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மின் செய்திகள்

### **Central Government Schemes to Promote Electricity**

Indian power sector is going through a major transition. Power shortages and access to reliable power is one of the critical challenges facing the country. India is home to about 300 million people who do not have access to electricity while several millions do not have reliable power. On the other hand, increasing awareness about the climate change impacts has set both developed and developing countries on the path towards achieving an inclusive and sustainable development. This is based on the increasing realization that GHG emissions from conventional sources of energy like coal fired power plants is causing harm to the earth atmosphere, having implications on climate. This has led countries to understand that growth should be more equitable and sustainable by balancing economic development with environmental sustainability.

India's policy makers have also realized the above and committed themselves to promoting renewable energy in India. The government has envisaged increasing the share of renewables from 15 percent to 40 percent by 2030. It has also committed to gradually phase out the use of fossil fuel by 2050. In the interim period, the Government has set ambitious targets to achieve 175 GW of renewable power capacity by 2022 the breakup of which is given in the table with a major thrust on solar energy.

Source	Target	
Solar (Utility Scale, distributed, off grid)	100 GW	•
Wind	60 GW	
Small Hydro	5 GW	
Bio Energy	10 GW	

Source: Report of the Expert Group on 175 GW RE by 2022

**Major Policies and Initiatives:** Both central and various state governments have launched initiatives to promote renewable energy generation particularly solar and wind. Some of the notable policy initiatives include a) <u>Power for All</u> b) <u>Jawaharlal Nehru National Solar Mission</u> (<u>JNNSM</u>) c) <u>Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY</u>). A common feature is to increase energy access while providing quality and reliable power to all rural areas.

**Power for All:** 24/7 Power For All is a joint initiative of the Government of India (GoI) and 16 state governments with a unified objective to ensure availability of reliable power to all the households, industries, commercial business, agriculture public needs, and any other electricity consuming entities. The Initiative aims to provide each household access to 24x7 reliable power supply and also adequate supply to agricultural consumers by 2019. The plans for each state/UT include reduction of Aggregate Technical and Commercial (AT&C) losses by increasing the collection efficiency and effective metering so as to achieve financially viable 24x7 power supply. It also emphasizes the development of transmission and sub-transmission network which plays a vital role in providing round-the-clock power supply. Further, these documents chalk out a plan for increasing generation through renewables and energy efficiency measures which suggests replacement of incandescent lamps/CFL bulbs with LED bulbs under Ujala programme.

**Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY):** This scheme seeks to support rural electrification by focusing on feeder separation. Historically, the agricultural and non-agricultural sectors are given electricity through a common distribution network. This leads to disparities in supply as distribution companies resort to load shedding in rural areas to supply urban areas. Hence, the main objective of the program is to separate the feeder and include meter at all levels in the rural areas to ensure parity in supply and better management of power. The major components of the scheme are feeder separation; strengthening of sub-transmission and distribution network; Metering at all levels (input points, feeders and distribution transformers). With respect to objectives of the rural electrification such as DDUGJY and other such schemes the government has introduced an app named GARV that provide real time data about rural electrification.

Jawaharlal Nehru National Solar Mission (JNNSM): The Jawaharlal Nehru National Solar Mission launched in January 2010. The Mission has set the target of deploying 20,000 MW of grid connected solar power by 2022. It aims to reduce the cost of solar power generation in the country through (i) long term policy; (ii) large scale deployment goals; (iii) aggressive R&D; and (iv) domestic production of critical raw materials, components and products, as a result to achieve grid tariff parity by 2022.

#### **Electricity Contacts**

- Call center—1912
- Fuse Off Call Centre:
- Tamil Nadu and Chennai
- RTI—<u>TANGEDCO</u>
- TNERC & Ombudsman: 044-28411376, 28411378, 28411379
- CGRF: <u>Addresses</u>
- Pay online: TNEBNET

# Please send your feedback to ecc@cag.org.in

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#### **Electricity Consumer Cells (ECCs)**

Madras Metropolitan Consumer Rights Protection Centre (MMCRPC) No. 118, Fourth Street, Kamaraj Nagar, Avadi, Tiruvallur District. Chennai - 600 071, Phone: 044-26554434 Email: ecctiruvallur@gmail.com

Tirunelveli District Consumer Rights Protection Sangam No. 9, Kulapirai Street, Tirunelveli Town, Tirunelveli - 627 006 Phone: 0462-2338544 Email: ecctirunelveli@gmail.com

Southern Consumer Organisation for Protection & Empowerment - (SCOPE) No. 49, Raja Street, FCI Nagar, Semmandalam, Cuddalore - 607 001 Phone: 0414-2233798 Email: ecccuddalore@gmail.com



## **Tamil Nadu News**

### **TANGEDCO Under Pressure to Buy Power From Private Producers**

Independent power producers (IPPs) in Tamil Nadu are pressurizing the government to instruct Tangedco to evacuate power generated by them at Rs 5.50 per unit, which is much higher than the cost of electricity in power exchanges.

IPPs were putting pressure through various 'sources' to evacuate power from Tangedco. But utility has to go by the merit order released by TNERC on evacuating power, which says it has to utilize its potential fully before purchasing power from other sources. The utility also has to prefer cheapest sources to fulfill its needs.

There is also pressure on the discom to import coal. The corporation has stopped import of coal to cut down costs and a section that was hugely benefitted from coal imports in the past is up against the corporation.

"The total capacity of all IPPs within the state is around 4000MW. Most of them use coal as fuel. The maximum capacity per unit is 600MW. Power from these companies will be evacuated only when the demand exceeds 14000MW. Only during summer the demand crosses 15,000 MW," said a senior Tangedco official.

As per the merit order issued by the TNERC, power at lower cost will come from Tangedco's own units as it gets coal from Coal India Limited. "The cost at which we generate power comes to Rs 3. We will have to evacuate the entire capacity from our units and then look at other sources. Similarly, the cost is pretty cheap when we buy form Central units. Wind power between May and September costs less than Rs 4 per unit and nuclear power is available at Rs 4.50 per unit," said the official.

"We have invested several crores to set up our thermal units and we cannot keep the units in limbo. We are not pressurizing Tangedco, but we are only asking Tangedco to evacuate power generated by us," said MD of an IPP.

Tangedco sources said the utility was all set to break even this year because of not purchasing power from IPPs. Except for the total outstanding debt, the Tangedco's financials have been looking better in the last few years.

"After a record loss of Rs 13,985.03 crore in 2013-14, the loss came down to Rs 5,000 crore in 2015-16. This year we have saved Rs 2,000 crore owing to stopping coal import," the official said. Source: The Times of India, Feb 22, 2017

## India News

### Poor Suffer as Electricity Subsidies in India Are Stolen by Rich

subsidized. Electricity tariffs are kept deliberately low for associations be deployed as franchisees. The state poor households. Unfortunately, much of this electricity is governments would be free to provide targeted subsidies to allocated in such a way that business and industrial poor households while the union government offered consumers, as well as richest users in the domestic sector, implementation and management expertise. Unfortunately, benefit from it more than the poor.

The residential electricity sector accounts for nearly a quarter of India's total electricity consumption. It has been estimated that as much as 87% of electricity subsidy The provision of free electricity led to other undesirable payments go to households "above the poverty line", instead of to the poor. According to the World Bank, the nationally designated poverty threshold as of October 2015 is \$1.90, electricity generated in India has been from fossil fuels, measured in terms of purchasing power parity.

Studies made using data provided by the government's National Sample Survey Organization (NSSO) have shown that over half of subsidy payments are directed to the richest two -fifths of India's households.

Almost all households in every state get some subsidy on their monthly electricity consumption, but the poorest two income quintiles consume significantly less electricity than the rest. This implies that wealthier households with access to electricity are typically eligible for as much, if not more, subsidies as poorer households with electricity.

According to the World Bank, 21.3% of India's population did not have access to electricity in 2011-15. The poorest, do not receive any benefit of electricity subsidies at all. India hopes to achieve total electrification in all regions of the country by 2017.

Under the Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY), a rural electrification scheme launched in 2005, households below the poverty line are supposed to receive free electricity connections. The total estimated cost of the scheme was Rs 16,000 crore (USD 2.4 billion). The scheme Source: The Quint, Feb 21, 2017 also laid special emphasis on the sustainability of electricity supply through collection of the cost of electricity from the beneficiaries.

Electricity in India is regulated by the state and is To achieve this, it was proposed that NGOs and consumer since a significant number of farm connections remain unmetered, quantifying the benefits of the electricity subsidy is a difficult task.

> results, such as undue pressure on fossil fuel supplies because of overconsumption. In the last few years, 75-80% of mainly coal. Free electricity has contributed to overuse of groundwater, especially in the agriculturally prosperous parts of northern and western India - Punjab, Haryana, western Uttar Pradesh, Gujarat and Maharashtra.

> Moreover, the electricity consumption of rural, poor and other low-use households is subsidized in the form of a tariff that is below the cost of recovery, says the World Bank. Given that households in India account for nearly one-fourth of its electricity consumption, net residential electricity subsidies (subsidies plus cross-subsidies) are significant.

> In 2010, residential subsidies were Rs 22.012 crore (USD 3.3 billion) which was 0.4% of the country's GDP that year. Even in states where residential electricity subsidies are funded by cross-subsidies from sectors such as industry and commerce, they represent a significant opportunity cost for state governments and their utility companies.

> The fact that subsidies do not reach their intended beneficiaries and often lead to perverse and regressive outcomes is borne out when one examines the way in which coal, oil and gas are subsidized as well.



# **Consumer Focus**

CGRF is an avenue established by the Tamil Nadu Electricity Regulatory Commission (TNERC) in 2004 as per section 42 of the Electricity Act,2003 (Act No: 36 of 2003). Consumers, who have grievances regarding new service connection, delay in effecting new service connection, change of defective meters, dispute in electricity consumption billing, non-attending to faults and similar such grievances can approach CGRF located in each circle. It consists of three members 1) Superintending Engineer of the concerned circle, 2) Civil Society Organization, 3) Financial and legal person nominated by District Collector.

#### Facts

The transformer near the appellant's residence (Shreyas Flats in Gopalapuram, Chennai) is faulty as heavy sparks are coming out of the transformer. It may cause harm to the residents of the locality.

The respondent claimed the transformer to be at a 'safe' distance from the apartments and it is a permissible distance. Hence, the complaint will not be entertained.

#### **Contestations**

Appellant: To prohibit further load on the transformer to avoid any fatality.

Respondent: The transformer is at a permissible distance; hence the complaint would not be entertained.

#### Judgment

The forum held that the transformer belonged to the electricity board and adding load within permissible limits as per TNERC Regulations. The respondent cannot be given directions in this regard. If the appellants are willing to shift the transformer at their own cost and to a desired place, the respondents are directed to do the needful.

# **ECC Voice**

### விபத்துக்கள் ஒர் அசைல் டீரான்ஸ்பார்மர் லைன்கள் மற்றும் மின்இணைப்புகளால் ஏற்படும்

#### விபத்துக்களை தவிர்க்க ஆலோசனைகள்

#### மின்வாரியத்தின் கவனத்திற்கு

- 1. டிரான்ஸ்பார்மர் ஸ்ட்ரக்சரில் எச்சரிக்கை பலகை வைக்க வேண்டும்.
- முரான்ஸ்பார்மர் ஸ்ட்ரக்சர் இருக்கும் இடத்தை சுற்றி சுமார் 3'X 3' முள்வேலி அமைத்து "அபாயம்" என்ற எச்சரிக்கை பலகை வைக்க வேண்டும்.
- முரான்ஸ்பார்மர் ஸ்டரக்சரிலிருந்து மின்இணைப்பு கொடுப்பதை தவிர்க்க வேண்டும். இதனால் அடிக்கடி மின்தடை செய்ய வேண்டி வருவதை தவிர்க்கலாம்.
- டிரான்ஸ்பார்மர் ஸ்ட்ரக்சரில் உள்ள ஏபி சுவிட்ச் கைப்பிடி பைப்பை பூட்டி போட்டு வைக்க வேண்டும். இல்லையெனில் இரவு நேரங்களில் விஷமிகள் அதை ஆப் செய்ய திருட்டு மற்றும் சமூக விரோத செயல்களில் ஈடுபடுவதை தடுக்கலாம்.
- 5. டிரான்ஸ்பார்மர் ஸ்ட்ரக்சரில் இருந்து உயர்மின் அழுத்த (HT) லைனுக்கும், அடியில் தாழ்வழுத்த (L.T) லைன்களுக்கும் இடையே இன்வெர்ட்டர் பாப்கார்டிங் செய்ய வேண்டும். இவ்வாறு செய்வதால் மின்கம்பி அறுந்து விழுந்தாலும் மின்சார விபத்தை தவிர்க்கலாம்.
- 6. கார்டிங் கட்டுகிற கம்பங்களும், கார்டிங் மற்றும் உலோகங்கள் பைப் எர்த் செய்யப்படுவதை உறுதி செய்ய வேண்டும்.
- முரான்ஸ்பார்மர் ஸ்ட்ரக்சரில் மாடுகளையோ ஆடுகளையோ நீறுத்தி கட்டி வைப்பதை அனுமதிக்கக்கூடாது.
- முரான்ஸ்பார்மர் ஸ்ட்ரக்சரில் தேவையான ஸ்டே வயர் செய்ய வேண்டும். ஒரு சில இடங்களில் செய்யப்படுவதில்லை.
- சாலையை கடக்கும் இடங்களிலுள்ள கம்பங்கள், தெருவிளக்கு கம்பங்கள் மின்இணைப்பு கம்பங்கள் (Taping Pole) இழுவை கம்பங்கள் (Tension Pole) நீலை நீறுத்தக் கம்பங்கள் (Stay Pole) மக்கள் நடமாட்டம் அதிகமுள்ள இடங்களிலுள்ள கம்பங்கள் அனைத்தும் நீல இணைப்பு earth செய்தல் மிக அவசியம்.
- 10. டிரான்ஸ்பார்மர் ஸ்ட்ரக்சரின் பக்கம் குப்பைகளை கொட்டுதல், குப்பைத் தொட்டிகளை வைப்பதை தவிர்க்க வேண்டும்.
- உயா் மற்றும் தாழ் மின்னமுத்த மின்பாதைகளுக்கு இருபக்கங்களிலும் போதிய அளவு இடைவெளிக்கு மரங்களை வெட்ட வேண்டும்.
- ஏ.பி. சுவிட்ச் கத்தியை பராமரிக்கும் பொழுது கீரானட் கீரீஸ் தடவினால் எளிதில் இயக்க ஏதுவாகும். இல்லையெனில் தீப்பொறிகள் கீழே விழ நேரிடும்.
- 13. எல்.டி. சிங்கீள் பேஸ் கொடுக்கும் பொழுது ரீல் இன்சுலேட்டர் உள்புறம் பி.வி.சி. வயர் அல்லது டபிள்யூபிடி 2.5 ச.மி.மீ. முதல் 4 ச.மி.மீ. இதை தாங்கும் கம்பி 7/20 ஜிஐ ஒயர் ஆக இருக்க வேண்டும். இதை 5 வருடங்களுக்கு ஒரு முறை புதியதாக வயர் 7/20 ஜிஐ வயரை மாற்ற வேண்டும். இதனால் எல்.டி. சிங்கீள் பேஸ் அறுந்து விழுந்தாலும் மின்விபத்து ஏற்படாமல் தவிர்க்கலாம்.

மேற்கண்டவைகளை பராமரித்தல், மின்நுகாவோர் மற்றும் கால்நடைகளுக்கு மின்விபத்து ஏற்படாமல் தவிர்க்கலாம்.

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# Citizen consumer and civic Action Group

9/5 II Street, Padmanabha Nagar, Adyar, Chennai 600020. Tamil Nadu

Phone: 91-44-24460387 Telefax: 91-44-24914358 Email: ecc@cag.org.in

#### www.cag.org.in

### Initiative of



Citizen consumer and civic Action Group (CAG) is a non-profit, non-political and professional organization that works towards protecting citizen's rights in consumer and environmental issues and promoting good governance processes including transparency, accountability and participatory decision making.

#### Supported by



#### **Editorial Team**

K. Vishnu Rao S. Ashwin Ram

# World News

### **Consumers Need Proper Guarantees of Energy Efficiency**

At the high altar of the business world, corporate social responsibility is the new religion. Top executives like to talk of little else and websites of every big business have pages dedicated to the idea. The fervour is of the newly converted but like most religions, observance is limited.

TV makers are the latest to come under fire for allegedly saying one thing and doing another. Samsung may have a vision to "build a society where people and the environment coexist in harmony" but it is facing allegations that technology in its sets helps it cheat energy efficiency tests.

LG may strive to "stay faithful to the values of our customers, communities, and the environment" but it is accused of duping shoppers into buying TVs that burn much more power than they say.

Neither allegation is yet proven but if history is any guide, consumers are right to be suspicious. Only last year, Volkswagen admitted fitting software to more than ten million diesel cars to help cheat emissions tests.

Claims about energy efficiency need to be trustworthy because so many shoppers now use them to make purchasing decisions. If these claims are hokum then they might as well have stuck with their old car or TV, particularly when so much of the carbon released is in the production phase rather than usage.

The financial savings promised by energy efficient appliances are significant — about £400 a year per household by 2020 — so if TV makers are conning us, it is deception on a major scale.

Long term, the environmental impact could be the greatest issue because about a tenth of all the electricity used by European households is to power their TVs. The UK's EastEnders habit alone probably uses enough energy to power a small town for a year. Genuinely efficient TVs will help reduce carbon emissions on a grand scale.

Yet despite all this, cheating energy efficiency tests in Europe is not illegal. That law needs to change forthwith. For all Europe's talk of social protection and regulation, it is American owners of diesel cars who are getting compensated.

There also needs to be much more independent scrutiny of the tests to ensure they cannot be gamed so easily. Manufacturers are far too involved in the process. Faith alone that big companies will practice what they preach is not enough. Source: <u>The Times</u>, Feb 7, 2017

# **Publications/Regulations**

- Bureau of Energy Efficiency, Ministry of power, Government of India, Energy Conservation Handbook, <u>Click here</u>
- Energy efficiency and Renewable Energy, US Department of Energy, Own Your Power: Consumer guide to solar electricity for the home, <u>Click here</u>

## Power Transmission Link, ASEAS Brown Boveri (ABB Group)

Raigarh-Pugalur 800 kV UHVDC link

Bringing power to 80 million people in India

Raigarh Pugalur



800 kV Ultrahigh-Voltage Direct Current technology enables the efficient and reliable transmission of power over longer distances with minimum losse



It has the capacity to transmit

enough to meet the needs of more than 80 million people



## POSTERS





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