

Energy Conservation Act (Part-2)

The previous issue explained the [Energy Conservation Act, 2001](#) (from here on called the Act) and the standards and labelling scheme. This editorial will discuss some more schemes passed under this Act:

2. Energy Conservation Building Codes (ECBC)

Provisions:

[Section 14\(p\) to \(s\)](#) of the [Act](#) empowers the Central Government to formulate and direct consumers to follow energy conservation building codes for efficient use of energy and its conservation in a building (or building complex). These codes must suit the climatic conditions of the region where the building is located. Furthermore, under [Section 14\(s\)](#) consumers can be directed to conduct an [energy audit](#) to check compliance with the ECBC.

Operational:

This scheme prescribes the energy performance standards for new commercial buildings across India.

1.It sets minimum building envelope (wall, roof & window) performance standards to: (i) limit heat gains (for warmer climates) (ii) limit heat loss (for cooler climate) (iii) aid natural ventilation and (iv) enhance day lighting.

2.It offers a [tool](#) to evaluate and provide changes in the design of the building to improve energy efficiency.

This scheme will be expanded through the latest [Amendment Bill](#) to include [large residential buildings](#).

The aim of the Act is two-fold: to provide for efficient use of energy and energy conservation. In order to commence the energy efficiency drive in the country (at the Central and State level) [the Act provides](#) for (a) regulatory mechanism (Standards & Labelling, Building Codes) (b) institutional arrangement (constitution of BEE) (c) legal framework (mechanism for policies and programmes).

3. UJALA (Unnat Jyoti by Affordable LEDs for All)

Provisions:

[Section 13\(2\)\(k\)](#) of the [Act](#) empowers the Bureau of Energy Efficiency to promote use of energy efficient processes, equipment, devices and systems. Energy efficiency in lighting can be achieved only when more people switch to LED bulbs. Furthermore, it is necessary to make LEDs affordable to everyone, especially those living in low income communities. In light of these circumstances, the Government launched UJALA.

Operational:

Launched on [January 5, 2015](#), this is the world's largest zero subsidy domestic lighting programme to promote energy efficiency.

1. Energy efficient LED bulbs are given at a subsidised rate (85% off) to every consumer across the country.

2. Free replacements are given for defective bulbs for a period of one year.

3. So far, more than 36.78 crore LEDs have been distributed through this scheme.

(To be continued)

INSIDE THIS ISSUE:

Editorial	1,2
Tamil Nadu News	3
India News	3
Consumer Focus	4
ECC Voice	4
World News	5
Publications, Statistics	5

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

Electricity Consumer Cells (ECCs)

ECC Tiruvallur

No. 118, Fourth Street, Kamaraj Nagar, Avadi, Tiruvallur District. Chennai - 600 071, Phone: 9382828286 Email: ecctiruvallur@gmail.com

ECC Tirunelveli

No.17/1,Shenbagavana Street, Palayamkottai, Tirunelveli - 627 006 Phone: 9443555097 Email: ecctirunelveli@gmail.com

ECC Cuddalore

No.23, Saraswathi Nagar, Thirupapuliur Cuddalore - 607 002 Phone: 8608615621 Email: ecccuddalore@gmail.com

ECC Tiruvannamalai

Avalurpet Road, Tiruvannamalai - 606 604 Phone: 04175 - 298033 Email: ecctiruvannamalai@gmail.com

ECC Salem

31/20, Sree Rangan Street, Gugai, Salem - 636 006 Phone: 9994941050 Email: eccsalem1@gmail.com

ECC Vellore

No: 10, Pillayar Koil Street GribblesPet Arakkonam Vellore District - 631 002 Mobile : +91 98946 32302 Email id: eccvellore@gmail.com

ECC Trichy

No: 4/74, Sangililyandapuram Pettavaithalai & Post Tiruchirappalli District - 639 112 Landline : 0431-2612597 Mobile : +91 9788203997 Email id : ecctiruchirappalli@gmail.com

Understanding the different charges borne by an electricity consumer (Part 1)

It's hard to imagine life without electricity. And yet, for something that so pervades our everyday lives, our understanding of the mechanics and the economics behind it remains limited. While most of us are aware of the need to pay our bills on time, not many understand what constitutes the final sum we pay. Consumers receive an electricity bill based on their electricity consumption. But there is more to it than just our daily consumption. In this series, we will be taking you through those charges that most consumers know and understand, and some lesser known ones. The electricity bill is generated by distribution companies; in Tamil Nadu it is the Tamil Nadu Generation and Distribution Company (TANGEDCO).

The charges that are levied on consumers, however, are not arrived at independently by the TANGEDCO. They are scrutinized and approved by the State Electricity Regulatory Commission, i.e. Tamil Nadu Electricity Regulatory Commission (TNERC). TNERC is a statutory body constituted by the Government of Tamil Nadu and discharges its functions as mentioned in the [Electricity Act, 2003](#). Amongst other roles, TNERC plays a vital role in determining the tariff rate for all the consumer categories (refer to Section 86 of the Electricity Act, 2003).

According to Section 50 of the Electricity Act 2003, TNERC shall have an electricity supply code to collect the electricity bill charges, recovery of electricity charges, provision for disconnection of supply for non-payment of charges, restoration of supply, etc. In this context, *Chapter 2 of the [Tamil Nadu Electricity Supply Code 2004](#)*, named "*Electricity Charges - Billing and Recovery*", states that the electricity charges such as electricity bill and other charges have to be collected from consumers by TANGEDCO.

In this Code, domestic consumers are listed as tariff 1-A, and these consumers will remain the object of this series. Below are the charges for 1-A consumers. Let us begin with tariff related charges - the one that consumers are most familiar with.

1. Tariff related Charges: As a distribution company, TANGEDCO plays an important role in ensuring reliable power supply to its consumers. In return, TANGEDCO charges consumers for the electricity supplied to their premises as current consumption charges. Any consumer who requests for supply of electricity from TANGEDCO will be given this based on the consumer category (Different types of consumer categories include Domestic, Multitenements, Handlooms, Old age homes). Current consumption charge is otherwise known as the cost/price of electricity and is calculated on a per unit, bi-monthly basis for low tension domestic consumers. For example, if a consumer's consumption is 400 units then the consumption charge is calculated as follows: first 100 units is free through subsidy for all consumers, followed by Rs.2.25 for next 100 units and Rs.4.5 for remaining 200 units. The charges are specified by TNERC based on the tariff petition submitted by TANGEDCO on a multi year basis.

From	To	Units	Rate (Rs)	Amount (Rs)
1	100	100	0	0
101	200	100	2.25	225
201	400	200	4.5	900
Consumption charges for 400 units = Rs.1125/-				1125

2. Fixed charges: Fixed charges are generally collected to recover the cost incurred for effecting the service connection. It is called that because it is a fixed amount that is designed to cover the basic costs of supplying electricity such as equipment and labour. With the recent [tariff revision](#), 1-A domestic customers need not pay fixed charges. For these consumers, it is always set at zero.

The upcoming editorials will explain the other charges in detail and elaborate with examples for a better understanding.

(To be continued)

Tamil Nadu News

State records highest solar power generation

As the dry weather prevailed across the State with temperatures going up, Tamil Nadu Generation and Distribution Corporation has recorded an all-time high solar power generation of 3,808 MW on Thursday noon. The State has a total solar installed capacity of 5,583 MW. A senior TANGEDCO official said that 3,808 MW, including the rooftop installation, is the highest recorded solar power generation in a day, crossing the highest of 3,782 MW a couple of days ago.

Normally, the high generation of solar is recorded during summer months including February and March. "The hot weather conditions across the state may have helped to increase solar generation. Besides, the solar installations in the State have also gone up," he added. At the beginning of this year, the installed solar generation capacity was about 4,772 MW.

A MET department official said that the temperature remained up by 1-2 degrees Celsius than normal in TN. In Chennai, it's expected to be hotter for the next few days. Tangedco officials also pointed out that Tamil Nadu's power demand has also increased. "Last year in September, our peak demand was in the range of 15,500-15,800 MW. Now it has gone up to 16,500 MW (peak power demand), due to the increased usage of air conditioners," the official pointed out. TN's solar power generation (2022) : September 22: 3,808 MW, September 21: 3,782 MW, March 5: 3,633 MW, February 10: 3,291 MW

Source: [DTNext](#), September 24, 2022

India News

Renewable Energy India Expo to bring Rs800 crore investment opportunity for biogas

Renewable Energy India Expo 2022 scheduled for later this month will bring in investment opportunities worth Rs 800 crore for the biogas sector, the Indian Biogas Association (IBA) said on Thursday (September 15). IBA is an industry association comprising operators, manufacturers, and planners of biogas plants. Renewable Energy Expo (REI) is scheduled for September 28-30, 2022 at India Expo Centre, Greater Noida, Uttar Pradesh. The bio-energy pavilion is supported by the Ministry of New and Renewable Energy (MNRE), Niti Aayog, Punjab and Maharashtra Energy Development Agency (PEDA and MEDA).

The expo focuses on renewable energy (bio-energy, solar, and wind) and energy efficiency technologies including electric vehicles and battery storage. We are expecting almost 15,000 footfalls with the renewed interest and MNRE's push towards the bio-energy sector. This is the reason we have opted for a separate pavilion for our exhibitors, A R Shukla, IBA President said in a statement. With 40 more large-scale biogas plants commissioned by this financial year, IBA expects the present CBG (compressed biogas) capacity to go up by one lakh tonne. The industry has sold 9,000 tonne of CBG worth Rs 486 crore in the last 3 years, post the launch of the SATAT scheme by the government.

Sustainable Alternative Towards Affordable Transportation (SATAT) is a government initiative taken up to extract economic value from bio-mass waste in the form of CBG and bio-manure. We had urged the government to double the outlay to Rs 900 crore recently. We are expecting the MNRE to announce a proper incentive under Central Financial Assistance (CFA) for commissioning of new CBG projects, Mr. Shukla added. Gaurav Kedia, Chairman, Indian Biogas Association said "Renewable Energy Expo (REI) is a perfect networking platform which connects manufacturers, industry experts, policy makers and influencers. Indian Biogas Association and all the exhibitors across India will address new ways of thinking and innovative partnerships to create solutions to help bio-energy sector. Indian Biogas Association has taken a step to support the drive to reduce India's carbon emissions and move towards clean energy. Renewable energy has a major role in meeting the energy demands of India, which is expected to reach 15,820 terawatt-hour (TWh) by 2040. We are encouraging the bio-energy technology providers and equipment manufacturers to adopt the state-of-the-art options and trends and contribute on bigger scale in achieving the goal of carbon -neutral economy by 2050."

Source: [NDTV](#), September 15, 2022

Consumer Focus

The appellant had applied for a new domestic service connection online on 29.08.2020 for his new residential building in Coimbatore. His building had a height of 14.8 metres, with 8 dwelling units. The Assistant Executive Engineer (AEE) inspected the building and requested the appellant to produce a completion certificate for effecting electricity service connections, which the appellant did not agree with. The appellant felt that he was wrongly subject to the new rule that was brought out in 2019, requiring a completion certificate from the Corporation. Aggrieved by the AEE's direction, he approached the Consumer Grievance Redressal Forum on 04.02.2022. On 21.03.2022 the CGRF held that TANGEDCO was right in asking the appellant to furnish a building completion certificate before effecting a service connection and disposed of the petition.

The appellant subsequently approached the Ombudsman on 19.04.2022 with the same argument. He stated that he had applied for the building approval on 11th November 2018 and duly paid the necessary charges for building approval on 27th December 2018 but received the approval only on 15th February 2019. Appellant further stated that, [Memo. No CE / Comml / SE / Comml / EE3 / AEE/F. Plg.Per / D-139 /2020 dt. 04.07.2020](#) insists for completion certificate from 04.02.2019. He further argued that the delay in obtaining his building approval was because of administrative delays from the Corporation and that he must not be penalised for this. Appellant also submitted that he was eligible for his planning permit 30 days after submission of his application i.e 11.11.2018. He should have therefore received his approval by 11.12.2018. Hence the appellant submitted that insisting for a completion certificate to effect service connection should not be made and service connection to the new building to be effected immediately.

Respondent stated that [Section 175 of the Electricity Act 2003](#) specified that the provisions of this Act are in addition to and not in derogation of any other law for the time being in force. Furthermore, the Madras High Court in [W.P. No. 14520 of 2017](#) had directed the utilities including TANGEDCO to follow the guidelines stipulated by the Government of Tamil Nadu with respect to building rules. Under [Tamil Nadu Combined Development and Building Rules, 2019](#) it is mandatory to get a completion certificate and the same came into force with effect from 04.02.2019. On 04.07.2020, based on these rules, TANGEDCO passed a [Memo. No CE / Comml / SE / Comml / EE3 / AEE/F. Plg.Per / D-139 /2020](#) directing that except for residential buildings up to 12m in height not exceeding 3 dwelling units or 750 sq.m and all types of industrial buildings, all other buildings require a completion certificate before effecting electricity service connections. Under this [Memo](#), exceptions are also given to constructions in progress as per the valid approved plans accorded on or before 04.02.2019.

The respondent stated that the appellant's building was inspected by the AEE who found that: The height of the building is 14.8 metres and It has a stilt + Ground (2 dwelling units) + 3 floors (2 dwelling units each). Total of 8 dwelling units. The appellant's building plan was approved on 15.02.2019 and they do not fall within the exception; therefore it is mandatory to submit a completion certificate. Even after a lapse of 15 days, the appellant failed to produce the completion certificate. Finally, the application was cancelled on 07.09.2020 only.

Considering the facts of the case, arguments put forth, cases cited, and the statutes relied upon, the Ombudsman passed the following order: a. The Respondent's request for completion certificate is valid for considering the appellant's application for effecting new service connection. b. With the above findings, the petition is dismissed by the Electricity Ombudsman.

Source - [Ombudsman Case, TNERC](#)

ECC VOICE

திருநெல்வேலி மாவட்டம், சிந்துபூந்துறை கிராமத்தில் வசிக்கும் திரு.இசக்கி முத்துவின் வீட்டிற்கு அருகாமையில் உள்ள மின் கம்பத்தின் அடிபாகத்தில் உள்ள கான்கிரீட் (concrete) முழுவதும் உடைந்து, மின் கம்பி சாய்வாகவும் மற்றும் அடிப்பகுதியில் உள்ள மின் கம்பிகள் வெளிப்புறத்தில் தெரிவதால் மக்களுக்கு ஆபத்தான வகையில் இருப்பதாகவும் தெரிவித்தார். பலமுறை மின் வாரிய அதிகாரிகளிடம் புகார் அளித்தும் புதிய மின் கம்பங்களை மாற்றி தரவில்லை என்று திரு.இசக்கி முத்து திருநெல்வேலி மின் நுகர்வோர் மையத்திற்கு தனது புகாரினை தொலைபேசி மூலம் தெரிவித்தார்.

திருநெல்வேலி மின் நுகர்வோர் மையத்தின் ஆலோசகர், திரு.ஷண்முகம், புகாரினை நேரில் ஆய்வு செய்து உதவி பொறியாளரிடம் தொலைபேசியில் தொடர்பு கொண்டு வாட்ஸாப்பில் (Whatsapp) பழுதடைந்த மின்கம்பத்தின் புகைப்படத்தை அனுப்பினார். புகாரினை பெற்றுக்கொண்ட உதவி பொறியாளர் இரு தினங்களில் நடவடிக்கை எடுக்கப்படும் என்று உறுதி அளித்தார். திரு.இசக்கி முத்து புகார் செய்த அன்றே புதிய கம்பங்கள் நடப்பட்டது என்று திருநெல்வேலி மின் நுகர்வோர் மையத்திற்கு தனது நன்றியினை தெரிவித்தார்.

Citizen consumer and civic Action Group (CAG)
No. 103(First Floor), Eldams Road , Chennai 600 018
INDIA

Phone: 91-44-2435 4458,
91-44-2435 0387
Email: ecc@cag.org.in

www.cag.org.in

Initiative of



CAG

Citizen consumer and civic Action Group

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.

Editorial Team

K. Vishnu Mohan Rao

Bharath Ram G N

Akshaya S

World News

South Korean firms to set up green energy hub in Australia

Three major South Korean groups said on Wednesday they hope to build a green energy export hub in Australia's Queensland state, aiming to produce a million tonnes of green ammonia annually for export by 2032. The Han-Ho Hydrogen Consortium, launched on Wednesday by Korea Zinc (010130.KS), petrochemicals group Hanwha Impact Corp and SK Gas (018670.KS), plans to build up to 3 gigawatts (GW) of renewable energy capacity in Collinsville in Queensland.

That electricity would be used to power electrolyzers that split water and produce green hydrogen, which would then be used to produce ammonia for export to South Korea, the Queensland government and the companies said. Green ammonia is considered a key alternative to coal in power generation and is seen as the best way to ship green hydrogen, which could be used as a transport fuel as well as in steel-making down the track.

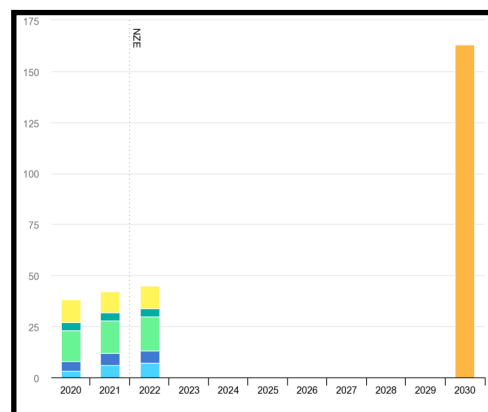
"We look forward to working with our partners to unlock Australia's potential to become a large-scale producer and exporter of green hydrogen and its derivatives including green ammonia," Korea Zinc Vice Chairman Yun B. Choi said in the statement released by the Queensland government. Ark Energy, Korea Zinc's Queensland-based clean energy arm, said the 3 GW of new renewable energy capacity was key to bringing down the cost of green hydrogen and ammonia, as the energy cost makes up about half of the cost of the products. The consortium aims to make a final investment decision around 2027 or 2028, with construction expected to take around four years, Kim said. Kim was not immediately available to comment on the estimated cost for the green energy hub.

Source: [Reuters](#), September 21, 2022

Publications / Regulations

- Renewable Energy and Jobs - Annual Review 2022), September 2022, [IRENA](#)
- Solar PV: A Gender Perspective, September 2022, [IRENA](#)
- Security of Clean Energy Transitions 2022, September 2022, [IEA](#)
- Technology and Innovation Pathways for Zero-carbon-ready Buildings by 2030, September 2022, [IEA](#)
- Global Hydrogen Review 2022, September 2022, [IEA](#)

Industry annual investment in energy efficiency by region in the Net Zero Scenario, 2020-2030



● North America ● Europe ● China ● India ● Rest of the World

Source: [IEA](#)