association

No.KSEBEA/Letters/2014-15

13-11-2014

To

The Hon. Minister for Power  
Government of Kerala.

Sir,

Sub : Second transfer scheme - modifications -reg.

Ref : 1. S.R.O No. 871/2013 issued as per G.O(P)No.46/2013/PD dated 31-10-2013.

2. Discussions held on 02-12-2013

3. Our letter No. KSEBEA/Letters/2013-14 dated 16-12-2013

This has reference to the second transfer scheme notified as per ref(1) above and our letter in this regard as per ref(3) above. Though most of the suggestions proposed as per letter cited(3) above have been incorporated in the amendment to the scheme , some suggestions are still remaining unattended. As provided in Clause 9(2) of the second transfer scheme, any modifications, additions, etc shall be made only after discussions with Trade Unions/ Association of Officers. Accordingly, we furnish herewith the following discrepancies, already brought out in the second transfer scheme as per letter cited (3) above, for rectification as and when further modifications are made to the second transfer scheme:

- a. In clause 5(vi), the opening balance sheet of KSEB Ltd. as on 1<sup>st</sup> April 2012 has been drawn based on provisional balance sheet of KSEB as on 31<sup>st</sup> March 2012. We suggest to draw up the opening balance sheet of KSEB Ltd as on 01<sup>st</sup> April 2013 based on provisional balance sheet as on 31<sup>st</sup> March 2013. This is suggested considering the exorbitant power purchase that was necessitated during 2012-13 due to poor water availability and the fact that the entire power purchase cost has not yet been fully approved by the KSERC.
- b. Similarly in clause 6(8) ,the wordings" **but before the arrangements are put in place**" , at the end of the sentence beginning with "Till such arrangements are made", needs to be deleted.c. The 33 kV lines are seen included in the Schedule A1 (Transmission undertaking) as well as Schedule A3 (Distribution undertaking).This contradiction needs to be rectified.
- c. **Dam, employee/officer/ workmen/personnel** need to be defined properly to avoid any ambiguity in future.

We expect that the above suggested modifications in the second transfer scheme will be duly considered for incorporation as per provisions contained in Clause 9(2) of the second transfer scheme.

Yours faithfully,

Sd/-

GENERAL SECRETARY

## BOARD ORDERS

### KERALA STATE ELECTRICITY BOARD LIMITED

(Incorporated under the Indian Companies Act, 1956)

Registered Office: Vydyuthi Bhavanam, Pattom, Thiruvananthapuram -695 004

#### Abstract

Group Personal Accident Insurance Scheme - Renewal of the Scheme for the year 2015 -Order issued.

#### CORPORATE OFFICE (PERSONNEL)

B.O.(DF) No. 3008/2014(PS 9/GL/GPAIS/2012) Dated, Thiruvananthapuram, 19-11-2014

#### ORDER

As per order read as 1st paper above, the Group Personal Accident Insurance Scheme has been implemented through Kerala State Insurance Department from 2011 and is made applicable to State Government employees and teachers including Part Time Contingent employees, teaching and non teaching staff of Aided schools and Aided Colleges, employees of Panchayath and Municipal Common Service, Contingent employees of Municipal Common Service, employees of Universities, employees of all Public Sector Undertakings, Co-Operative Institutions, Autonomous Bodies and Government Institutions. As per Government Order read as 9th above, the Scheme is extended in the Year 2014 and the annual premium was enhanced for the Employees of Kerala State Electricity Board and Kerala State Road Transport Corporation to ₹ 750/- and ₹450/- respectively and '300/- for all other employees who are subscribers to State Life Insurance/Group Insurance and are being governed by KSRs, with an assured sum of ₹ 10 lakh.

The Kerala State Electricity Board Limited vide order referred 10th above has adopted Government Order referred 9th above and renewed the Group Personal Accident Insurance Scheme for a further period of one year with effect from 01-01-2014 to 31-12-2014 for implementation in Board in accordance with the terms and conditions of the Scheme appended with G.O. read 1st paper above and modifications as per G.O. read 9th above.

The term of the Scheme expires on 31-12-2014. Having examined the proposal of the Director, Kerala State Insurance Department, to renew the Group Personal Accident Insurance Scheme for a further period of One year, the Government, vide order read 11th above, have renewed the Group Personal Accident Insurance Scheme for a further period of One year with effect from 01-01-2015 to 31-12-2015 subject to the following modification to the existing proviso to para(6) of G.O(P) No.616/10/Fin dated 23.11.2010.

"Provided that no compensation shall be paid for death or disablement as described above arising out of intentional self injury, suicide, attempted suicide



and death or disablement due to accident while under the influence of intoxicating liquor or drugs including drugs in Nattuvaidyam and death or disablement while breaching law with criminal intent”

All other terms and conditions in the Government Orders referred above remain unchanged.

Having considered the matter in detail, the Board is pleased to adopt the Government Order read as 11th above renewing the Group Personal Accident Insurance Scheme for further period of One Year with effect from 01-01-2015 to 31-12-2015 for implementation in Kerala State Electricity Board Limited in accordance with the terms and conditions of the Scheme appended with the Government Order referred 1st above and modifications issued thereafter.

The Financial Adviser shall issue detailed instructions for deduction of premium towards GPAIS by the ARU'S concerned from the Salary of the employees for the month of November 2014 and to remit the collection under the heads of accounts specified therein within the time limit prescribed in line with the Government Order read 11th paper above.

By Order of the Director  
Sd/-

M. Shahul Hameed  
Secretary (Administration)

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## **KERALA STATE ELECTRICITY BOARD LIMITED**

(Incorporated Under the Indian Companies Act, 1956)

Registered Office: Vydyuthi Bhavanam, Pattom,

Thiruvananthapuram-695 004

### **ABSTRACT**

KSERC order dated 30th September- 2014 on Petition No. OP-9 of 2014 in the matter of Transmission charges, wheeling charges and cross subsidy charges payable by open access consumers, meter rent, Pooled Cost of Power Purchase and Cost at Voltage Model - implementation- Sanction accorded- Orders issued.

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### **CORPORATE OFFICE (Commercial & Tariff)**

B.O. (FTD)) No.2891 /2014 (KSEB/TRAC/Tariff Rev-2014-15) dated ,Tvpmm 05.11.2014

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Read: 1. KSERC order dated 30.09.2014

2. Note No. KSEB/TRAC/ Tariff Rev2 014-15/open access charges dated 17.10.2014 of the Chief Engineer (Commercial & Tariff).

### **ORDER**

Kerala State Electricity Regulatory Commission (KSERC) vide the order dated 30-09-2014 had revised the transmission charges, wheeling charges, grid support charges, cross subsidy surcharge payable by open access consumers, meter rent, pooled Cost of Power Purchase and cost at Voltage Model for the year 2014-15.

2. The transmission charges, wheeling charges and cross subsidy surcharge payable by the open access consumers for the year 2014-15 is given below.

Table-1. Transmission charges, wheeling charges and cross subsidy charges for theyear 2014-15

Particulars	Transmission charges (Rs/ kWh)	Wheeling charges (Rs/kWh)	Cross subsidy charges (Rs/ kWh)	Total (Rs/ kWh)
EHT- 66 kV	0.26		0.00	0.26
EHT- 110 kV	0.26		0.00	0.26
EHT- 220 kV	0.26		0.00	0.26
EHT General	0.26		1.80	2.06
EHT Commercial	0.26		2.10	2.36
Railways	0.26		0.00	0.26
HT-1 Industry(A)	0.26	0.32	0.00	0.58
HT-1 Industry(B)	0.26	0.32	0.50	1.08
HT-II General(A)	0.26	0.32	0.10	0.68
HT-II General(B)	0.26	0.32	1.80	2.38
HT III Agriculture (A)	0.26	0.32	0.00	0.58
HT III Agriculture (B)	0.26	0.32	0.00	0.58
HT-IV Commercial	0.26	0.32	2.30	2.88
HT V Domestic	0.26	0.32	0.00	0.58

3. KSERC vide order dated 30.09.2014 has also revised the meter rent fort all consumers based on the following assumptions

- a. The average cost of meter is taken as Rs 500/- for single phase meters and Rs 1200/- for three phase meters .
- b. The useful life of the meter is assumed as 15 years.
- c. The rate of interest is adopted as 12%.

The existing meter rent, and the meter rent revised by KSERC w.e.f 01-10-2014 is given below.

Table-2. Meter rent approved by KSERC w.e.f 01-10-2014

Sl No	Description	Meter rent (Rs/month or part thereof)	
		Existing meter rent	Revised meter rent wef 01.10.2014
1	Single phase static energy meters with LCD and ToD facility and with ISI certification	10	6
2	Three phase static meters with LCD and ToD facility and with ISI certification	20	15

3	LT CT operated three phase four wire static energy meters (Class 0.5 accuracy) with LCD and ToD facility and ISI certification	75	30
4	3 phase AC static tri-vector energy meters with ABT, ToD facility and compliant to Device Language Message Specification (DLMS) protocol		1000

3. While approving the ARR& ERC for the year 2014-15, KSERC had approved the amount expected from meter rent as Rs 175 crores as income as part of the non-tariff income. However by revising the meter rent as above, the reduction of non-tariff income from meter rent is about Rs 35.00 crore during the year 2014-15.
4. KSERC has also approved Rs 3.14 per unit as the average pooled cost of power purchase for the year 2014-15 for the purpose of granting renewable energy certificates (REC), in conformity with the regulation 5 (1)(c) of the CERC (Terms and Conditions for Recognition and Issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulation, 2010.
5. KSERC has approved the cost of supply at EHT system, HT system and LT system as Rs.3.50/Unit, Rs.4.04/Unit and Rs.5.60/Unit respectively. However, KSERC has approved the tariff for the year 2014-15 based on the average cost of supply instead of cost of supply at different voltage levels
6. The Chief Engineer (Commercial & Tariff) vide note read as above has placed the order before the Board for compliance.
7. Having considered the recommendations of Chief Engineer (Commercial & Tariff), KSEBL hereby orders to :
  - (1) Adopt the transmission charges, wheeling charges and cross subsidy surcharges applicable to the open access consumers approved by the KSERC vide the order dated 30-09-2014 as detailed under Table-1 above.
  - (2) Adopt the meter rent as approved by KSERC vide order dated 30.09.2014 as given in the Table-2 above.
  - (3) Adopt the average pooled cost of power purchase for the year 2014-15 as 3.14 per unit approved by KSERC vide order dated 30.09.2014, for the purpose of granting renewable energy certificates (REC), in conformity with the regulation 5 (1)(c) of the CERC (Terms and Conditions for Recognition and Issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulation, 2010.
  - (4) Encourage the consumers to remit the cost of meter along with other charges and fees to be remitted to KSEBL at the time of application of service connection, so that meter rent can be avoided to such consumers.
  - (5) KSEBL may take up the revenue shortfall on account of reduction in meter rent for the year 2014-15 from the Non-tariff income.
  - (6) the O/o the Director (SCM & Generation Electrical) may provide detailed comments on the assumptions adopted by the Commission for revising the meter rent including (a) useful life of the meters as 15 years and (b) the average cost of meter - as Rs 500/- for single phase meters and Rs 1200/ for three phase meters

By Order of the Full Time Directors  
Sd/-  
M.Shahul Hameed  
Secretary (Administration)

**KERALA STATE ELECTRICITY BOARD LTD**

(Incorporated under the Indian Companies Act,1956)

Registered Office: Vydyuthi Bhavanam, Pattom

Thiruvananthapuram-695 004

Realisation of proportionate amount for transmission works-Sanction accorded- orders issued

**Corporate Office (SBU-T/SO)**

B.O.(FTD)No.2949/2014(D(T&SO)/T2/supply code/2014)

Thiruvananthapuram Dated: 13.11.2014

- Read: 1. Letter No.CE(TS)/EE2/AEEIX/TVPM/General/583 dtd 20.09.2014 of the Chief Engineer(Trans. South)
2. Remarks of the Financial Adviser dated 16.10.2014
3. B.O.(FB) 2390/2009 (TPC2/314/2009) dtd 15.09.2009
4. FTD Note No. D(T&SO)/T2/supply code/2014) dtd 30.10.2014 of the Director(Trans.& System Operation)

**ORDER**

The Chief Engineer(Trans.South) as per the letter read as 1st paper above reported that several bulk consumers are requesting power for which the transformer capacity /feeder outlets of the substation concerned have to be enhanced. The consumers are willing to pay proportionate expenditure as per the provisions of the Kerala Electricity Supply Code 2014.

As per clause 36 of the Kerala Electricity Supply Code 2014:"The expenditure for extension or up-gradation or both of the distribution system undertaken **exclusively** for giving new service connection to any person or a collective body of persons or a developer or a builder or for enhancing the load demand of a consumer or a collective body of consumers or a developer or a builder shall be borne by the respective applicant or consumer or collective body of consumers or developer or a builder shall be borne by the respective applicant or consumer or collective body of consumers or developer or builder as the case may be in the following cases:

- (1) for meeting the demand of an applicant with a contract demand above 1 MW
- (2) for meeting the additional demand of existing consumers if the aggregate demand including the additional demand applied for is above 1 MW
- (3) for meeting the demand of the domestic or commercial or industrial complex or colony constructed by a developer or a builder with a demand above 1 MW
- (4) for meeting the demand of a high rise building irrespective of its demand
- (5) for meeting the demand of power intensive unit irrespective of its demand and
- (6) for meeting the demand of a consumer requesting for dedicated feeder or protected load status irrespective of its demand

Provided that, if due to technical reasons, the extension or upgradation or both to be undertaken by the licensee as per this regulation is more than the requirement of such consumer, the expenditure for such extension or upgradation or both to be realised from the consumer shall be limited to the proportionate expenditure."

In this regard, the Chief Engineer(Trans.South) has pointed out that the deposit works as mentioned above, does not come under the purview of the planned works and hence might not have budget provisions. Only proportionate expenditure can be realised from the consumer. The

realisation of balance amount and the possibility to collect proportionate expenditure from the subsequent applicants needed clarification.

The Financial Adviser remarked that for such deposit works, estimate is to be prepared considering the current market rate along with statutory provision and supervision charges and demand notice issued to the firm. The work to be commenced once the remittance is made. As budget provision cannot be made for this type of work which cannot be planned, necessary provision can be made in the revised estimate. Special care shall be exercised so that cash flow will not get affected due to huge investments without budget allocation and only on collecting the proportionate amount. As for accounting, the entire expenditure is to be booked separately. This has to be set off as and when proportionate expenditure are realised from consumers. Methodology to maintain the capital expenditure details of a particular work, realising the same from prospective consumers and the internal control that can be exercised are to be detailed to the Financial Adviser for allocating suitable account heads and issuing accounting procedures.

As per the provisions of the Supply Code 2014 only proportionate expenditure is to be realised by the licensee for the works required to be executed for providing the required power to the applicant. Realising the balance expenditure incurred by Board for the work from the subsequent prospective consumers needs clarification.

Having considered the above, the Board hereby:

1. authorises the Chief Engineer (Commercial & Tariff) to take up the matter with KSERC for amendment of the clause 36 in the supply code 2014 to enable KSEBL to collect proportionate expenditure from subsequent applicants also till the enhanced capacity of the expansion/upgradation work already undertaken exhausts.
2. accords sanction to prepare the estimate for the deposit works based on current market rate along with statutory provision and supervision charges. The work shall be commenced once the above remittance is made. The balance expenditure shall be booked under normal development. Also, the proportionate expenditure shall be collected from the subsequent applicants and accounted as 'consumer's contribution' in anticipation of the amendment of supply code.

By Order of the Full Time Directors

Sd/-

**M.SHAHUL HAMEED**  
**SECRETARY(Administration)**

**KERALA STATE ELECTRICITY BOARD LTD**

(Incorporated under the Indian Companies Act, 1956)

Registered office: Vydyuthi Bhavanam, Pattom, Thiruvananthapuram -695004

**Abstract**

Revision of standard rates of fast moving materials under distribution wing as on 2013-14 – Approved- Reg.

CORPORATE OFFICE (SCM & Generation- Ele)

B.O (FTD) No. 2978/2014(SCM/TA.41/dis cost data/13-14) Tvpm Dated 15 .11.14

Read: 1. FTD note no. SCM/TA.41/dis cost data/13-14 dated 11.11.14 of the Director (SCM & Generation -Electrical).

**ORDER**

As per Board order dated 22.7.14, the Chief Engineer (SCM) is authorized to furnish the standard rate (weighted average cost) as on 2013-14, of all distribution materials with due verification by CIA and got approved by FTD and furnish the same to Chief Engineer (Commercial & Tariff) before 30.8.14.

Accordingly, the cost of materials purchased by the distribution Chief Engineers and Dy. Chief Engineers were collected by Chief Engineer (SCM) and the weighted average cost was calculated. The rate of line materials were furnished by the Dy. Chief Engineer, Civil circle, Pallom. Material for which tender was invited with variable price like distribution transformer, ACSR conductors, 11kV, 3x300 sq.mm cable and PSC poles, the rates were updated with IEEMA price variation formulae. The revised standard rates were furnished to the Chief Internal Auditor for verification. The CIA vide letter dated 4.11.14 has certified the rates of 86 fast moving items which were purchased during 2013-14. The rates of certain items like fuse units of certain ratings (415v,32A, 415v,63A), 22kV/110v CTPT unit, 11kV/110v CTPT unit, 22kV Disc Insulator, 22kV pole top bracket, 22kV stay insulator and LT XLPE cable of certain sizes (1x25 sq.mm, 1x70 sq.mm, 2x50 sq.mm, 2x 95 sq.mm, 3.5x 95 sq.mm, 3.5x120 sq.mm) were not included in the list as these items were not purchased in the field during 2013-14. The Chief Internal Auditor has stated to ensure = that if future purchases and issues in respect of these items are made, the purchase cost may be considered as standard rate of the items so purchased instead of the standard rates of 2011-12.

The matter was placed before the Full Time Directors vide note read as above to decide whether to approve the standard rates of 86 fast moving items for 2013-14 certified by CIA.

Having examined the matter in detail, the Full Time Directors meeting held on 14.11.14 decided to approve the standard rates of 86 fast moving items for 2013-14 certified by CIA and enclosed as Annexure.

By order of the Full Time Directors  
Sd/-  
M.Shahul Hameed  
Secretary (Administration)

Sl. No.	Name of Item	Unit	Rate in Rs
<b>TRANSFORMERS</b>			
1	Transformer 3Ph 25 KVA 11KV/433V ONAN	E	51905.00
2	Transformer 3Ph 100 KVA 3 Star 11KV/433V ONAN	E	155844.00
3	Transformer 3Ph 160 KVA 3 Star 11KV/433V ONAN	E	227505.00
4	Transformer 3Ph 250 KVA 11KV/433V ONAN	E	237130.00
5	Transformer 3Ph 100 KVA 22KV/433V ONAN	E	145185.00
<b>METERING EQUIPMENTS</b>			
<b>Energy Meter (EM)</b>			
6	EM 1x240V CL 1.8 5-30A Static LCD	E	660.00
7	EM 3x240V CL 1.8 10-60A Static LCD	E	2052.00
8	EM 3x240V CL 0.55 45A Static LCD & TDD (LT CT Meter)	E	2441.00
9	ABT meter with GPS	E	103794.00
10	DTR Box	E	3142.00
<b>CABLES AND CONDUCTORS</b>			
		Km	
11	Conductor ACSR Raccoon	Km	64284.00
12	Conductor ACSR Rabbit	Km	49131.00
13	Conductor ACSR Wessal	Km	26785.00
14	Conductor ACSR Squirrel	Km	18058.00
15	Cable 1100V Weather Proof AL 1x1.8 sq mm (1/1.4 TC)	Coil	723.00
16	Cable 1100V Weather Proof AL 2x2.5 sq mm (1/1.8 TC)	Coil	775.00
17	Cable 1100V Weather Proof AL 2x5.0 sq mm (1/2.8 TC)	Coil	1345.00
18	Cable 1100V XLPE AL 1x55 sq mm Unarmoured	m	47.00
19	Cable 1100V XLPE AL 1x55 sq mm Unarmoured	m	73.00
20	Cable 1100V XLPE AL 1x125 sq mm Unarmoured	m	91.00
21	Cable 1100V XLPE AL 1x150 sq mm Unarmoured	m	103.00
22	Cable 1100V XLPE AL 1x185 sq mm Unarmoured	m	157.00
23	Cable 1100V XLPE AL 1x240 sq mm Unarmoured	m	228.00
24	Cable LT PVC AL 50 sq mm	m	51.00
25	Cable LT PVC AL 70 sq mm	m	68.00
26	Cable LT PVC AL 95 sq mm	m	77.00
27	Cable LT PVC AL 120 sq mm	m	90.00
28	Cable UG 11KV XLPE AL 3x300 sq mm	Km	9,51,390.00
<b>POLES</b>			
29	Pole PSC 7 H	E	3111.00
30	Pole PSC 8 H	E	5845.00

Contracted:

*Therese Switzer*

*Ulf*  
DAE, Govt of

31	Pole PSC 9 M	E	3830.00
32	Pole A-Type 10 M	E	12894.00
33	Pole A-Type 11 M	E	13838.00
34	Pole A-Type 12 M	E	15189.00
35	Pole A-Type 13 M	E	17258.00
36	Pole A-Type 14 M (30kV)	E	27082.00
37	Pole A-Type 12 M (30kV)	E	17888.00
38	Lattice A-Type	E	76029.00
39	Lattice B-Type	E	110048.00
40	Lattice C-Type	E	87394.00
<b>ELECTRIC LIGHT FITTINGS</b>			
41	Street Light Fittings for 2x40W FT	mat	1246.00
42	Pipe Fittings for double FT with GBH for Street Light Fittings	mat	482.00
<b>LINE MATERIALS</b>			
43	AG Switch 11KV/ 400A	mat	12041.00
44	AG Switch 33KV/ 400A	mat	18204.00
45	Clamp GI for LT Cross Arm (24 Line)	E	83.00
46	Clamp GI for V-Cross Arm	E	156.00
47	Cross Arm GI 2-Line	E	126.00
48	Cross Arm GI 4-Line	E	436.00
49	Cross Arm GI Channel 1.8M	E	801.00
50	Cross Arm GI Channel 2.4M	E	1273.00
51	Cross Arm GI Channel 3M	E	1987.00
52	Cross Arm GI Channel 3.18M	E	2119.00
53	V-Cross Arm GI 11KV	E	638.00
54	Disc Insulator 11KV 40KN, Porcelain	E	280.00
55	Lightning Arrester 8KV 50KA	E	298.00
56	Lightning Arrester 8KV 10KA (Station Class)	E	2648.00
57	Lightning Arrester 22KV	E	1427.00
58	Pin Insulator with Pin 4.15V	E	67.00
59	Pin Insulator with Pin 1.5V	mat	127.00
60	Pin Insulator with Pin 22KV	mat	388.00
61	MG cleat	E	63.00
62	Earth Pipe	E	427.00
63	Pole Top Bracket 11KV (F-Clamp)	E	113.00
64	Shackle Insulator 4.15V with 50V	E	60.00
65	Single Tension Clamp 11KV (Hardware Fitting)	E	272.00
66	Stay Insulator 4.15V	E	13.00

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 SUBHASH CHANDRA  
 SENIOR ASSISTANT AUDITOR

  
 SUBHASH CHANDRA  
 SENIOR ASSISTANT AUDITOR



69	Stay Insulator 11kV	pc	35.00
69	GI wire sq.4 mm	Kg	64.00
69	GI wire 2.8 mm	Kg	68.00
70	Stay Rod GI 16 mm (LT Stay Rod)	E	247.00
71	Stay Rod GI 30 mm (HT Stay rod)	E	399.00
72	Stay Tightner GI 415V (Turn Buckle LT)	E	143.00
72	Stay Tightner GI 11kV (Turn Buckle HT)	E	330.00
74	Stranded Wire GI 73.5 sq mm (LT Stay Wire)	Kg	81.00
75	Stranded Wire GI 73.16 sq mm (HT Stay Wire)	Kg	88.00
<b>CONTROL AND PROTECTION</b>			
76	11kV RMU (extendible, DA compatible) with 3 nos. SF6 load break switches and vacuum/SF6 breakers for connecting distribution transformers, outdoor type (CCTC)	E	302511.00
77	11kV RMU (extendible, DA compatible) with 3 nos. SF6 load break switches, outdoor type (CCTC)	E	287337.00
78	11kV RMU (extendible, DA compatible) with 2nos. SF6 load break switches & earthing switch on both sides outdoor type (GDDG)	E	121729.00
79	Fuse Drop Out 11kV	E	1048.00
80	Fuse Unit 415V Porcelain 100A	E	354.00
81	Fuse Unit 415V Porcelain 200A	E	357.00
82	Fuse Unit 415V Porcelain 300A	E	1073.00
83	Fuse Wire 100A	Kg	987.00
84	Fuse Wire 200A	Kg	727.00
85	Fuse Wire 300A	Kg	888.00
<b>FASTNERS</b>			
86	Bolt & Nut GI (assorted size)	Kg	81.00

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**CHIEF INTERNAL AUDITOR**  
 HYDEL & ELECTRICIAN CO.

  
**Dy. Chief Engineer**  
 with powers of Chief E

**KERALA STATE ELECTRICITY BOARD LTD.**

(Incorporated under the Indian Companies Act, 1956)

Registered Office: Vyduthi Bhavanam, Pattom, Thiruvananthapuram-695 004

**Abstract**

Procurement of Safety Equipments and Materials- Approval of list of items sanctioned- Regarding

**CORPORATE OFFICE DIRECTOR (DISTRIBUTION & SAFETY)**

BO (CMD) No.2661/2014/(D (D&S)/Safety/Safety Materials/Panel of Vendors/2014-15) Dated Thiruvananthapuram 14.10.2014

- Read:-
1. Minutes of the meeting held by the Chairman on 13.10.2013 with FTMs & HODs
  2. Note No. SCKSEB/ Safety Materials/Panel of Vendors/2014/104 dated 22.8.2014 submitted to the CMD

**Order**

As part of observing the Safety Procedures in tune with the recognized statutory Safety Regulations, the field staffs of K S E B Ltd are to be provided with standard quality Safety Materials and Personal Protective Equipments. During the inspections conducted as part of providing safe working atmosphere as a precondition for the Safety Management System, visualized in the Industry, it has been noted that many of the personal Protective gadgets and Safety Materials which are being used in the field does not keep at par with the standard. While arranging local purchase of such materials, the quality and standard of the materials cannot be assured. The cost of standard materials is so high that the purchasing limit exceeds the financial powers given to Executive Engineers and Assistant Executive Engineers.

The Chief Engineer (CP) & Safety Commissioner vide note read above highlighted this issue and proposed to standardize the quantity and quality of the Safety Equipment required for each Section and to arrange procurement of materials on an yearly rate contract from reputed manufactures after ensuring its quality.

Having considered the proposal, the Board hereby accord sanction for the list of Safety Equipments (annexed herewith) as per the standard to be made available in all Electrical Sections. Also a centralized yearly Rate Contract System shall be adopted for purchasing the specified safety equipments from reputed manufactures enlisted for the purpose. The Procurement shall be arranged at the Office of the Director (SCM & Generation Electrical).

Orders are issued accordingly.

By order of the Chairman & MD  
Sd/-  
SHAHUL HAMEED M.  
Secretary (Administration)

## SBI gives blueprint for Rs. 50,000cr power fund

### A LIFELINE FOR POWER COS?



■ The sector is reeling under heavy financial crisis

**254,000 MW**  
India's total installed power capacity

**136,000 MW**  
Capacity under the private sector

**₹6.23 lakh cr**  
Investments by private sector, including banks, stuck in various projects

**₹4-5 lakh cr**  
Banks' recoverable stressed projects

■ The new fund will help recover banking sector resources that are stuck in various power projects

■ Power sector PSUs will contribute 49% to the fund

■ The balance would come from banks and foreign investors

#### PROBLEMS FACING THE SECTOR

- Fuel shortage
- High input prices of coal
- Depreciation issues
- Delay in land acquisition
- Transmission bottlenecks
- Poor financial health of distribution companies
- Time and cost overruns

# Indian Power Sector Roundup

India's largest lender, State Bank of India, has submitted details of the proposed power sector fund, which is likely to be set up with a corpus of Rs. 50,000 crore for reviving stalled power projects in the country. It will also help recover thousands of crores worth of banking sector funds that are stuck in such projects.

According to the concept paper worked out by SBI, a copy of which is available with HT, the fund would have 49% contribution from power sector PSUs, with the balance coming from banks and foreign investors.

"The fund would provide equity support and undertake some debt restructuring," said the minutes of the October 17 meeting, quoting SBI chairperson Arundhati Bhattacharya.

The meeting was held at SBI's head office in New Delhi and attended by senior officials of the finance and power ministries, along with heads of banks and financial institutions including SBI, Punjab National Bank and India Infrastructure Finance Company Ltd, besides the Association of Power Producers (APP), which represents the country's top power companies.

The proposal of the fund was first mooted in June soon after power and coal minister Piyush Goyal had taken charge and met the bankers on power sector issues. SBI was asked to work out the finer details.

“The government is looking at options by which it can become feasible for banks to fund long-term projects, which include power as well. At present, there are a few issues that concern banks and these need to be addressed for speedy financing decisions,” a senior SBI official said.

Private sector companies have contributed significantly to the installed capacity in the power sector during 2007 to 2012, with their share rising to 67% by August 2014 from 55% in 2012.

State-run power sector financial institutions including Rural Electrification Corp, Power Finance Corp and cash-rich companies such as NTPC, along with various public and private sector banks, are likely to contribute to the corpus of the fund, officials with knowledge of the proceedings said.

“As much as 136,000 MW of capacity, out of India’s total installed capacity of 254,000 MW, involving an investment of over Rs. 6.23 lakh crore, has been added by the private sector,” according to a presentation made by the APP during the October 17 meeting. “The capital charge on the investments (by the private sector) is about Rs. 90,000 crore.”

Fuel shortage, high coal import prices, a depreciating rupee, delays in land acquisition, transmission bottlenecks and poor financial health of distribution companies are some of the issues plaguing the power sector. Besides time and cost overruns, the projects are also facing funding constraints. This has resulted in higher non-performing assets (NPAs) - loans that do not yield returns - for banks, besides affecting economic growth and the overall investment climate.

High cost of alternative fuels and the reluctance of discoms to procure power have resulted in substantial decline in revenues of power companies, leading to cash flow issues. The high construction risk is keeping away new investors and project developers are finding it difficult to manage long-term contractual obligations.

*(Source : Hindustan Times)*

### **Govt approves funds for power sector push**

The National Democratic Alliance (NDA) government on Thursday approved an outlay of Rs.43,033 crore to fund an ambitious initiative to supply electricity through separate feeders for agricultural and rural domestic consumption, aimed at providing round-the-clock power to village households. In addition, the cabinet also approved spending Rs.32,612 crore on an integrated power development initiative, which involves strengthening sub-transmission and distribution systems, according to a government statement.

Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY), named after an icon of the ruling Bharatiya Janata Party (BJP), is aimed at ensuring around eight hours of quality power supply to agricultural consumers and 24-hour electricity to households. In addition, it would also help reduce India's aggregate transmission and commercial (AT&C) losses by five percentage points from the present 27%. Separating electricity feeders is aimed at ensuring that while farmers receive optimal electricity, the quality of power and its availability for rural households also improves. It will also ensure that users are billed and technical and commercial losses because of theft are reduced.

The scheme is based on an initiative called Jyotigram Yojana in Prime Minister Narendra Modi's home state of Gujarat and is named after the late Deendayal Upadhyaya, a leader of the erstwhile Bharatiya Jana Sangh, the forerunner of the BJP. Mint reported on 8 September about the proposed outlays. The cabinet also decided to merge the United Progressive Alliance (UPA) government's Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) and the restructured accelerated power development reform programme (R-APDRP) with DDUGJY and Integrated Power Development Scheme (IPDS), respectively.

RGGVY is a programme aimed at boosting rural electrification for which an outlay of Rs.39,275 crore, including budgetary support of Rs.35,447 crore, has already been approved. "This outlay will be carried forward to the new scheme of DDUGJY in addition to the outlay of Rs.43,033 crore," the government's press statement said. The previous government last year approved an outlay of Rs.44,011 crore for the R-APDRP, including a budgetary support of Rs.22,727 crore. The outlay "will be carried over to the new scheme of IPDS", the statement added.

In line with Prime Minister Modi's strategy of accelerating development of infrastructure along the country's frontier, the cabinet also approved Rs.5,111.33 crore for the North Eastern Region Power System Improvement Project for the six states of Assam, Manipur, Meghalaya, Mizoram, Tripura and Nagaland. The project is aimed at strengthening the intra-state transmission and distribution systems in the region.

*(Source : Livemint)*



### **AIPEF writes to PM on Electricity Act amendment**

All India Power Engineers Federation (AIPEF) has written to Prime Minister demanding a thorough review of the Electricity Act 2003 before attempting an amendment to act.

AIPEF in a letter to Prime Minister with copy to Power Minister has opposed the concept of multiple supply licensees to segregate carriage and content in power

distribution sector. In the proposed amendment there will be one single distribution company which will be responsible for maintaining the distribution network and there will be several supply licensees.

Multiple supply licensees at the same area of operation aimed at retail competition of improving quality and reducing cost through market competition is not going to be successful in the scarce power conditions. The multiple licensee system will help only “cherry picking” and the deterioration of the incumbent public sector licensee, which will be the only responsible for supplying electricity to the unprivileged common.

The proposed amendment will allow any person with sufficient financial capability to apply for a supply license and then the only purpose of supply franchisee is to accommodate persons not ready to come under regulatory control.

This is an extremely serious issue given the financial dependence of State distribution companies on the revenue from high end consumers. Eventually all these changes will lead the system to chaos and it will ultimately affect the social development of the nation.

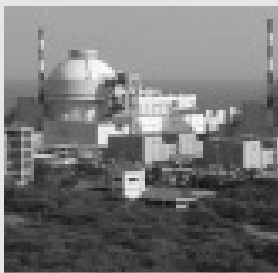
Even the past performance of several input based distribution franchisees suggests the need to bring its functioning and operation under regulatory scrutiny. There are several cases of franchisees not properly paying their bills to the Discoms for several months, thereby severely straining the Discoms working capital needs.

Further the proposed amendment makes the Electricity and Tariff Policies adopted by the UPA government as mandatory in functions of State Electricity Regulatory commissions. This provision overrides the central-state relationship in a concurrent subject like electricity. Hence making the policy decisions of Central Government as mandatory is against the federal set up of governance and is not proper. The changes in the constitution of committee entrusted to select the members of State Regulatory commission also take away the powers with the State government.

All India Power Engineers Federation feels that the proposal for amending the Act will prove as a step worsening the situation.



### **Kudankulam nuclear plant to start commercial ops by Jan 22**



Commercial operations of the first 1,000 MW unit of Kudankulam nuclear power project is now expected to start by January 22, 2015, as an earlier deadline could not be met due to technical problems.

The Nuclear Power Corporation, which is implementing the 2,000 MW plant, has received permission from the Central Electricity Regulatory Commission (CERC) for extending the deadline for commercial operation.

The plant, having two units of 1,000 MW capacity each, is being set up with technical cooperation of Russia. The first unit could not start commercial operations by the earlier specified date of October 22 on account of certain technical problems.

Nuclear Power Corp submitted before the CERC that technical problem relating to the turbine would be resolved by December 22, 2014 and sought one month time "for eventualities" during the rectification work.

Taking into consideration the technical problem, the regulator in an order dated November 10 has allowed Nuclear Power Corp to inject infirm power into the grid for the commissioning tests including full load test of the first unit till January 22, 2015.

Infirm power refers to supply that is not committed and mainly fed into the grid as part of testing purposes.

At Unit-I, the first and second stage turbine blades and diaphragm have been damaged which are being replaced by taking from Unit-II, according to Nuclear Power Corp.

"The replacement of blades and diaphragm would take about from 7 to 8 weeks time. Therefore, the COD is expected to be achieved by January 22, 2015," the company had told the CERC.

Successful testing of reactor, turbine-generator, feed water pump system and the control and protection system of different transients are mandatory as per Atomic Energy Regulatory Board, before declaring Commercial Operation Date (COD) of the project.

COD refers to the day from which the unit starts full commercial generation of electricity.

CERC has also asked the company to file a status report on rectification work carried out at the unit by December 30.

Nuclear Power Corp, after synchronised the unit into the grid on July 15, had earlier planned to start commercial operations in September.

"However, while raising power, an increase in turbine thrust bearing temperature was observed and the temperature touched operational limit on reaching power level of 850 MW.

"For attending to the technical problem, Turbine-Generator was taken off the bar and reactor was shut down on September 26, 2014," the company has informed CERC.

The turbine high pressure casing is being dismantled for carrying out inspection of the turbine and identify the problem along with specialists of the turbine manufacturer from Russia.

*(Source : The Hindu)*

## ☞ US Ex-Im Bank Offers \$1 Billion Renewable Energy Loan To India



The US Export-Import Bank has played a very important role in shaping the Indian renewable energy market into its current form. The bank now plans to provide further assistance to promote renewable energy infrastructure development in India.

The bank has offered \$1 billion in low-cost loan to India for aiding the development of **renewable energy projects**. The loan will be provided to the Indian Renewable Energy Development Agency (IREDA) which would in turn disburse it to various renewable energy projects across India.

US Ex-Im Bank has been among the prime lenders to solar power projects in India. It provided debt financing to several projects which became the first solar power projects to be commissioned in India. The **largest solar thermal power project** in the country has also been financed by the bank. A number of projects under the National Solar Mission have successfully approached the bank.

The bank offers debt financing at about one-third the cost of what Indian banks offer. Cheap debt financing is among the major reasons for the explosive growth in the Indian solar power sector and the fall of tariffs to less than a third of what they were in 2009-2010.

However, cheap loans weren't the only thing that came from US Ex-Im Bank's basket. Solar modules from American manufacturers also made a huge mark in the Indian market. First Solar is the biggest beneficiary of this system. By some estimates, the company enjoys about 30% of the market share in India.

This proposed loan will also carry a caveat that beneficiaries will have to import and use products manufactured by American companies, although the loan can be used for procuring a maximum of 30% of domestically manufactured equipment as well.

It is interesting to note than up until a few months back American module manufacturers were facing possible anti-dumping duties from the Indian government, which had intentions of promoting **domestic module manufacturers**. In August, however, India announced that it will no longer pursue **anti-dumping investigations** against any country, recognising that such measures may be in violation of the WTO rules.

India is planning to significantly boosts its installed **renewable energy capacity** and plans to invest \$100 billion over the next few years.

*(Source : Clean Technica)*



## **Solar boost: TN tops in rooftop installations**

CHENNAI: Shortage of sufficient grid power, resulting in people looking up to the Sun, has turned Tamil Nadu into a leading state for installed rooftop solar power systems in India. Tamil Nadu accounts for 50 megawatt (MW) of the total 285MW of installed rooftop solar power capacity in India, according to data from German renewable power consultancy firm Bridge To India.

Companies say that the installations are driven by adoption of solar power amongst industries in TN which don't get sufficient power from the state electricity grid.

"A major driver for the adoption of solar power has been the shortage of power. Cost of solar power vis-a-vis diesel gensets used by industries is low, and this has driven up number of solar installations," said Basant Jain, CEO of Mahindra EPC Services, which puts up solar power systems for companies. Power from diesel gensets costs about 15 per unit, while solar power from a captive rooftop system costs about 7 a unit. Companies like Asian Paints, Grundfos Pumps India, Infosys, Schwing Stetter and several textile mills in the state have all put up solar power systems on their roofs for captive consumption.

With the Tamil Nadu government planning to hike power tariffs, solar companies are expecting a further increase in rooftop solar installations since it's more economical. "Solar costs are falling and companies are bidding for less than 7 for solar projects, but Tamil Nadu is offering a solar tariff of 7.01 and this will be a big draw for companies to set up projects," Pashupathy Gopalan, president (Asia Pacific), SunEdison, a solar power project developer said. An added benefit is the accelerated depreciation scheme under which companies can write off 80% of the project cost as depreciation during the first year and thus save taxes.

Though the state has the largest capacity, it is not a significant amount by itself, experts say. "The potential in India is easily in excess of 100GW. So far, only a tiny fraction of this opportunity has been tapped. As the economics of electricity will continue to shift in favor of local solar solutions, we will see phenomenal growth," said Tobias Engelmeier, founder & director, Bridge To India.

Also, all this activity has been predominantly in the industrial space. Solar power still doesn't make economic sense for most residential and commercial establishments and the adoption there is low.

"One of the reasons is because there isn't enough space required to install a system. Most commercial establishment in India have either AC chillers, pipes or such things on the terrace leaving no space for solar panels," Jain said.

Adoption in residences is slow because the concept of net metering where consumers who generate excess power from their rooftop systems can sell the power to the state grid is only now picking up. Across India, only 112MW of residential rooftop capacity is installed driven more by a desire to have green power than because of commercial benefits.

*Source : ToI*

### **Power ministry plans cap on electricity price**

After the Supreme Court ruled that allocation of coal block that figured in the coal scam should be cancelled, the government is planning to complete the auctioning of 74 coal mines and handing them over to bid winners before March 31.

The Ministry of Power is planning to ask watchdog Central Electricity Regulatory Commission to prevent the companies that have bagged the coal blocks from passing on the additional cost burden to consumers by increasing power tariffs, government sources have told Deccan Herald.

While coal-based power companies have already hinted that they should be allowed to pass on the rising cost of fuel to consumers, experts have cautioned that this would burden the common man. Though the companies are allowed to pass on their burden to consumers, there is a need to put a cap on it so that power-generating firms do not indulge in profiteering, said the sources.

The ministry also feels that tariff-capping would discourage the firms from indulging in aggressive bidding, and lead to efficient utilisation of coal.

The capping will face resistance from private firms as they claim such restriction could be imposed only if the companies were allotted coal blocks for free. At a time when the companies are paying huge sums for coal blocks, there should not be any restriction on fixing electricity tariffs, said a private firm executive.

The government is also allowing swapping of coal blocks among end-user companies who have bagged them through auction.

After the successful auctioning of 74 blocks, the government would start auctioning the rest of the 214 blocks whose allocations were cancelled by the Supreme Court, sources said.

**(Source : Deccan Herald)**



## Tribunal cancels green clearance to 3600 MW thermal power plant



In a significant decision, the National Green Tribunal (NGT) has quashed environmental **clearance** (EC) to a 3,600 MW thermal power plant in Tamil Nadu and pulled up the Union ministry of **environment** and forests (MoEF) for “not applying its mind” and for having a “casual approach” while giving green clearances to the project.

The NGT decision regarding the 3,600 MW thermal power plant of IL&FS in Cuddalore area of Tamil Nadu came about on the ground that a proper cumulative impact assessment of the project was not conducted. The tribunal order came after an appeal was filed by villagers around the project area. The villagers claimed that the project would have a wide range of impacts on the stressed and fragile ecosystem, as well as the health and livelihood of local communities.

The project was proposed to be developed as part of a petroleum, **chemicals** and petrochemicals region (PCPIR) with a port, several industries and associated **development** of infrastructure. But, Cuddalore area has a high comprehensive environmental pollution Index (CEPI) index, and was, until recently, classified as one of the “critically polluted areas” of India. The area is also close to the Pichavaram mangroves, which is an ecologically fragile ecosystem.

The project was granted environment clearance on May 31, 2010, but NGT in May 2012 stayed the EC while directing a cumulative impact assessment (CIA) which was rapidly completed by the company following which the MoEF cleared the project. Villagers, however, were of the view that CIA was carried out hurriedly without adhering to accepted scientific parameters, rendering it to be a mere “useless formality”.

The NGT in its order on Monday held that the CIA of the project was conducted by the project proponent on the basis of incomplete information and “non-existent” standards, and the EC granted by the MoEF was without application of mind.

The tribunal noted that the CIA was “inadequate and erroneous” because of reasons like faulty methodology adopted, unreliable and inadequate data collected.

“Perusal of the additional conditions imposed by EAC indicates a casual approach as these conditions are extremely general in nature and do not prescribe extent or level of work required to be carried out and in the absence of any specifics,

such conditions shall remain on paper without being effectively monitored for implementing the conditions and the mitigative measures required,” NGT bench headed by NGT chairperson Justice Swatanter Kumar held in its order.

The bench further stated that MoEF’s casual approach is demonstrated from the fact that ministry and EAC both remained unmindful of non-existing air quality standards.

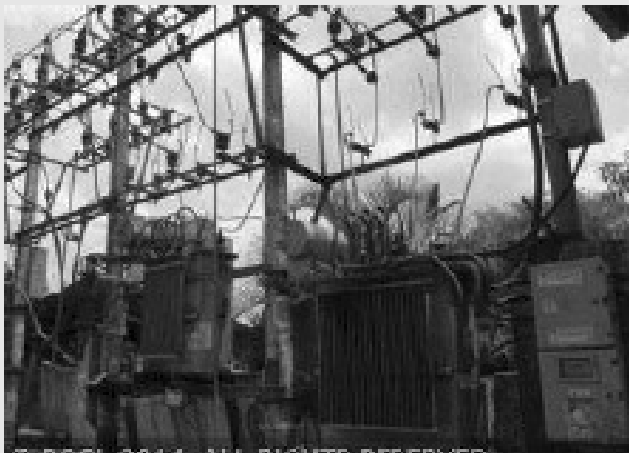
“We are, therefore, of the considered opinion that the EAC failed to apply its mind to the material placed before it by the rival parties and proceeded to recommend the conditions purportedly for safeguarding the environment. Reading of the conditions stipulated show that the MoEF did nothing more than merely reiterating the conditions previously stipulated ...in different language,” noted the bench while setting aside EC granted to the project.

The tribunal order delivered by Justice UD Salvi directed for a “fresh review of the environmental Clearance on the basis of fresh cumulative impact assessment study”.

“It is a very significant decision because the **environment ministry** is again have been found guilty of rapid approval to an industrial project without even considering the fact that it approved the project based on air quality standards that does not even exist,” noted environmental lawyer Ritwick Dutta, who fought the case for villagers, told dna.

(Source : DNA)

### 👉 **Biggest global bidding: Transmission projects of Rs 53,000 crore to be auctioned**



The government will auction eight contracts to set up power transmission projects worth Rs 53,000 crore in the biggest global bidding round ever since the sector was opened in 2010 and in the next three years.

The bidding will provide an opportunity to private firms like Tata Power, Reliance Infrastructure, Sterlite Energy, Larsen &

Toupro, GMR Energy, Lanco Infratech and JSW Energy to bag mega transmission projects connecting several power plants to consumers.

The proposed schemes will benefit the power starved states of south India that face acute power transmission congestion. The transmission contracts include a 2,500-km long high capacity power evacuation link between Chhattisgarh and Tamil Nadu worth ₹26,820 crore. The transmission system will facilitate inter-state transfer about 6,000-MW of electricity.

An empowered committee on transmission decided to bid these projects though the state-run Power Grid Corporation of India was keen to take them up on nomination basis, a senior government official said.

“The empowered committee on transmission has approved tariff-based competitive bidding of over Rs 53,000 crore power evacuation schemes. This is the biggest ever auction of power transmission projects in the past and in the near future. These are pending projects and have got accumulated for lack of decision and such large scale packages are not likely to be bid at least in the next three years,” he said.

Electricity transmission in India is a monopoly of Power Grid Corp that owns and operates about 45% of inter-state transmission system. The government has decided that future inter-state transmission system schemes would be awarded under tariff-based competitive bidding.

The proposed schemes include a Rs 8,570 crore inter-regional transmission link to facilitate import of power from Maharashtra to Telengana and Andhra Pradesh.

A Rs 7,032-crore transmission system strengthening scheme beyond Vemagiri in Tamil Nadu has also been approved. A transmission line worth Rs 4,440 crore between Ajmer in Rajasthan till Moga in Punjab has also been proposed. Besides, two separate transmission lines connecting NTPC and Odisha Power Generating Corp have been planned.

(Source : PTI)



## *Letters to the Editor*

### **Cancer taught me that...**

*Er. Geetha L. , Asst. Exe. Engineer*

**A**re cancers fatal...? no...not at all.. Blood pressure, Diabetics, Blood cholesterol.. there are so many life style diseases . Cancer too is a rather life style disease. As I was informed that the growth in my right ovary was cancer.. I too was little bit under the thought that I am closer to death.. But since I am not afraid to die, I was not terrified.. All the miseries of human life would end up on death.. my worries will meet an end.. As I have been practicing naturopathy to an extend for over a decade, I decided to go for nature cure only. But my husband and my doctors repeatedly reminded me of my Dependants. 84 years old mother with no other children who cannot move without any one's help..Two daughters, one in MA class and the other in BSc..

Finally I decided to undergo surgery and cancer treatment at RCC, Thiruvananthapuram. Since the malignancy was in Stage 1 only, the treatment is supposed to be more effective. Doctors of RCC assured me that there will not be much problems if follow ups are done correctly. But before starting chemotherapy, Dr. John told me other side effects will be minimum, but there will be hair fall .. I was little bit uncomfortable on that, just because others would feel that I am a patient.. But surprisingly,

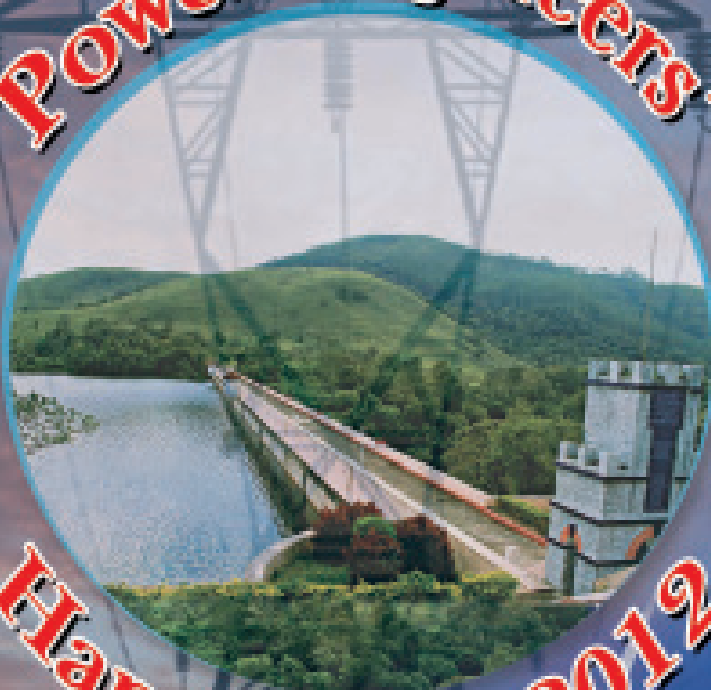
there was no hair fall.. some people say that it may be due to the nature life care and cure methods.. others say that it due to the will... the Omnipotent had framed me like that..

Any way, I am back to normal life and work now... Things are not the very same as before.. There's definitely a fall to my physical activity level.. but even now more than that of an average lady of my age.. as there are certain after effects of hysterectomy and chemotherapy.. Homeopathy treatment is helping me to cope with it.. Thanks are due to the Omnipotent, Naturopathy, Allopathy and Homeopathy and of course to Cancer as I feel that I am a more composed personality now.. I can handle tough situations with much balance state of mind.

During the hardships I have been suffering in my career for a couple of years, just because of certain severe symptoms of the disease and those who were determined to give me 'an assignment' could fulfill their wish. At times I have simply uttered that ' they would also come to understand about what I am suffering from their life '... But an average person cannot withstand it.. Hence I have only one utterance now.. 'Lokaa Samastaa Sukhino Bhavantu...'



**Power Engineers,**



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