CURRENT NEWS

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WHY TIME OF DAY (TOD) MAY NOT BE ESSENTIAL FOR LT COMMERCIAL AND MSME CONSUMERS IN TAMIL NADU?

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In 2020, the Ministry of Power in India introduced the Electricity Rights of Consumers, outlining guidelines designed to empower consumers and enhance the efficiency of the power sector. A key aspect of this initiative was the emphasis on time-of-day (ToD) tariffs, encouraging their implementation to benefit consumers nationwide and improve the overall electricity grid.

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Generally, the electricity grid experiences fluctuation in power demand (with the demand curve being high during the peak hours and low at non-peak hours). This strains the power infrastructure such as grid, transmission and distribution systems. Sometimes this leads to power outages because of the sudden spike in demand.

Generation and distribution companies prefer a stable demand curve to maintain efficiency in their plants. There are several strategies to achieve this, one of which was introduced by Tamil Nadu Generation and Distribution Corporation Limited (TNPDCL) as Time of Day Tariffs.

As outlined in the Tariff Order of 2022 for Tamil Nadu, certain Low Tension (LT) consumer categories are also required to pay a peak hour charge under the ToD tariff structure. Prior to this regulatory amendment, commercial and industrial consumers within the LT category were charged a uniform flat rate, regardless of the time of day. The rationale for introducing peak charges for LT consumers is the observation that their electricity usage during peak hours often exceeds that of HT consumers, necessitating a more nuanced pricing model.

Who are Low Tension (LT) Commercial and MSME consumers?

According to the Tamil Nadu Electricity Regulatory Commission's regulation, the Tamil Nadu Power Distribution Corporation Limited (TNPDCL) classifies consumers into two main categories: High Tension (HT) and Low Tension (LT) consumers. This classification is based on their power supply needs. Specifically, consumers with a power demand of up to 112 KW are referred to as Low-Tension consumers, while those with demands exceeding 112 KW fall into the category of High Tension consumers. Low Tension consumers are further divided into several subcategories, including agricultural, domestic, commercial, public sector institutions, cottage industries, and various other industries. Out of these Low Tension consumers, the commercial consumers (LT V) and MSME consumers (LT III A & III B) are charged under the ToD tariff.

1. Commercial consumers categorised as Low Tension V consumers encompass a broad range of commercial entities, including shops, offices, and educational institutions, that operate at low voltage levels. Other LT Tariff V consumers include common area facilities of residential complexes, such as lifts, water pumps, streetlights, and other essential services.
2. MSME consumers are categorised as Low Tension III A (Cottage and Micro industries) and III B (Power Looms) customers

What is the Time of Day tariff?

Time of Day (ToD) refers to the different periods of time segments within a day when electricity tariff rates vary. The different periods are peak hours and off-peak hours. The peak hours are from 6.00 A.M to 10.00 A.M and 6.00 P.M to 10.00 P.M (refer page no 253 of Tariff Order, 2022). Generally, peak hours are when electricity demand is at its highest due to the use of appliances, air conditioning, lighting, and industrial activities. Off-peak hours are the periods of the day when electricity demand is low because the usage of energy-intensive appliances will be less.

How is ToD electricity consumption measured?

A Time of Day (ToD) meter is a special electricity meter that tracks and charges electricity based on the time it is used. The meter records the amount of electricity consumed during different times of the day.

Implication for Consumers

- For commercial consumers:
  - When ToD meters are installed, many consumers can adjust their usage during non-peak hours, saving on costs. So, while it could nudge consumers to optimize their electricity consumption, especially during peak hours, a few commercial consumer categories (for example, electricity usage for the common facilities) cannot vary their usage by time of day, and are left burdened with the financial costs.
- For MSME consumers:
  - The Time of Day (TOD) tariff was initially introduced for the Micro, Small, and Medium Enterprises (MSME) sector in September 2022. After extensive appeals from various stakeholders from the MSME sector because of the financial strain that these tariffs imposed on small businesses, the government made a significant adjustment by reducing the peak hour charges for Low Tension (LT) 3(B) consumers, which primarily serve MSMEs, from 25% to 15%.
  - After several steps, small industries advocated for an outright waiver of the TOD tariff. In response, the government has temporarily suspended the implementation of the revised tariff.

Conclusion

In conclusion, while the introduction of Time-of-Day (ToD) tariffs aims to promote more efficient energy consumption and alleviate strain on the electricity grid, including Low Tension (LT) commercial and MSME consumers in ToD tariffs remains a questionable move. The variability in operational hours and consumption patterns of these businesses, combined with the challenges associated with implementing ToD meters, raises concerns about practicality. If the distribution companies reduce or waive off the ToD tariff rates, it can significantly benefit low tension (LT) consumers and MSME consumers, ultimately easing the financial burden on these consumers.

Figure: TNERC

CONSUMER FOCUS

The petitioner, a commercial consumer, had a single-phase service connection established in 2003 with a sanctioned load of 1 kW. In 2019, when the petitioner exceeded this sanctioned load, it was revised to 2 kW after the necessary development charges were paid. However, in February 2024, the petitioner received an electricity bill that included a charge of Rs. 5110. Upon inquiry with TANGEDCO, the Assistant Engineer revealed that the petitioner had exceeded the sanctioned load on three separate occasions

According to the Assistant Engineer, during the assessment months, the petitioner consumed more than the sanctioned load as follows: in May 2023, consumption was at 2.011 kW over the sanctioned limit of 2 kW; in July 2023, it reached 2.151 kW; and in September 2023, it was 2.028 kW, again exceeding the sanctioned load of 2 kW.

> *As per Non- Miscellaneous Tariff Order 2022, which states that if the recorded demand exceeds 2 times or more than the sanctioned demand, within a calendar year the recorded demand may be regularized, provided the consumer has to pay the additional/development charges.*

Thus, a demand of Rs. 5110 was raised on February 29, 2024, as a development charge.

The petitioner argued that the excess consumption was likely due to temporary usage at specific times. Furthermore, the petitioner pointed out that for the past nine months, their consumption has consistently been below 0.5 kW after revising the sanctioned load. They questioned whether TANGEDCO would issue a refund if the usage remained below the sanctioned load, claiming there is an inherent unfairness in the current billing system. Additionally, the petitioner criticized TANGEDCO's lack of proactive communication, asserting that consumers should be alerted in advance if their load exceeds the approved limit through modern communication methods like SMS or WhatsApp.

In response, the officials noted that the petitioner's static meter was replaced with a smart meter in 2022, enabling automatic meter readings.

> *As per TNERC Supply Code 2003, Regulation 14A, the meter readings are carried through Automatic Meter Reading (AMR) technology or Advanced Metering Infrastructure (AMI) technology where the billing details such as Electricity consumption charges for electricity, the due date of payment, demand for additional security deposit any other demand/information etc., shall be communicated through e-mail or SMS or Mobile App or any other electronic mode adopted by the TANGEDCO.*

The respondent stated that it was for this reason that traditional field assessments were replaced with a remote assessment system. The respondent claimed that the petitioner was receiving notifications regarding their electricity bills and any relevant notices via their registered mobile number.

Dissatisfied with TANGEDCO's explanations, the petitioner filed a complaint with the Consumer Grievance Redressal Forum (CGRF) seeking to have the charges waived and receive a refund for the development charges. After hearing from both parties, the CGRF ordered that TANGEDCO had adhered to the regulations established in the TNERC supply code regarding the collection of development charges. Consequently, the petition was dismissed without any refund.

Subsequently, the petitioner filed an appeal petition to the Electricity Ombudsman, contesting the CGRF's decision. Hearing both sides, the electricity ombudsman observed the following :

During the meter readings 05/2023 and 07/2023, the petitioner had paid extra demand charges of Rs.17 & Rs.9.16 respectively. (Excess Demand Charges means that if the recorded demand exceeds the sanctioned demand, the consumer shall pay the excess demand charges)

> As per Tamil Nadu Electricity Supply Code Regulations 5(2) III (A) *"In case the recorded demand has not exceeded 112 KW, the existing load sanction shall, after intimation to the consumer, be revised within one month of the second occurrence to the level of maximum recorded demand and all the relevant charges applicable to the additional load shall be included in the next bill."*

It was clear that the petitioner was aware of the additional charges incurred for exceeding the sanctioned load

According to the regulations, any excess load used by the consumer must be regularized within a month following the second occurrence of recorded demand. In this case, the petitioner has experienced several instances of excess demand, specifically on 05/2023, 07/2023, and 09/2023. Consequently, the petitioner's sanctioned load has been revised on 02/2024. As a result, development charges related to the revision of the sanctioned load have been applied.

In conclusion, the Electricity Ombudsman ordered that the Rs. 5110 collected as development charges could not be refunded. Therefore, the petitioner's appeal was resolved in favour of TANGEDCO.

SOURCE: OMBUDSMAN CASE

NEWS FROM TAMIL NADU

TNPDCL signs power purchase agreements to meet summer demand

Summer is approaching, and the Tamil Nadu Power Distribution Corporation anticipates the electricity demand to go beyond 22,000 megawatts (MW) and has signed power purchase agreements to buy 2,000 MW for one month starting Feb 15. Of the 2,000 MW, about 700 MW is for round-the-clock consumption while the remaining 1,300 MW is to meet the peak power demand, an official has said. However, the discom anticipates an additional requirement of 1,000 MW to meet the peak power demand in March, April and until May 15. Officials refused to disclose the price of the power purchased. These power purchases will be for a medium term and are likely to be around 8 to 9 per unit. So far, the all-time high power demand was 20,830 MW recorded on May 2, 2024, while the maximum daily consumption was 454.320 million units on April 30 last year.

Tangedco officials expect that these numbers will be breached in March this year. Meanwhile, electricity minister V Senthil Balaji on Friday held a meeting with TNPDCL officials and reviewed the utility's preparedness to tackle the summer power demand. Officials informed him that 48 new substations have been established across the state. Work is under way to set up an additional 20 new substations while 260 power transformers have been upgraded. Speaking to reporters after the review meeting, the minister said, "More than 6,000 transformers were planned to be erected to strengthen the distribution network, of which 5,000 transformers have been erected. The remaining work will be completed soon," he said. In response to a query on the lodging of tenders for smart meters, the minister said the bids were not viable due to high prices quoted. Fresh tenders would be floated soon, he added.

SOURCE: THETIMESOFINDIA, JANUARY 25,2025

NEWS FROM ACROSS THE COUNTRY

India's Renewable Energy Surge: MNRE Reports Record 209.44 GW Capacity in 2024, Doubling Year-on-Year Growth

The Union Ministry of New and Renewable Energy (MNRE) has reported a significant surge in India's renewable energy capacity, marking substantial progress between December 2023 and December 2024. The latest figures highlight the nation's commitment to its clean energy transition, aligning with the 'Panchamrit' goals set by Prime Minister Shri Narendra Modi. India's total installed renewable energy capacity has reached 209.44 GW as of December 2024, reflecting a 15.84% growth from 180.80 GW in December 2023. The country added 28.64 GW of renewable capacity in 2024, more than doubling the 13.05 GW added in 2023, recording a 119.46% year-on-year increase.

Solar power led the expansion, with 24.54 GW of new capacity added in 2024, bringing the total installed solar capacity to 97.86 GW, a 33.47% rise from 73.32 GW in 2023. Wind energy also saw steady growth, with 3.42 GW added in 2024, raising total wind capacity to 48.16 GW, a 7.64% increase from the previous year. Bioenergy capacity grew from 10.84 GW in December 2023 to 11.35 GW in December 2024, marking a 4.70% increase. Small hydro power also recorded a slight uptick, rising from 4.99 GW in 2023 to 5.10 GW in 2024, reflecting a 2.20% increase.

Under the leadership of Union Minister of New and Renewable Energy Shri Pralhad Joshi, MNRE continues to implement key initiatives to drive India toward its ambitious 500 GW renewable energy target by 2030. The latest capacity additions underscore India's commitment to accelerating clean energy deployment, enhancing energy security, and fulfilling its climate action goals.

SOURCE: SOLARQUARTER, JANUARY 29, 2025

WORLD NEWS

Weather and climate services inform transition to clean energy

WMO is committed to supporting the transition to renewable energy by strengthening the provision of tailored weather and climate services. This is because of the close links between renewable energy resources and weather and climate conditions which impact the potential capacity of wind, solar and hydropower. It is also because climate change affects energy supply and demand, particularly in the context of heating and cooling. UN Secretary-General António Guterres said the transition to renewables was unstoppable. "This year, renewables are projected to become the world's largest source of electricity generation for the first time. Meanwhile, their prices keep plummeting. On the International Day of Clean Energy, we celebrate this revolution. But, we also recognize the challenges ahead," he said in a message to mark the day.

"This year offers an unparalleled opportunity for countries to align their climate ambitions with their national energy and development strategies," he said. The International Day of Clean Energy highlights how clean energy plays a vital role in reducing emissions, and can also benefit communities lacking access to reliable power sources. Still today, 685 million people live in the dark - more than 80 per cent of them in Sub-Saharan Africa.

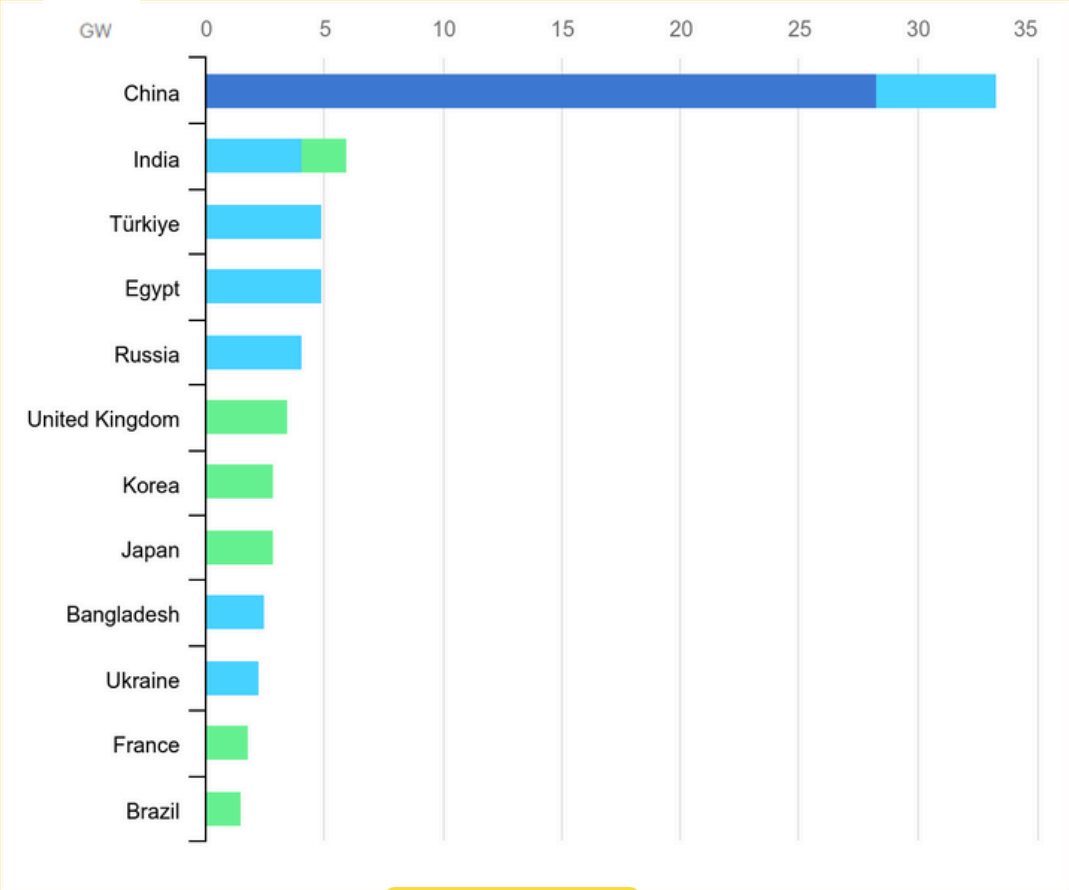
The connection between clean energy, socio-economic development, and environmental sustainability is crucial in addressing issues faced by vulnerable communities worldwide. "Renewable energy is powered by the forces of nature—sunlight, wind, and water cycles—the very elements that WMO has monitored and forecasted for the entire 75 years of its existence," said WMO Secretary-General Celeste Saulo. "Science-driven information will not only strengthen energy resilience but also unlock economic opportunities and sustainable development."

SOURCE: WMO, JANUARY 24, 2025

PUBLICATIONS

- **Notification for Solar Systems, Devices and Components Goods Order, 2025, MNRE**
- **Energy Technology Perspectives 2024, IEA**
- **Guidelines for PM Surya Ghar: Muft Bijli Yojana RESCO, Utility Led Aggregation Models and Payment Security Mechanism, MNRE**
- **Economic Survey 2024-25, Ministry of Finance**
- **UJALA: 10 Years of Energy-Efficient Lighting, PIB**

NUCLEAR POWER CAPACITY UNDER CONSTRUCTION BY REGION AND NATIONAL ORIGIN OF TECHNOLOGY, AS OF DECEMBER 2024



SOURCE:IEA

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