

# Assessing TANGEDCO's Compliance to Distribution Inside this issue: Standards of Performance (DSOP): An Analysis of RTI Data for the Year 2016 (Part-11)

The previous issue explained TANGEDCO's level of performance in shifting service connections for its electricity consumers. This section of the editorial will examine the distribution company's (discom) level of performance for transfer of service connections.

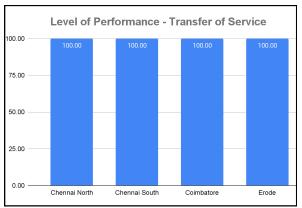
#### Transfer of Service Connection

As per TNERC DSOP regulations (page no 7), whenever consumers request transfer of service connection, the discom is expected to process the application within 7 days from the date of receiving the application. In order to evaluate whether the discom adheres to the above prescribed timeline, data around transfer of service connection was collated via RTI requests filed across 43 distribution circles.

TANGEDCO processes its consumer requests for transfer of service **connections efficiently:** Responses thus collated reflect a high level of expediency with 100% of requests related to transfer of service connections being processed within timelines. TNERC outlines that 95% of the total applications should be completed within the corresponding timeline. It must be observed that on this account, TANGEDCO's level of performance surpasses the targeted performance set by the TNERC.

In Chennai North, Chennai South, Coimbatore and Erode regions, all 23,311 applications received for transfer of service connections were completed as per regulations, without any delay.

There is adequate scope for TANGEDCO to expedite consumer requests for **new supply connection and additional load**: When compared with new supply connections and additional load, the discom has been more expedient with transfer of service connections. This shows that the distribution company works efficiently when it doesn't involve any infrastructure requirements.



(to be continued...)

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, Thirupapuliyur 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 GriblesPet Arakkonam Vellore District - 631 002 Mobile: +91 98946 32302 Email id: eccvellore@gmail.com

#### ECC Trichy

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



# A smart plug for a smart home! - Are you ready to take the first step towards home automation?

So you've heard the buzzword - <u>Smart Home</u>. Well, you are about to find out how to transform your abode into a smart home with a simple, low-cost solution - <u>Smart plug!</u>

#### Have you tried a smart plug yet?

A <u>smart plug</u> is all you need to remotely control the electrical appliances in your home. You can plug these smart plugs into a standard electrical outlet/power socket and connect any device/appliance to this smart plug. It converts devices that are not internet-enabled into smart ones through microcontrollers which will enable consumers to control them through an app or voice assistant. If you are wondering how that's possible, here is how - smart plugs, like any other smart gadgets, are Wi-Fi connected. Once the smart plug is connected to the internet, it can be controlled using an app/assistant.

Here is all that you need to do in your first step towards home automation:

- 1. Plug the smart plug adaptor into a regular electrical wall outlet/power socket.
- 2. Download the manufacturer's application onto your smartphone most smart plugs come with a companion app that can be downloaded from Google Play Store.
- 3. Connect it to your Wi-Fi network.
- 4. Once connected, plug any appliance of your choice into the smart plug.
- 5. Now the appliance can be controlled through the application on your smartphone!



Source: Indian Express

**Note** - One smart plug will control only one appliance at the time. The smart plug must receive power all the time in order to control the appliance.

#### How 'smart' is a smart plug?

At its most basic level, the smart plug enables you to turn the connected appliance on/off using an application on your phone. But, depending upon the smart plug you choose, a range of features can be unlocked.

<u>Scheduling</u>: A lot of smart plugs offer the option of scheduling your appliance to turn on/off automatically. This feature can be very effective when integrated into your routines, especially while using appliances like a coffee maker and water heater, among others. A few smart plugs also provide 'Away modes' for you to set up automatically switch your appliances on and off to simulate an occupied home, while you are away.

**Energy monitoring:** This feature essentially keeps an eye on the power consumed by the connected appliances. Televisions, set-top boxes, game consoles, computers, printers, speakers, air conditioners, and kitchen appliances can use more energy while in standby mode. By connecting these appliances to smart plugs, they can be nudged into turning them off while not in use.

#### Are you ready to bring home a smart plug?

An average Wi-Fi smart plug can cost you anywhere between <u>INR 800 to INR 2000</u>. This depends on the features and brands that you opt for. Now, if you have made the decision to bring one home, here are a few things to keep in mind.

- 1. Ensure that you have a stable Wi-Fi connection to support the usage of your all new smart plug
- 2. Choose the ones that are compatible with the Google assistant/Amazon alexa depending upon the other smart gadgets in your house.
- 3. All smart plugs are not compatible with all appliances. Check for the <u>amp limit</u> of the plug and be careful not to operate appliances above the specified limit.
- 4. Be sure to review all the features before you make the purchase.

With this buy, you have a smart plug for your smart home!



#### Tamil Nadu News

#### TANGEDCO purchases additional 1,000 MW to meet spike in demand

TANGEDCO has purchased an additional 1,000 MW to meet the increasing demand kicked off by recent election works and onset of summer. Speaking to TNIE, a senior official from Chennai said, "Last summer, the State's power demand was around 14,500 MW per day; it increased to 15,500 MW during peak summer. Now, we have an availability of 14,200 MW, including 4,320 MW from thermal sources and 5,000 MW from the central generation stations. Besides, the demands during the peak hours of the day would be met with 900 MW from hydro and other sources."

The official added that they are managing the situation by adopting short-term measures like procuring additional power with the permission of the Tamil Nadu Electricity Regulatory Commission (TNERC), and hoped that there would not bе anv shortage in the upcoming On power cuts increasingly reported from rural areas, the official said, "There are chances that transformers or other equipment got damaged under the harsh sunlight. We have taken steps to attend to all complaints immediately."

TNEB grid details (As on April 9): Source Capacity(MW) Generation (MW), Hydro - 2,321.9 793, Thermal - 4,320 2,770 ,Centre's share - 6,227 4,784, Power purchased - 2,830 6,205, Others - 2,044.38 1,584, Total - 17,743.28 16,136

Source: TheNewIndianExpress, April 10, 2021

#### India News

#### New report says India nearing 7 GW of rooftop solar

India's cumulative installed capacity of rooftop solar stood at 6,792 MW as of December 31, 2020, with 1,352 MW having been added in the year 2020. The commercial and industrial (C&I) sector is the biggest adopter of rooftop solar, accounting for 71% (4,842 MW) of the cumulative installed capacity. Residential rooftops aggregated to 1,107 MW and public sector installations 843 MW—according to the latest rooftop solar map produced by Bridge To India.

The capital expenditure (Capex) model—wherein consumers finance and own the system and hire an EPC company for the installation—amounted to 72% (4905 MW) of cumulative installations. The balance of installations (1887 MW) were in Opex (operating expenditure) mode, wherein a third-party company (developer/RESCO) owns, installs and operates the system at consumer premises. Maharashtra is India's rooftop solar capital, with 958 MW of generation capacity made up of 872 MW of C&I systems and 86 MW of public sector arrays. With 556 MW of rooftop capacity, Rajasthan ranks next, followed by Tamil Nadu, with 537 MW.

Annual installations: In the year 2020, Maharashtra led with new capacity addition of 147 MW out of the nationwide installation of 1352 MW. It was followed by Karnataka (81 MW), then Rajasthan and Tamil Nadu (74 MW each). Capex mode installations stood at 988 MW (73%) and Opex mode 364 MW (27%).

In EPC installations, Mumbai's Tata Power led with 7.8% of the market, closely followed by Hyderabad-based Fourth Partner Energy (7.4%). Mumbai's Mahindra Susten (3.4%) installed the third most capacity. In Opex (developer-mode) installations, Fourth Partner Energy claimed 19% of the market, followed by Singapore-based Cleantech Solar (14%) and Gurgaon's Amplus Solar (10%). Chinese manufacturers continued to dominate the inverter market, with Growatt supplying around 17.8% of the year's 1352 MW market, followed by Solis (17.4%) and GoodWe (17.2%).

Source: PVMagazineIndia, April 9, 2021



### **Consumer Focus**

The petitioner applied for two new service connections for his G + 1 complex - the ground floor for commercial and the first floor for domestic purposes on 29.02.2020. Given that both the floors had the same square footage and only one person was staying on the first floor, the Assistant Engineer (AE) refused to sanction a domestic service connection stating that there were no signs of habitation on that floor and additionally, it was being used for commercial purposes as a tuition centre at certain times.

On 05.03.2020, the petitioner received commercial service connections for both his applications. Aggrieved with this, the petitioner pursued the complaint with the <u>Consumer Grievance Redressal Forum (CGRF)</u>, again, asking that his first floor service connection be given as on domestic tariff. In order to find a solution for this request, CGRF ordered TANGEDCO officials to assess whether there was domestic habitation on the said floor. In response, a TANGEDCO official visited the premises on 07.11.2020 and reported no occupant on the first floor during his visit, also stating that there was no sign of a cooking appliance that could indicate domestic habitation. Based on this, CGRF dismissed the case. Disagreeing with the order, the petitioner appealed to the <u>Electricity Ombudsman</u>.

During the Ombudsman hearing, the petitioner stated that the person living on the first floor does not take tuitions in the premises. He said that the occupant takes classes for high school teachers in their respective schools. He also added that the occupant travels to various parts of the country for religious speech and cultural training for students, explaining why he was not there on the day of the visit. On hearing the arguments from both parties, the electricity Ombudsman stated that there was no proof to support TANGEDCO's claim that the occupant was taking tuitions in the premises in question. The ombudsman stated that it is not fair to deny a domestic service connection based on assumptions. Further, the ombudsman applied TNERC's Determination of Tariff for Generation and Distribution clause 6.2.2.1 - Low Tension Tariff I-A tariff applicable to.. and considered that the electricity consumption was utilised for residential purposes. Thus the Ombudsman ordered TANGEDCO officials to change the respective service connection to domestic tariff within 15 days and to submit a compliance report within 45 days from the date of receiving the order.

Source - Ombudsman case from the TNERC

#### **ECC VOICE**

நாகவேடு கிராமம், ஒத்தவாடை தெருவில் வசிக்கும் திரு சதீஷ்குமார், திரு. ரஞ்சித் மற்றும் திரு. தீன சக்கரவர்த்தி ஆகியோர்கள் தங்கள் பகுதியில் சீரற்ற மின்னழுத்தம் வருவதால் மின் விசிறிகள் முழு திறனில் செயல்படாமல், மெதுவாக இயங்கி வருவதாகவும், வாஷிங்மெஷின் போன்ற பிற மின்சாதனங்கள் முற்றிலும் இயங்கவில்லை என்று நாகவேடு மின்சார வாரியத்தில் பலமுறை புகார் அளித்துள்ளார்கள். ஆனால், இந்த புகாரின் மீது எந்தவித நடவடிக்கையும் மேற்கொள்ளப்படவில்லை. திரு. சதீஷ்குமார் தனது நண்பர் மூலமாக வேலூர் மின் நுகர்வோர் மையத்தைப் பற்றி அறிந்து, அந்த மையத்தில் தங்கள் பிரச்சனைகளை கூறி புகாராக அளித்தார். வேலூர் மின் நுகர்வோர் மையத்தின் மின் ஆலோசகர் திரு. பலராமன் அவர்கள் அவ்விடத்திற்கு சென்று, அங்குள்ள மின் கம்பிகளை பார்வையிட்டார். அவை பல வருட காலமாக மாற்றப்படாமல், லோயர் கேஜ் கம்பிகளாக இருப்பதால் சீரற்ற மின்னழுத்தம் ஏற்படுகிறது என்பதை உணர்ந்தார்.

பின்பு அப்பகுதியின் மின்வாரிய இளநிலை பொறியாளரை தொலைபேசி மூலம் தொடர்பு கொண்டு, இப்புகாரினை விவரித்தார். மேலும் அக்கம்பிகளை மாற்றி புதிய ஹையர் கேஜ் கம்பிகளை அமைத்து கொடுக்குமாறு வேண்டுகோள் விடுத்தார். அதன்பிறகு சம்பந்தப்பட்ட அதிகாரிகள் அந்த இடத்தினை பார்வையிட்டு, மின்கம்பிகளை மாற்றி தருவதாக அப்பகுதி மக்களிடம் உறுதி அளித்தனர். பின்பு, அவர்கள் கூறியவாறு பழைய லோயர் கேஜ் கம்பிகளை அகற்றிவிட்டு, புதிய ஹையர் கேஜ் கம்பிகளை அமைத்துக் கொடுத்தனர்.

நீண்ட காலமாக தொடர்ந்து வந்த பிரச்சனைக்கு தக்க நடவடிக்கை எடுத்து உதவிய வேலூர் மின் நுகர்வோர் மையத்திற்கும், மின் ஆலோசகர் திரு.பலராமன் அவர்களுக்கும் திரு சதீஷ்குமார் மற்றும் அப்பகுதி பொதுமக்கள் தங்கள் நன்றியினை தெரிவித்தனர்.

#### Citizen consumer and civic Action Group (CAG) New #246 (Old #277B),

New #246 (Old #277B), TTK Road (J.J. Road ), Alwarpet, Chennai 600 018 INDIA

Phone: 91-44-24660387 Telefax: 044-24994458 Email: ecc@cag.org.in

www.cag.org.in

#### Initiative of



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

Balaji M K

Bharath Ram G N

Pavithra R

#### **World News**



#### Israel aims to become world leader in use of solar energy

Israeli authorities believe it would be feasible to rely mainly on solar energy while several natural gas power plants will still be used as a backup in a few decades. Israel, generating about 8 percent of its electricity from solar power plants nowadays, sets a goal of reaching 20 percent of its electricity from solar radiation by 2025 and 30 percent by 2030.

"As Israel doesn't have many different natural resources, we don't have a lot of potential for hydro facilities, and the wind is also quite limited. To reach high targets of renewables, we have to rely on solar energy," said Yoav Katsavoy, acting chairman at Israel's Electricity Regulatory Authority. Gideon Friedmann, acting chief scientist at Israel's Ministry of Energy, said that Israel is moving toward renewable energy.

"We want to clean our air and reduce emissions. The only viable renewable energy solution in the country currently is solar," he noted. To reach such a high percentage of solar usage, Israel will need to develop an advanced storage system to accumulate enough energy for periods when the sun doesn't shine. Israel is a leader in storage installations with around 800 megawatts (MW) of committed solar plants that have an additional four hours of storage that supply electricity at peak demand hours after the sun has gone down. Solar power generation depends on the solar radiation that is constantly changing due to sun position, day or night, winter or summer, cloudy or clear day.

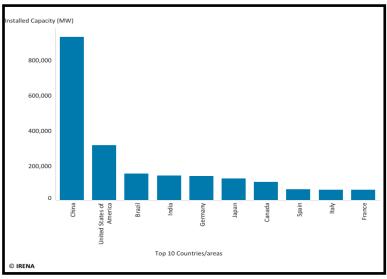
Another idea is to promote the dual-use of land, installing PV on farming fields, water reservoirs, existing infrastructure, alongside roads, and more solutions could help the faster expansion of the solar sector.

Source: Globaltimes.cn, April 03, 2021

# **Publications / Regulations**

- Planning and prospects for renewable power: Eastern and Southern Africa, IRENA, 2021
- Renewable Capacity Statistics 2021, IRENA, 2021
- Analytical frameworks for electricity security, **IEA**, 2021

## Renewable Energy installed capacity - Top Ten Countries



Source: IRENA