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Current News
மின் செய்திகள்

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"Terms and conditions" that electricity consumers need to understand

As per 2020 data, TANGEDCO is supplying electricity to 307.54 lakh consumers. In order to provide quality supply to its lakhs of consumers, TANGEDCO has taken several initiatives in recent years. This is commendable. However, to make these improvements work, and to get the most of it, we also need consumer awareness. One area where consumer awareness is especially lacking is in understanding the terms and conditions associated with TANGEDCO electricity supply. Working together with TANGEDCO needs to be thought of as a partnership, with the consumer keeping a certain number of rules and regulations to make the partnership work effectively. Consumers who are lacking in awareness of their own roles and responsibilities are more likely to be disgruntled consumers.

These 'Terms and Conditions', are explained in the Tamil Nadu Electricity Distribution Code, Chapter 6. For example ,Chapter 6 "Terms and Conditions for Supply of Electricity', clause 29(6)', states that 'the consumer cannot claim any damages to the property during any work carried out by TANGEDCO. In the case of damage, it will fall on the consumer to pay for repair. The aim of this article is to break down the 'terms and conditions' to consumers, and help them work in line with TANGEDCO for a hassle free process.

Terms and conditions are divided into two, applicable to these two types of consumers: 1) Individual consumer: a household living in an independent home 2) Multi-storied building consumers.

Things to be remembered by individual consumers:

When a consumer applies for a new service connection with the TANGEDCO, the officials will carry out a feasibility study where they will inspect the consumer's premises for laying the wires, placement of meters and any other requisite equipment. Based on the feasibility report, TANGEDCO will suggest land/space requirements needed within the premises. {TNE Distribution Code, Service Lines, Clause 29,(5)}

- When a consumer's service connection requires equipment such as a transformer, switchgears, or meters, TANGEDCO will install them in the space provided by the consumer. After the feasibility study, the TANGEDCO will let the consumer know of an estimated amount for uptaking the work. This cost will be borne both by the consumer and TANGEDCO based on the situations. For example, installation of equipment such as meters, wires have to be borne by the consumers whereas erection of transformers, laying wires to the transformers from the nearest power sources have to be borne by TANGEDCO.
- If TANGEDCO is extending electricity supply to different consumers in different premises using the equipment installed in the consumer's premises, then the consumer should allow TANGEDCO to permit that action. This is based on an assurance given by the area engineer that quality of supply to the original premises will not be compromised. {TNE Distribution Code, Service Lines, Clause 29,(6)}

(To be continued)

INSIDE THIS ISSUE:

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Floating solar plant and its technology - (Part 2)

The previous issue explained the floating solar panel and its increasing value to the renewable energy ecosystem. This issue aims to explain its components, functions and measures taken by the Government to promote floating solar power plants.

Comparison with other solar installations: Compared to a conventional solar plant, installing a floating solar plant requires a higher investment due to the specialised knowledge and equipment involved. A floating solar plant can be commissioned for large-scale projects and requires an undisturbed water body, since the motion can cause the mounting structure to loosen. It is important to understand the water-bed topography and its suitability for setting up mechanisms for floating. However, as these systems are still new, there are currently no international standards for verifying buoyancy structure (floats/pontoons). It requires skilled manpower to maintain the systems. Apart from the technological know-how, these systems also carry the additional risk of falling into water bodies.

Components: The components of a floating solar plant are almost similar to a rooftop solar or ground-mounted solar and include solar panels, supporting structures (vertical and horizontal frames), buoyancy structures (floats/pontoons), combiner boxes, inverter, underwater cables, anchoring systems, and mooring lines. The solar panels need to be humidity resistant, dustproof, lead-free, and well protected from the effects of water. A polyethylene compound is used for buoyancy structure as it can hold 2.5 times the weight of the panels. Overall, the components used for the floating solar plant must be highly resistant to corrosion.

Functioning: Unlike a solar plant installed over a building or land, floatovoltaics use buoyant structures (generally pontoons, which can carry heavy loads), where the solar panels are fixed and kept afloat on the water surface. The solar panels harness the light from the sun and generate direct current. The combiner box receives generated power from all the panels and transmits it to the inverter. An inverter converts the direct current into alternating current and is

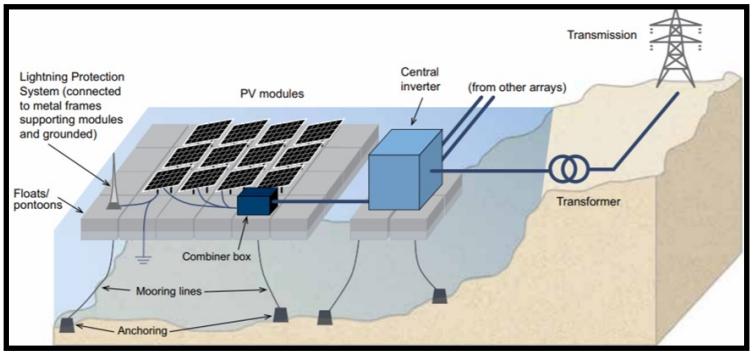

Image 1 - Schematic representation of a floating solar plant; Source: Solar Energy Research Institute (SERIS)

In the year 2015, the Government of India announced a target for 175 GW cumulative renewable power installed capacity by the year 2022 which includes 100 GW from solar (40 GW Rooftop and 60 GW through Large and Medium Scale Grid Connected Solar Power Projects), 60 GW from wind, 10 GW from bio-power and 5 GW from small hydro-power.

The Ministry of Power issued an order on "Flexibility in Generation and Scheduling of Thermal power stations to reduce the cost of power to the consumer" dated 30, August 2018, which orders that the generating companies having multiple generating assets can supply power from any of its generating stations Based on this, the NTPC commissioned a 25 MW floating solar plant on the reservoir of its Simhadri thermal station in Visakhapatnam, Andhra Pradesh.

However, as the Government of India has so far not added floating solar plants to the 175 GW mission, energy generated through these are not counted toward accomplishment of the mission. On the other hand, the addition of the 'Pilot cum demonstration project for the development of grid-connected solar PV power plants on canal banks and canal tops scheme' to the mission, results in all contributions from these to be counted towards the accomplishment of the mission. With the Central Financial Assistance or subsidies offered by the Ministry of New and Renewable Energy (MNRE) for various renewable energy schemes already promoting solar plant installations across the country, what remains now is holistic policies that will ensure the 175 GW mission is successful.

(Concluded)

Tamil Nadu News

Tangedco mulls exclusive electricity lines for agricultural connections

Tangedco is planning to install separate power transmission lines for agriculture services across the State at a cost of Rs 2,000 crore under the Centre's revamped distribution sector scheme to improve operational efficiency and strengthen power infrastructure.

Currently, there are 23 lakh agriculture power connections in Tamil Nadu. A senior official of the Tamil Nadu Generation and Distribution Corporation (Tangedco) said, "At present, Tangedco uses same transmission lines to supply power to agriculture and domestic users. This leads to overloading, tripping of transformers, and power loss. To avoid these issues, we have planned to lay separate, dedicated power transmission lines from substations itself."

Because of this 'feeder segregation', overloading problems could be identified easily and more transformers could be installed. Through this, Tangedco would also be able to avoid frequent power cuts and financial losses and reduce power thefts, another official said. He also pointed out that currently there is no mechanism to measure usage of power in agricultural services. After completing this segregation work, it would also be possible to calculate power usage accurately. Agricultural services would be solarized in the future to generate cheap and free day time power for irrigation, he said. "Rural Electrification Corporation and Power Finance Corporation are the nodal agencies to implement the scheme. Funds would be released in a phased manner. It is mandatory to complete all work before 2027. If Tangedco finishes the task within that period, 60% of the loan amount will be offered as subsidy. Otherwise, the power utility has to repay the full amount to these institutions," the official said.

Source: The New Indian Express, June 26,2022

India News

India's electricity shortages ease as wind and hydro output rises

India's electricity shortages have eased over the last six weeks as renewables generation has increased seasonally and relieved some of the pressure on coal-fired units short of fuel. In a sign of reduced stress on the network, frequency averaged 50.00 cycles per second (hertz) in May, exactly in line with the operational target, up from just 49.93 Hz in April.

Frequency fell below the minimum threshold of 49.90 Hz just 9.8% of the time in May compared with 32.0% of the time in April, data from the Power System Operation Corporation of India (POSOCO) showed. Below-target and falling frequency is a sign that consumption is exceeding generation, causing rotating generators to lose momentum, while above-target and rising frequency signals the opposite. Grid stability improved even though it supplied a record 136 billion kilowatt-hours (kWh) in May up from 133 billion kWh in April and 110 billion kWh in the same month a year earlier. Seasonal increases from hydropower and wind played a critical role improving generation availability and easing the severe power shortages and blackouts evident in March and April. Wind farms added an extra 6 billion kWh in May compared with March and April while hydro generators added an extra 1-2 billion kWh. Renewables supplied 23% of system-wide electricity demand in May up from 18% in March and April. ("Monthly operational performance report", POSOCO, June 24).

But low coal stocks compared with prior years mean electricity shortages are likely to re-emerge in September-October, when the monsoon recedes and renewables generation falls, and again in March-April 2023. India needs to build up coal inventories much faster and develop more generation to meet demand and reduce blackouts in the pre- and post-monsoon seasons or widespread blackouts will occur again.

Source: Reuters, June 27, 2022

Consumer Focus

The Appellant (a domestic consumer) received a huge electricity bill for May 2020. Upon inspecting the meter, he found that the meter was flickering, and its display inconsistent. He complained of the defective meter to the AE (Assistant Engineer) in June 2020, but no action was taken. The next bill was also high; so he complained again. This time the office told him that their internal systems indicated that the meter was "normal". The Appellant said that there was no display in the meter and asked the 'normal' remark for the meter to be changed. There was no action. The Appellant continued getting high bills and raising complaints. Finally, the meter was replaced on 11.02.2021; but the new meter was also defective and showed high consumption. Several representations were made about this in April/May/June 2021. The Appellant complained to the AE that the meter was indicating consumption as high as 60-70 units; and with the mains switched off, the meter still read more than 1 unit /hour.

On 23.7.2021, a check meter was run parallel to the fast running meter. This is done to check a meter's reading validity. The check meter showed a total of 63 units consumed in 4 days, as against the fast running meter which recorded 137 units, i.e. it showed more than double the actual consumption. Subsequent to this, the AE revised the bill for the period when it was installed. Based on an earlier mail recounting the issues faced by the Appellant, some additional staff came for a visit to test the meter. The AEE (Assistant Executive Engineer) then sent the meter to the Meter Relay Testing (MRT) Wing (the meter testing facility of TANGEDCO, for testing defective meters and providing reports). The meter was tested on 6.8.2021. The Appellant has stated that the AEE informed him that the MRT report stated that the meter was working normally and instructed him to pay the entire amount of Rs.40,000/- approx. Aggrieved by this, the Appellant finally made an online petition to the CGRF. The Appellant argued that the check meter reading was sufficient to prove a defective meter. Furthermore, the AEE refused to share the MRT report, stating that he would only share it during the hearing as the Appellant had now approached the CGRF.

CGRF held that the billing amount under the first meter (which showed no display) had to be revised, but it held that the new meter was found to be "in order" based on the MRT report. Aggrieved by this order, the Appellant appealed to the Electricity Ombudsman on 06.12.2021. The Respondent argued that the defective meter was replaced on 11.02.2021 with a new meter. The Respondent followed the CGRF order and revised the billing amounts for the period May 2020 to February 2021 as per Regulation 11 of the Tamil Nadu Electricity Supply Code (TNESC). The Respondent also submitted that the MRT report of the new meter showed that it was in order and no revision was therefore necessary.

In light of the facts of the case, arguments put forth, the MRT report and the statutes relied upon, the Ombudsman passed the following order:

- The ombudsman observed that the very purpose of checking the current consumption with the healthy check meter was to ascertain the healthiness of the main meter. Downloaded data from the meter in MRT testing reveal only the values recorded in the meter, and cannot be used to determine the healthiness of the meter. When differences are recorded between the two-meter readings, the main meter is considered faulty.
- Given the variations in consumption patterns between the main & check meters, the new meter is declared defective and hence the consumption recorded during the period from 11.2.2021 to 31.8.2021 requires revision. Therefore, the Respondent is directed to revise the billing of the assessment period from 5/2020 to 31.8.2021, adopting Regulation 11(5) of the TNESC and to refund the excess amount if any paid by the Appellant.

Source - Ombudsman Case, TNERC

ECC VOICE

திருநெல்வேலி டவுன் வி.ஓ.சி தெருவில் வசிக்கும் திரு. ரமேஷ் அவர்கள் அவருடை தாத்தா பெயரில் இருந்த அவரது வீட்டின் மின் இணைப்பினை தனது பெயருக்கு மாற்றம் செய்வதற்காக தமிழக மின் வாரியத்தின் இணையதளத்தில் ஏப்ரல் மாதத்தில் பதிவேற்றம் செய்து அதற்குரிய கட்டணத்தை செலுத்தினார். பெயர் மாற்றத்தின் நிலையை தெரிந்து கொள்ள திருநெல்வேலி டவுன் உதவி பொறியாளரை தொலைபேசியிலும் மற்றும் நேரிலும் பல முறை தொடர்பு கொண்டுள்ளார். காரணமே சொல்லாமல் பல நாட்கள் அலைக்கழித்து அதிகப்படியாக பணமும் கேட்டுள்ளனர். இது தொடர்பாக திரு.ரமேஷ் திருநெல்வேலி மின் நுகர்வோர் மையத்தில் தனது புகாரை பதிவு செய்தார். மின் நுகர்வோர் மையத்தின் மின் ஆலோசகர் திரு.சண்முகம் சம்மந்தப்பட்ட உதவி பொறியாளரை தொலைபேசி மூலம் தொடர்பு கொண்டு திரு.ரமேஷின் விண்ணப்பத்தின் மீது நடவடிக்கை எடுக்குமாறு கேட்டுக்கொண்டார். அதற்கு உதவி பொறியாளர் இன்டெம்நீட்டி பாண்ட் (Indemnity Bond) என்ற ஆவணத்தை திரு.ரமேஷ் விண்ணப்பத்துடன் இணையதளத்தில் பதிவேற்றம் செய்யவில்லை என்றும், இந்த விவரத்தை பல முறை திரு.ரமேஷிடம் தெரிவித்தோம் என்றும் பதில் அளித்தார். மேலும் அவர் இந்த ஆவணம் இல்லாமல் இணையதளத்தில் பெயர் மாற்றம் செய்ய முடியாது. அதனால் விரைவில் திரு.ரமேஷ் அவர்களை இன்டெம்நீட்டி பாண்ட் ஆவணத்தை பதிவு ஏற்றம் செய்யுமாறு கூறினார். இன்டெம்நீட்டி பாண்ட் பற்றிய விவரங்கள் திரு.ரமேஷ் அவர்களுக்கு தெரியவில்லை என்பதால் மின் ஆலோசகர் அந்த ஆவணத்தை தயார் செய்து திரு.ரமேஷ் அவரின் விண்ணப்பத்தில் இணையதளத்தில் பதிவேற்றம் செய்தார். இதனை உதவி பொறியாளரிடமும் தொலைபேசியில் தெரிவித்தார். விண்ணப்பத்தினை பதிவேற்றம் செய்த இரண்டு நாட்களில் பெயர் மாற்றம் செய்யப்பட்டது என்ற தகவலை திரு.ரமேஷ் மின் நுகர்வோர் மையத்திற்கு தெரிவித்து தனது நன்றியினையும் கூறினார்.

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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

Covid-19 slows progress toward universal energy access

The Covid-19 pandemic has been a key factor in slowing progress toward universal energy access. Globally, 733 million people still have no access to electricity, and 2.4 billion people still cook using fuels detrimental to their health and the environment. At the current rate of progress, 670 million people will remain without electricity by 2030 – 10 million more than projected last year.

The 2022 edition of Tracking SDG 7: The Energy Progress Report shows that the impacts of the pandemic, including lockdowns, disruptions to global supply chains, and diversion of fiscal resources to keep food and fuel prices affordable, have affected the pace of progress toward the Sustainable Development Goal (SDG 7) of ensuring access to affordable, reliable, sustainable and modern energy by 2030. Advances have been impeded particularly in the most vulnerable countries and those already lagging in energy access. Nearly 90 million people in Asia and Africa who had previously gained access to electricity can no longer afford to pay for their basic energy needs. The impacts of the Covid-19 crisis on energy have been compounded in the last few months by the Russian invasion of Ukraine, which has led to uncertainty in global oil and gas markets and has sent energy prices soaring.

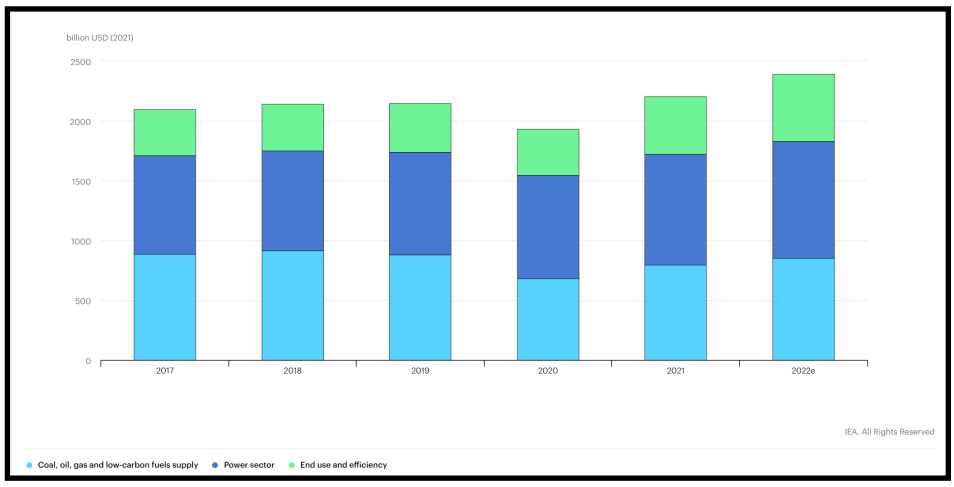
In this context, the SDG 7 custodian agencies, the International Energy Agency (IEA), the International Renewable Energy Agency (IRENA), the United Nations Statistics Division (UNSD), the World Bank, and the World Health Organization (WHO), as they launch this report, are urging the international community and policymakers to safeguard gains toward SDG 7; to remain committed to continued action towards affordable, reliable, sustainable, and modern energy for all; and to maintain a strategic focus on countries needing the most support.

Source: IEA, June 01, 2022

Publications / Regulations

- Tracking SDG 7: The Energy Progress Report (2022), June 2022, IRENA
- RE-organising Power Systems for the Transition, June 2022, IRENA
- World Energy Investment 2022, June 2022, IEA
- The value of urgent action on energy efficiency, June 2022, IEA
- Draft Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulations, 2022. notified on June 2022, CERC

Global energy investment, 2017-2022



Source: IEA