Volume VIII, Issue 10

Current News
மின் செய்திகள்

October, 2023

INSIDE THIS ISSUE:

Electricity consumer rights under the latest Supply Code Amendments (Part - 1)

Tamil Nadu Electricity Regulatory Commission (TNERC) recently passed Amendments to the Tamil Nadu Electricity Supply Code to include conditions of Electricity (Rights of consumer) Rules, 2020 along with other recommendations made by the Code Review Panel (CRP). These amendments are aimed at enhancing consumer rights and implementing consumer friendly practices in supply of electricity. This article analyses some of the noteworthy changes for domestic consumers:

1. Charges recoverable by the Licensee (Amendment 3)

Three new miscellaneous categories were added to the pre-existing charges:

(i) Consumers now have to pay charges for periodical inspections like installation testing. These charges are not levied for routine inspections like mass raid, surprise raid, etc. (ii) Consumers that have requested for temporary disconnection of service have to pay charges for the same. (iii) Consumers have to pay charges for getting certified copies of records such as the meter relay test findings, etc.

2. Excess demand for domestic consumers (Amendment 4)

Each consumer is given a specific maximum electricity load that can be drawn at any given time. For example, if the demand is fixed as 3kW for a service connection, the consumer cannot use beyond that. If exceeded, the consumer is charged a penalty called an excess demand charge. Excess demand charges are collected from the consumer at the rate specified in Clause 5(2) in the Tamil Nadu Electricity Supply Code, 2004, To know more see page 3 of this link: https://www.cag.org.in/sites/default/files/2023-08/Current_News_June_2023.pdf. Excess demand charges are not applicable to domestic consumers. But this Amendment allows for the revision of demand in case the consumer has exceeded demand for three consecutive billing cycles within 12 months. The demand will be recorded in every billing cycle and it will be revised once in a year in case it exceeds the set limit. In such cases, the licensee has to give the consumer a warning notice on the first and second occurrence of excess demand. The notice should advise the consumer to control their usage to ensure that it is within the sanctioned limit. The notice will also contain details of these regulations to create awareness and enable consumers to take necessary steps.

After the third occurrence, the sanctioned demand is revised to match the new recorded demand. The revision is done to the level of demand as denoted in the third occurrence. After the revision, the next bill will contain:

(i) Details of the revised demand (ii) Excess demand charge amount billed (iii) Developmental charges (for the infrastructural improvements required to meet the newly revised demand).

3. Additional Security Deposit (Amendment 5)

Any security deposit amount that is in excess of the requirement can be adjusted against two future electricity supply bills of the consumer. In case of any remaining excess payment, this balance has to be refunded to the consumer. This can be done through a cheque payment or directly crediting the consumer's bank account.

4. Installation of meter (Amendment 7)

The consumer can opt to purchase their own meter for a new service connection in the open market instead of getting it from the licensee. It is the duty of the licensee to test meters and ensure that a sufficient number of meters across all categories are made available in the open market (ie, that supply meets the demand).

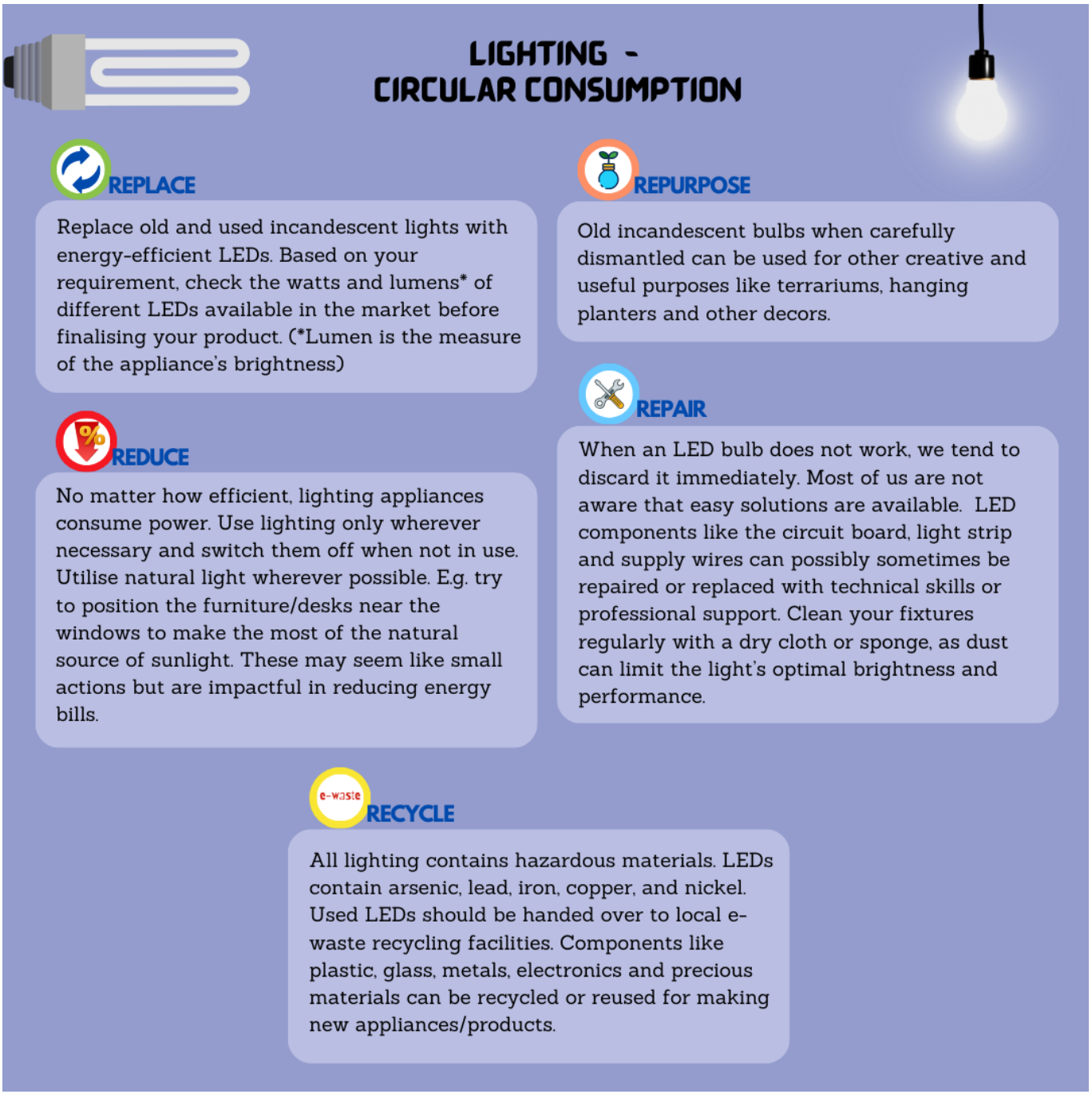
(To be continued)

Simple measures for Electricity consumers to participate in the circular economy - Do It Yourself series (Part-5)

The previous issue discussed how the R's (Refuse, Reduce, Repair and Reuse, Repurpose, Recycle) of the circular economy can be put into everyday use, concerning refrigerators. In this edition let us look at the practice of circular economy relating to electric lighting.

4. Lighting:

Electric lights are the most common form of artificial lighting. In lighting appliances, an electric current passes and illuminates the light source producing visible light. Lighting accounts for notable energy consumption. The choice and efficient use of lighting is important for visual comfort, reduced light pollution and resource efficiency. The light-emitting diode (LED) is today's most advanced and energy-efficient lighting technology in which the LED semiconductors are the light source.



(To be continued)

Relaxation for Tariff 1D consumers (Part-2)

The previous issue explained changes brought about through Tariff 1D, and its impact on apartment blocks. This issue will focus on the common area electricity charges for 1) large apartment blocks and 2) the introduction of Tariff 1E.

Large apartment blocks: Large apartment blocks have more than 10 dwelling units with common area amenities such as lighting for corridors, staircases, parking spaces, gardens, terraces, and operation of water motor pumps, and lifts, gymnasiums / fitness facilities, recreational areas, clubhouses, community hall and amphitheatre. These common areas are used by the residents, with these units serving both domestic and commercial purposes. Electricity charges for these spaces were previously charged under Tariff V (commercial tariff). With the introduction of Tariff 1D, the changes in charges are explained below:

Tariff Year	Common Area under Tariff V	Common Area under Tariff 1D
Tariff order 2017 If the consumption is 200 units	Rs. 5 - Rs. 8.05 per unit The electricity bill will be Rs.1585**.	-
Tariff order 2022 If the consumption is 200 units	-	Rs. 8.00 per unit The electricity bill will be Rs.2000*.

* The electricity bill includes fixed charges.
**The electricity bill includes fixed charges, peak hour charges and e-tax.

Table 1: Electricity charges for large apartment block with commercial spaces (as defined in Tariff Order 2017) - difference between old and new tariffs

As indicated in the above table, the electricity bill for common areas, for consumers with 200 units bi-monthly increased from Rs. 1585 under the previous tariff structure to Rs. 2000 under Tariff LT 1D, which represents a 26.18% increase.

Tariff 1E: Following the changes, dissatisfied and burdened with increased bills, residents approached the TNERC, requesting a reduction in electricity tariff for common areas. In response, the Tamil Nadu Electricity Regulatory Commission (TNERC) introduced a new tariff category called Tariff 1E for electricity usage in common service connections. This particular tariff category is however only applicable to small sized apartments that have less than three floors and ten houses and are without a lift facility. The tariff rate is determined as Rs.5.50 per unit for the energy charges and fixed cost of Rs.204/kW/bi-monthly. As per the order, to effect the conversion from tariff 1D to 1E, there will be a TANGEDCO inspection to verify that the building meets the prescribed conditions. If it does, the new tariff is applicable.

Impact on bills using Tariff 1E		
Common area apartments meeting above mentioned criteria	Tariff 1D	Tariff 1E
If the consumption is 200 units	Rs. 8.15 per unit The electricity bill will be Rs.2038*.	Rs. 5.5 per unit The electricity bill will be Rs.1508*.

* The electricity bill includes fixed charges.

Table 2 : Electricity charges under Tariff 1E vs Tariff 1D

If the electricity bill for consumers consuming 200 units bi-monthly is reduced from Rs. 2038 to Rs. 1508 under the new announcement in Tariff LT 1E, then the percentage decrease in the electricity bill is approximately 26%. This reduction in the electricity bill will benefit residents, making their bills more affordable compared to the previous tariff structure.

Large apartment blocks will continue paying at tariff 1D.

(To be continued)

Tamil Nadu News

Tamil Nadu govt to explore large scale green energy storage options

The Government of Tamil Nadu is considering options for storing green energy during peak generation seasons to use it during lean periods. Currently, no state in India has a comprehensive strategy for storing green energy and ensuring round-the-clock renewable energy (RE) supply. Tamil Nadu contributes 26 per cent of the wind power generation, 10 percent of solar generation, and a total of 14 per cent to India's overall RE generation capacity. According to sources, the state's Industries Minister, T R B Rajaa, has informed District Collectors that green energy storage is a significant focus for Tamil Nadu, addressing a meeting on Tuesday.

This comes weeks after the Ministry of Power released a detailed framework to reshape the country's energy sector, with a special emphasis on energy storage systems. Based on the plan, the central government may offer viability gap funding support for battery energy storage system projects, covering up to 40 per cent of the initial capital expenses of these projects. Tamil Nadu is exploring a hybrid storage model in which pumped storage plants (PSPs) will be used to store excess energy from solar, wind, and other sources during periods of high demand, said sources. An industry executive noted, "Wind and solar power are seasonal. Hence, this strategy will be advantageous for a state like Tamil Nadu."

PSPs operate similarly to giant water batteries, storing power and releasing it when needed. This approach is cost-effective compared to various battery technologies that use different electrochemical reactions to store electricity, such as lead-acid batteries, lithium-ion (Li-ion) batteries, sodium-sulphur batteries (NaS), flow batteries, zinc-air batteries, and supercapacitors. "The seasonality of these sources is disproportionate to consumption patterns, which essentially calls for sustainable storage infrastructure. In the case of Tamil Nadu, over 30 per cent of the demand is met by RE sources. Of the total 11,557 million units of wind power generated in June, Tamil Nadu contributed around 3,049 million units. Similarly, of 9,607 million units of solar power generated during that month, the state's contribution was 969 million units.

Source : Business Standard, 04 October 2023

India News

India's demand for electricity for ACs to exceed total power consumption of Africa: International Energy Agency

India's demand for electricity for running household air conditioners is estimated to expand nine-fold by 2050 and will exceed total power consumption in the whole of Africa today, the International Energy Agency (IEA) said on Tuesday. In its latest World Energy Outlook, IEA said India will see the largest energy demand growth of any country or region in the world over the next three decades. It projected India's energy supply to rise from 42 exajoules (EJ) in 2022 to 53.7 EJ in 2030 and 73 EJ in 2050 under stated policies scenarios and 47.6 EJ by 2030 and 60.3 EJ by 2050 as per announced pledges. Oil demand is seen rising from 5.2 million barrels per day (bpd) in 2022 to 6.8 million bpd in 2030 and 7.8 million bpd in 2050 under stated policies scenario. Under announced pledges, this demand is seeking 6.2 million bpd in 2030 and 4.7 million bpd in 2050. IEA said over the past five decades, India witnessed over 700 heatwave events, which have claimed over 17,000 lives. Fuelled by its geographic and meteorological conditions, air conditioner ownership in India has been steadily rising with growing incomes, tripling since 2010 to reach 24 units per 100 households. "The impact of cooling needs on electricity consumption is already clear," the Paris-based agency said."Electricity demand is sensitive to temperatures, and in India's case, there is a sharp increase in demand as temperatures cross the 25-degree Celsius threshold. In the APS, the increase in clean energy investment changes the outlook. In the STEPS, solar provides nearly 45 per cent of total generated power by 2050; in the APS, it crosses 50 per cent. In both the STEPS and APS, India achieves its target of 50 per cent non-fossil power generation capacity by 2030. Clean energy investment in the APS over and above those in the STEPS also drives faster growth in electromobility, low-emissions hydrogen, grid expansions and other clean energy infrastructure. "As a result, India's annual CO_2 emissions fall sharply in the APS by over 40 per cent from current levels by 2050, even though its GDP quadruples over this period," it added.

Source: The Indian Express, 24 October 2023 .

Consumer Focus

Ombudsman Case

The appellant (consumer) had requested the respondent (utility) to move an electricity transformer placed at the entrance of their home. The respondent denied this request stating that the transformer structure was erected on a public road and fulfilled all safety norms. The appellant was not satisfied with this response and filed a complaint with the Consumer Grievance Redressal Forum (CGRF). On 21.07.2023 the CGRF dismissed the complaint by observing that there was adequate space between the appellant's house and the transformer. Aggrieved by this, the appellant approached the Ombudsman on 14.08.2023.

The appellant argued that she had filed a complaint with the local Assistant Engineer (AE) on 10.10.2006 (when the transformer was first built), asking that it be moved as it was obstructing her entrance. She stated that they had been asked to identify a suitable alternative location for the transformer, which they were unable to. Following this, there had been no further communication from the respondent. The appellant also stated that a transformer being so close to their home made them fearful for their own safety, with its hazards such as fires, flashes etc. The appellant has stated that again on 14.4.2023, workers had begun digging in front of her house without her consent to install a new version of the transformer. She then called the AE and objected to the new installation, asking that it be moved. Her request to shift the transformer was denied again.

The respondent argued that the transformer was erected along the public road with no hindrances to public movement, ever since its installation in 2006. The requisite horizontal clearance was 4 feet (as per Regulation 61 of the Central Electricity Authority (Measures relating to Safety and Electric supply) Regulations, 2010) from the appellant's building. This transformer, the respondent claimed, allowed a clearance of 5 feet, therefore meeting all protocols.

Additionally, the respondent submitted that there was no gate in use near the transformer at the time of installation. The home's main gate was then on a different side of the building. The appellant extended the building's gate only after the transformer was erected in 2006. As for the new Ring Main Unit (RMU) structure, the respondent stated that it was in the same location as before, and there were no deviations in the clearance distance. Furthermore, the respondent stated that the RMU type arrangement offers distinct safety advantages over open structure distribution transformers, and that this upgrade would reduce the risk of accidents due to adverse weather conditions, tampering, etc. The respondent also stated that if the request was to be fulfilled, it can only be under the Deposit Contribution Works (DCW) schemes, and on payment of the necessary charges and based on the availability of alternate locations for moving it.

Considering the facts of the case, arguments put forth, cases cited, and the statutes relied upon, the Ombudsman passed the following order:

- The new RMU structure is erected on a public road with adequate safety clearance in the same location as the previous structure. Thus, the appellant's request to relocate the transformer at the respondent's cost for relocation is not feasible.
- If the appellant still wishes to shift the structure, she may approach the respondent to shift the structure under the Deposit Contribution works (DCW) basis. The cost of shifting is to be borne by the consumer (Rule 6 of the Tamil Nadu Electricity Supply Code). This is also subject to technical feasibility and availability of alternate space.
- The petition was dismissed by the Electricity Ombudsman.

Source: **Ombudsman Case**, TNERC

Reference: CAG's poster on safe distances from power lines

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.

World News

Current News

Large consumers can help drive the clean energy transition – but they need better data

To build a net zero energy system by mid-century and limit global warming to 1.5 °C, the world needs to triple the installed capacity of renewables and double the annual rate of energy intensity improvements by 2030. However, the additional renewable capacity the International Energy Agency (IEA) expects to come online by the end of the decade falls short of what's needed to meet international climate targets. Advanced economies and China are expected to install just 85% of what's required, while emerging and developing economies would have to deploy almost twice as much as planned today.

Large consumers can play an important role in bridging this gap by bringing additional investment in renewable capacity and deploying flexible demand to improve overall energy efficiency. In recent years, this has been led by large energy consumers, such as private companies and corporates, looking to reduce their emissions. This is significant, since the global industrial and commercial sector is responsible for more than half of global electricity demand.

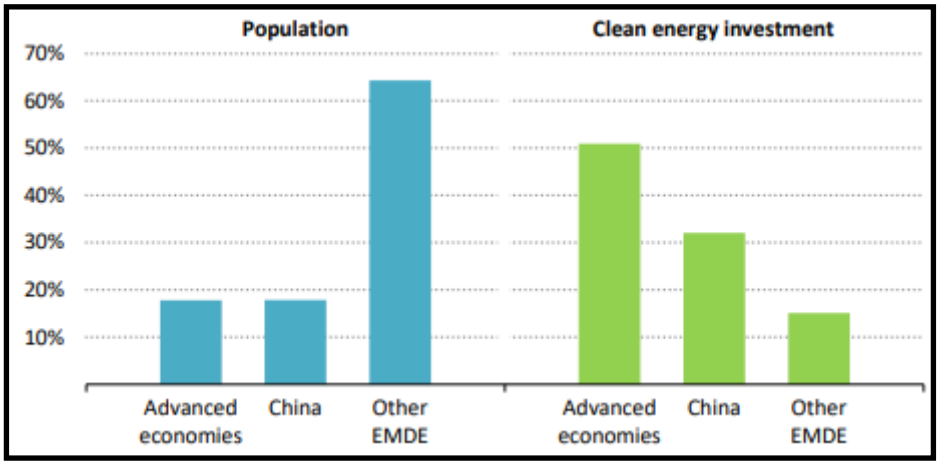
The IEA's 2022 report Accelerating Decarbonisation Through Clean Electricity Procurement found that among the hurdles to ramping up decarbonisation efforts, the most common across regions was the lack of reliable data, particularly in emerging economies. Quality data, and access to it, is crucial to support clean energy strategies, measure progress and report associated emissions reductions. This commentary, the first in a series that will explore the link between decarbonisation and digitalisation, will examine how policy makers can enable stronger data ecosystems for clean electricity, empowering consumers to play a strong role in reducing energy sector emissions.

Source: IEA, 20 October 2023

Publications / Regulations

- R&D Roadmap for Green Hydrogen Ecosystem in India, MNRE
- Tripling renewable power and doubling energy efficiency by 2030: Crucial steps towards 1.5°C, IRENA
- Electricity Grids and Secure Energy Transitions, IEA
- Efficient Grid-Interactive Buildings, IEA
- Climate Governance and the Circular Economy: A Primer for Boards, WEF

Share of total population and clean energy investment by region, 2022



Source: World Energy Outlook