Volume VI, Issue 1

Current News
மின் செய்திகள்

January, 2021

Assessing TANGEDCO's Compliance to Distribution Standards of Performance (DSOP): An Analysis of RTI Data for the Year 2016 (Part-8)

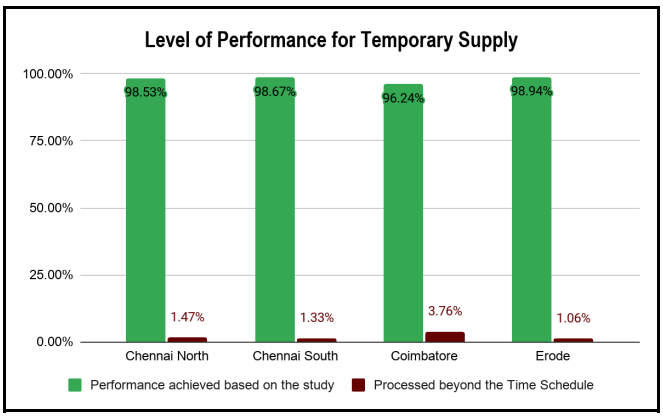
The previous issue explained the performance of additional load connections against the TNERC's benchmark. This section of the editorial will indicate the compensation payable for delay in providing additional load connections and examine the performance of temporary supply connection in detail.

Compensation for additional load connections

As per the RTI data and the provisions under the DSOP regulations, 2.92% (366) applications for additional load connections were not processed within the stipulated time. As per Clause 21, DSOP regulations, an average of Rs.36,600 (366 applications) should have been ideally compensated for these applications that were processed after the mandated time. The compensation is calculated based on the minimum amount (i.e) Rs.100/- per day of delay subject to maximum of Rs.1000. The data reveals that no compensation has been paid to consumers for non-adherence nor have consumers applied for compensation. The latter situation may be due to lack of awareness on the part of the consumer to demand compensation.

III. Temporary Supply

As per *TNERC DSOP regulations*, *Section 6*, *Temporary supply*, the time schedule for providing temporary supply connections to consumers is thirty days from the date of receiving the applications. TNERC has set 95% as the targeted performance to assess TANGEDCO's level of performance (i.e.) 95% of the total applications submitted should be processed within 30 days . Data shows that 97.47% (24,097) of the applications submitted for obtaining temporary supply connections were processed within the time schedule, which is more than the targeted performance. 2.53% (626) of the applications were processed beyond the time schedule recommended by the DSOP regulations.



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Bifacial Solar Panels - An Emerging Technology (Part -1)

To reduce environmental degradation from electricity generation using fossil fuels and to conserve the natural resources for the future generations, it is important to shift to renewable sources to meet India's electricity demand. At present in India, 36.4% of electricity is generated through renewable sources which includes about 10% of solar power. Total installed capacity of solar power across the nation is 3,74,000 MW. In addition, Indian Government has set a target for adding 10,000 MW more solar power by 2022. While discussing electricity generation through solar, solar photovoltaic (PV) panels play a significant role.

Solar panels used presently are monofacial panels which can absorb the sunlight from one side of the panels. Now an innovative solution has been introduced in the world of solar energy. Bifacial solar panels' in the world of solar energy, which can absorb sunlight from both sides of the panels. This article will give an overview on solar panels, and explain about monofacial and bifacial solar panels.

Solar photovoltaic (PV) panels :

- Solar panel is an array of photovoltaic (PV) cells and the array can be formed by connecting the cells in a series or parallel mode. Solar panels work on the principle called photovoltaic effect.
- Sunlight consists of photons that can be used to produce electricity. The PV cell is made of P-N junction semiconductor materials and can absorb the photons. When solar radiation enters a PV cell, it results in the formation of electron hole pairs in the cell.
- The difference in voltage pushes the electrons from the p-side of the junction to the n-side by which electric current will be formed in the external circuit.

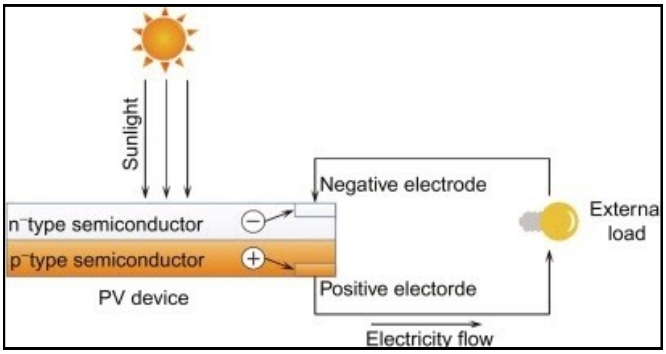

FIGURE 1: PHOTOVOLTAIC EFFECT

Monofacial solar panels

The most commonly used panels in India are i) Monocrystalline solar panels, and ii) Polycrystalline solar panels. Both the panels are made up of monofacial configuration. In Monofacial solar panels, the silicon array is sandwiched between a protective glass coating and an opaque back sheet. The figure 2 represents monofacial solar panel. The glass coating allows the sunlight through it and also protects the solar cells while the opaque sheet does not let in the sunlight but protects the cells. Therefore, if the reflected sunlight from the installed surface falls on the backside of the panel, it will be bounced off. Thus, electricity will be generated from only one face of the panels.

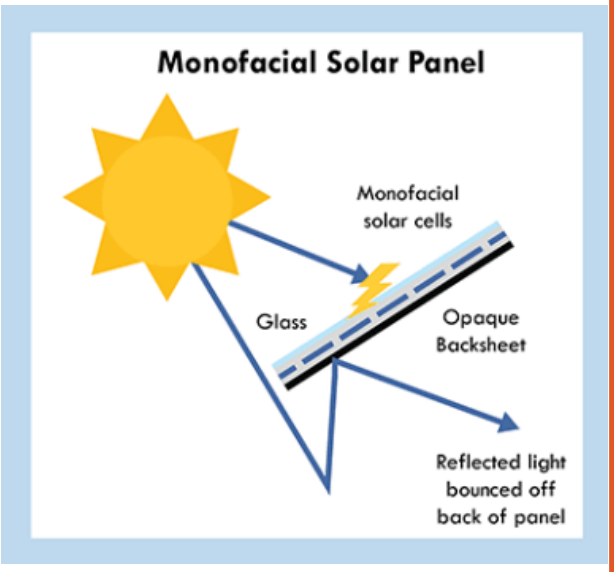

FIGURE 2: MONOFACIAL SOLAR PANELS

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Tamil Nadu News

TNERC allows Tangedco to procure 1,000 MW to meet summer demand

The Tamil Nadu Electricity Regulatory Commission (TNERC) has given its nod to the Tamil Nadu Generation and Distribution Corporation (Tangedco) for procuring up to 1,000 MW of round-the-clock (RTC) power for three months from February 15 to meet the summer demand.

In its petition before the TNERC, the Tangedco said the minimum power demand during the summer of 2019 was around 14,500 MW, while the peak demand range was 15,150 - 16,150 MW. "It is expected that the minimum demand is likely to increase this summer up to 15,100 MW," it said, adding that the total power availability was 14,200 MW. This includes 4,320 MW from its own thermal sources, 5,000 MW from central generation stations and other sources.

Tangedco said the deficit in power availability would be 900 MW and considering an unforeseen outage of thermal units, 600 MW is added to the deficit. This would put the total anticipated deficit at 1,500 MW during summer.

Pointing out that the State general elections and public exams for schools and colleges are scheduled during the 2021 summer, Tangedco said the availability of power was to be ensured for benefit of the public. To meet the deficit, the utility proposed to procure 1,000 MW RTC through short-term bidding. To a query by TNERC on why the power should be procured through power exchanges, the Tangedco said advance booking of transmission corridors was also necessary to avoid transmission any issues in the summer.

On these grounds, the TNERC gave its nod to procure 1,000 MW RTC and also allowed the utility to deviate from the Ministry of Power guidelines on monthly billing cycle and payment security clause while processing short term bids.

Source: DTNEXT, January 25, 2021

India News

India added 7 GW of renewable energy capacity in eight months

The capacity addition during FY 2020-21's first eight months ending November is 38% lower year-on-year as the pandemic-led disruptions constrained new project development. India added 7 GW of renewable energy generation capacity during FY 2020-21's first eight months leading to November end. That is 38% lower than 11.4 GW installed during the corresponding period (April-November end) last fiscal, according to a new report by Care Ratings. Solar power accounted for 75% or 5.2 GW of the new capacity addition, taking India's cumulative installed PV capacity to 37 GW as of November end. "

The lower capacity addition [during FY 2020-21] can be attributed to the lockdown led disruptions in the supply chain (which slowed movement of inputs and has led to an increase in their prices), labor shortages as well as the constrained finances and liquidity pressures faced by the developers. Besides, the restriction on the imports of inputs, viz, for solar power, has aggravated the constraints faced by the developers," said Care Ratings analysts in the report. Coal-based power, which is the nation's dominant electricity source and accounts for 55% of the total power generation capacity, added just 1.9 GW to generation capacity in the eight months to November 2020. Of the cumulative 374 GW domestic electricity generation capacity, renewable energy generation capacity stands at 90 GW (24% of the total).

The report said outstanding dues owed by DISCOMs to power generators have been mounting. As of November 2020 end, these amounted to INR 1.31 lakh crore, a 28% increase from April 2020. The outstanding dues were the highest for the Discoms of Rajasthan (INR 40,229 crore), followed by Tamil Nadu (INR 21,825 crore) and Uttar Pradesh (INR 14,329 crore). These three states accounted for 58% of the total outstanding dues.

Source: Pvmagazine, January 13, 2021

Consumer Focus

The petitioner is a domestic consumer. On 29.11.2017, TANGEDCO officials attempted to erect a new electricity pole obstructing the entrance to her house. The petitioner submitted a legal objection letter along with a complaint to the Superintending Engineer (SE) highlighting that a pole sited there would be a risk to their lives, apart from potential damage to property. Further to this complaint, the electricity pole was removed on 02.12.2017. However, on 29.05.2019 and then again on 01.06.2019, more than a year later, TANGEDCO officials tried again to erect a new electricity pole at the same site. The petitioner spoke to the respective SE and stopped the work. This time the petitioner followed up with a complaint to the local section office. Since there was no response from them, she approached the Consumer Grievance Redressal Forum (CGRF). On hearing arguments from both parties, the CGRF, vide Order dated 25.02.2020, directed the Executive Engineer and Assistant Engineer to not erect a new pole in front of the petitioner's residence. In contravention to this order, TANGEDCO officials made a further attempt to erect the pole, following which the petitioner appealed to the Electricity Ombudsman.

The petitioner stated to the Ombudsman, that if a new pole was erected in front of her entrance, the electric lines would pass near her staircase, making it hard for them to use the terrace. Further, it would not be possible to construct a first floor. This would be in addition to the practical difficulty of getting their vehicle into their premises. She also mentioned in the petition that no electricity lines should pass through any part of their premises and that there should be appropriate clearance between their premises and the proposed electricity lines. Further, the petitioner said that there were existing, fully functioning electricity poles, at a distance of 80 ft and 50 ft towards their right and left, respectively, thereby questioning the need for a new one. In response, TANGEDCO officials stated that the area was a developing area, and new residences had been constructed around the petitioner's house. Therefore, they argued, that if the local body requests new poles for street lights, new service connections or any other electrical installation for HT/LT line network improvement in the future, TANGEDCO would have to oblige. They claimed to have rejected the petitioner's request on these grounds.

The petitioner responded that the area was not a developing area, but in fact was already a developed area. She also stated that there were no new construction projects underway. She also pointed out that the area already had electrified street lights, and had had these for many years. She further claimed that the work undertaken was only due to personal grudges and intended to cause her mental agony. On hearing arguments from both parties, the Electricity Ombudsman stated that there was no need for an appeal since the order given by CGRF was already in favour of the petitioner. Further, the Ombudsman ordered, that if the TANGEDCO officials were found disobeying the CGRF order again, the petitioner could file again before the Hon'ble TNERC, for non-compliance of the orders of CGRF, under Section 142 of the Electricity Act, 2003 (i.e., *Punishment for non-compliance of directions by Appropriate Commission).*

Source: Ombudsman Case

ECC VOICE

திருச்சி மாவட்டம், மண்ணச்சநல்லூர் கிராமத்தில் வசிக்கும் திரு. ஜீவா என்பவர், தனது வீட்டிற்கு வரும் EB சர்விஸ் வயர் அறுந்து மின்சாரம் துண்டிக்கப்பட்டுள்ளதால், அவற்றை சரி செய்து கொடுக்குமாறு மின்சார வாரிய அலுவலகத்தில் புகார் அளித்துள்ளார்.

ஆனால், அவரின் புகாருக்கு எந்தவித நடவடிக்கையும் மேற்கொள்ளப்படவில்லை. அப்பொழுது, திருச்சி மின் நுகர்வோர் மையத்தினை பற்றி, செய்தித்தாளின் மூலமாக அறிந்துகொண்டு, அதன் மின் ஆலோசகர் திரு. செல்வம் அவர்களை தொடர்பு கொண்டு பிரச்சனைகளை கூறி புகாராக அளித்தார்.

புகாரினை பெற்றுக்கொண்ட மின் ஆலோசகர், உதவி பொறியாளரிடம் தொலைபேசி மூலம் தொடர்பு கொண்டு, இப்புகாரினை விவரித்தார். புகாரின் முக்கியத்துவத்தை எடுத்துக் கூறி விரைவில் சரி செய்து கொடுக்குமாறு வேண்டியுள்ளார். அதன்பிறகு சம்மந்தப்பட்ட அதிகாரிகள், அவரது வீட்டிற்கு சென்று பார்வையிட்டு, புதிய வயரை மாற்றி அமைத்துக் கொடுத்தனர். குறுகிய காலத்தில் தக்க நடவடிக்கை எடுத்து உதவிய திருச்சி மின் நுகர்வோர் மையத்திற்கும், மின் ஆலோசகர் திரு.செல்வம் அவர்களுக்கும் திரு ஜீவா தனது நன்றியினை தெரிவித்தார்.

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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

Solar and battery-run Brisbane neighbourhoods to save on bills

Two Brisbane neighbourhoods being developed to run with 100 per cent solar and battery is set to save home owners $1600 per year on their power bills. The neighbourhoods in Carseldine and Oxley being built on government-owned land would use Tesla Powerwall batteries and AlphaESS batteries, with garages being fitted for electric vehicles. Deputy Premier Steven Miles said the neighbourhoods would be one of the first in Australia to be 100 per cent solar and battery-run.

"This is all about delivering affordable housing, creating jobs and leading the way in what renewable communities can look like," he said. "On top of the photovoltaic solar energy and batteries, they will also have heat-pump hot water and Wi-Fi-controlled airconditioning, allowing them to make use of the solar energy during the day and manage it remotely via mobile phones and tables. Economic Development Queensland spokesman Michael Kane said they were building "homes of the future". "These houses are designed to be cool in summer and warm in winter with minimal amount of energy being spent," he said.

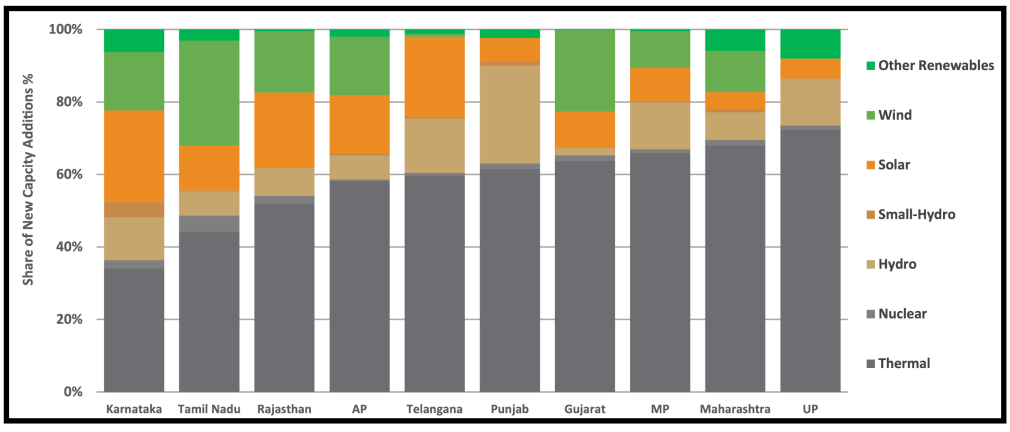
"They'll generate most of their power themselves. "At Carseldine, they'll generate 122 per cent of energy need so there's an opportunity to provide back to the grid." Mr Kane said there was an option to take part in a virtual power plant. "It's a bit like a phone plan but instead of you always paying out, you can make decisions about how much money you want to get back," he said." So if you go travel to north Queensland and no one is using your home for two weeks, under a normal situation you have a battery that sits there and does nothing. "But under a [virtual power plant], your battery can continue to trade and make you a little bit of money while your own holiday." Mr Kane said there was interest in the neighbourhoods with almost all the land already being sold for the homes.

Source: Brisbanetimes, January 23, 2021

Publications / Regulations

- Amendment to Tamil Nadu Electricity Distribution Code, TNERC, 2021
- Amendment to Tamil Nadu Electricity Supply Code, TNERC, 2021
- Advisory on rooftop solar scheme, MNRE, 2021

Installed Power Generation Capacity by Source for Top 10 states (Jan - Dec 2020)



Source: MercomIndia