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Current News

மின் செய்திகள்

May, 2018

Note on BEE Star Rating for LED Lights

LED (Light Emitting Diode) lights are more energy efficient, versatile, and last longer than incandescent and fluorescent bulbs. But not all LEDs are efficient. There are numerous factors that decide the quality, safety and efficiency of LED products. Till recently LED lights were under the voluntary scheme of the BEE star rating program. Manufacturers were not required to mandatorily follow the prescribed standards, due to which, poor quality LED bulbs were sold in the market. This was also one of the reasons behind the import of cheap quality LED bulbs in the country.

In order to address this, the BEE brought LED bulbs under mandatory scheme from 2018. BEE has released guidelines for the product and fixed energy efficiency rating labels on LED lamps. This labelling program of BEE has now made it mandatory for all the LED lamp manufacturers to put efficiency star labels on the lamps.

The LED lights which are covered under this BEE labelling program are self -ballasted non-directional general LED lamps meant for general lighting services which work on single phase ac supply up to 250 V, 50 Hz and also they should be manufactured, imported or sold in India. This mandatory scheme does not cover self-ballasted tinted or coloured LED lights and also the OLEDs (Organic Light Emitting Diode).

Consumer guide to LED energy star label: The amount of light from the bulb is measured in terms of lumens. The LED bulb which provides higher lumens per watt is considered as more energy efficient. The BEE energy star label for LED bulbs will look like as shown in Fig.1. The luminous efficacy should be mentioned on the label which is the lumens per watt. Apart from this the label should also have other information like total power in terms of watt, rated luminous flux, validity of the luminous efficacy, brand and model. The consumer can select a high energy efficient bulb by looking at the luminous efficacy. The minimum luminous efficacy that a bulb should have is 79 lumens per watt in order to get qualify for the BEE star label. The star rating plan for the LED lamps for the period 01/01/2018 to 31/12/2019 is as shown in following Table.

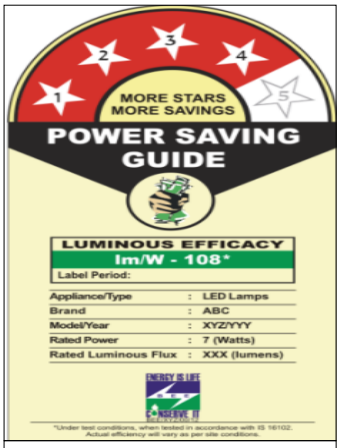

Fig.1 BEE Star Label for LED

Star Rating	Rated Luminous Efficacy (lumens/watt)
1	≥ 68 & 79
2	≥ 79 & <90
3	≥ 90 & < 105
4	≥ 105 & < 120
5	≥ 120

Apart from the luminous efficacy a consumer should also look for other factors like colour temperature and colour rendering index before selecting a LED lamp. **Colour Temperature:** this decides the colour of the light emitted from the bulb a) for temperature between 2700K and 3500K - warm yellowish colour, b) between 4000-4500K - a little yellow and c) around 5000K and above - pure white. So in order to get a high quality white light we should choose the bulb which has higher colour temperature. **Colour Rendering Index:** It's a scale which ranges from 0 to 100. This value indicates how good a given light source is at rendering colour compared to a reference light source. For good quality of light this value should be higher. Thus BEEs energy star rating for LEDs helps in eliminating the low quality products from the market.

(*CONCLUDED*).

INSIDE THIS ISSUE:

Please send your feedback to ecc@cag.org.in

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Tamil Nadu News

Tamil Nadu taps record wind energy for 2017-18, leads clean energy chart

Tangedco harnessed 13,000 million units of wind energy and 2,905 million units of solar energy in 2017-18. Tamil Nadu is the only state to have used so much of green energy last year. The state has saved not less than 5,406 million tonnes of carbon on this count.

"In the green energy initiative, Tamil Nadu is a leader among all states. It had installed capacity of 11,113 MW as on March 31, 2018, compared to 10,480 MW at the end of the previous financial year," said state electricity minister P Thangamani in the assembly on Tuesday. In the coming months too, the government will increase the share of clean energy through various initiatives, he said.

On July 27, 2017, Tangedco harnessed wind energy to the extent of 5,095MW. "In 2017-18, it was proposed to add wind power capacity to the extent of 4,500MW. Work is still going on. Apart from Tangedco floating tenders on its own to increase the wind power capacity, Power Grid Corporation of India will add 800MW of wind power in Tamil Nadu," said a senior Tangedco official. This year, the maximum wind energy harnessed in a day is 4,200MW.

The discom, by using green power, has lowered its purchase expenditure. "Due to lowering of power purchase tariff, the discom's loss for 2017-18 has come down to Rs 2,975 crore. We are working towards a break even by this year end," said the official.

In Sholinganallur and Manali, 400 kV substations have been commissioned and work is under progress for commissioning 400 kV Guindy sub-station and tender is under scrutiny for Korattur 400kV sub-station.

To reduce the time of supply interruption in Chennai and suburban areas, the discom has proposed to replace 17,535 distribution transformers at an estimated cost of Rs 1,750 crore. This will be funded by the Rural Electricity Corporation.

Similarly 38,844 pillar boxes in Chennai city will be replaced by high rupturing capacity 6-way pillar boxes. The work is expected to be over in 2019-20.

Also, overhead lines will be replaced with underground cables in all parts of Chennai Corporation at a cost of Rs 2,549 crore. A total of 33,307.81km of low tension overhead lines and 2004,89 km of high tension overhead lines will be taken out.

Source: The Times of India, May 31, 2018.

India News

India's government has postponed its electric vehicle replacement plan to next year.

Going green is never as easy as it sounds, and this is a fact that India is slowly digesting. Citing delays by state governments and a shortage of charging points, Energy Efficiency Services Ltd, a joint venture between four public-sector power companies, has decided to postpone a plan to procure and operate 10,000 EVs to March 2019.

The battery-powered cars are meant to replace the petrol and diesel cars in the government's fleet, which comprises of 500,000 vehicles. As most of these cars are for use within cities, the relatively short distances required to be traveled make electric cars a suitable alternative. The replacement period is expected to take three to four years.

The government had originally planned to have 500 EVs on the road by November 2017, sourced from Tata Motors and Mahindra & Mahindra, with the remaining 9,500 ready by June 2018. The move dovetailed with the central government's somewhat unrealistic plan to have battery-powered vehicles make up 30% of the cars (not just government cars) on Indian roads by 2030 in order to reduce dependence on oil and curb air pollution.

India plans to have a third of its total fleet of cars driven on electricity by the year 2030. State-owned Energy Efficiency Services Ltd., which is responsible for bringing electric cars to replace the petrol and diesel passenger vehicles used by government officials, will roll out 10,000 vehicles by March 2019. EESL issued its first tender for 10,000 cars in September. Initially, the company planned to roll out the first batch of 500 cars by November and the rest by June.

However, Saurabh Kumar, the head of Energy Efficiency Services, which is leading the government's electric vehicle charge, told Bloomberg that there were only 250 government-procured electric cars in operation in India at the moment - 150 in Delhi and the rest in the state of Andhra Pradesh.

Worse still, only 200 charging points have been constructed to date, half of which are in Delhi. While this could be due to the confusion over the licenses and permissions required to set up charging stations, the Ministry of Power had issued a statement last month clarifying that companies setting up these points did not require a separate license for the transmission or distribution of electricity.

Despite its lack of progress, the government released a second tender in March 2018 inviting bids for the supply of 10,000 new EVs. That will likely be put on hold as the first phase of the plan moves towards completion. Affordable fossil fuel-driven cars and an absence of state subsidies for electric vehicles make purchases by the government and companies critical for EV sales, according to BNEF, which expects EVs to comprise about 7 percent of sales in India by 2030.

Source: Business Insider, May 30, 2018.

Consumer Focus

FACTS

The Appellant, availed a single phase service connection for his residence. During the assessment period, the consumer was charged for 520 units. As the consumption was high, the consumer filed a petition before the CGRF for refund of the excess amount of Rs.1123/- collected. The CGRF of Chennai EDC/ North dismissed the petition. Aggrieved, the Appellant filed an appeal before the Electricity Ombudsman.

CONTESTATIONS

Appellant: As per the appellant's calculation, the real current charges for the period was supposed to be Rs.1139 but the department has mentioned mistakenly as Rs.2262. Therefore, the excess amount of Rs.1123 collected from him may be returned with interest by the department and action may be taken against the person who is responsible for this

Respondent: The meter became defective because of Chennai rains in December 2015 was replaced because of the assessment that was made as 10 units. The corresponding amount of Rs.88 was collected on 9.3.2016. At that time, the petitioner did not object and paid the amount. Later, some discrepancies were found in the meter reading. The difference in amount of Rs.731 will be adjusted in the future CC charges. Necessary Disciplinary proceeding have been initiated against the assessor.

OBSERVATIONS AND JUDGMENT

In view of the findings, the Respondent was directed to refund the excess amount of Rs. 968 with interest as applicable to security deposit within 30 days from the date of receipt of the order. The interest was to be calculated up to the date of refund. As the Respondent had agreed to refund the excess amount and had stated that Disciplinary Proceedings had been initiated against the assessor, the Appellant informed that his petition may be closed.

ECC Voice

அதிக உபயோகத்தில் உள்ள மின் சாதனங்களின் மின் செலவு அளவு

நீர் வெப்பமூட்டி (Water Heater)

உடனடி வெப்பமூட்டி (Instant Heaters) 3000W - 3 யூனிட் / மணி	சேமிப்பு வகை (Geycers) 2000W - 2 யூனிட் / மணி	அமிழ் சூடேற்றி (Immersion Heaters) 1000W - 1 யூனிட் / மணி

குளிர் சாதனங்கள்

காற்றுப்பதனி (Air-conditioner) 1500W-2500W 8.5 - 14.5 யூனிட் / நாள் **	காற்றுகுளிர்த்தி (Air-cooler) 170W 1.7 யூனிட் / நாள் **	மின் விசிறி (Fan) 60W 0.6 யூனிட் / நாள் **	குளிர்பதனி (Refrigerator) 200W 2 யூனிட் / நாள் **

சூடேற்றி சாதனங்கள்

கெட்டில் (Kettle) 1000 – 2000W 1 - 2 யூனிட் / மணி	ஹாட் ப்ளேட் (Hot Plate) 1000 – 1500W 1 – 1.5 யூனிட் / மணி	அடுப்பு (Stove) 1000W 1 யூனிட் / மணி	டோஸ்டர் (Toaster) 800W 0.8 யூனிட் / மணி	இஸ்திரி பெட்டி (Iron Box) 750W 0.75 யூனிட் / மணி

ஒளி விளக்குகள்

குமிழ் விளக்கு (Incandesent Lamp) 100/60/40W	குழல் விளக்கு (Tube Light) 40/20W 0.28/ 0.15 யூனிட்/நாள் **	மெல்லிய குழல் விளக்கு (Slim Tube Light) 36W 0.26 யூனிட் / நாள் **	கை அடக்க குழல் விளக்கு (CFL) - 7/9/11/13W 00.6 – 0.09 யூனிட் / நாள் **

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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.

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World News

Current News

Air conditioning set to be a main driver of global electricity demand

The rising use of air conditioners (ACs) in offices and homes is set to be a top driver of global electricity demand in the next 30 years, the International Energy Agency (IEA) said Tuesday.

Worldwide energy demand from air conditioners is set to triple by 2050, according to the IEA's "The Future of Cooling" report. Today, less than a third of global households own an air conditioner. In countries such as the United States and Japan, more than 90 per cent of households have air conditioning, compared to just 8 per cent of the 2.8 billion people living in the hottest parts of the world.

Using air conditioners and electric fans to stay cool already accounts for about a fifth of the total electricity used in buildings around the world - or 10 per cent of all global electricity consumption today.

This increasing demand will need huge amounts of new electricity capacity, equivalent to the combined capacity of the U.S., Japan and European Union today. The number of air conditioners in buildings will hit 5.6 billion by 2050, up from 1.6 billion today, the study said.

The impact of using air conditioners and electric fans is already significant, accounting for around one-fifth of the electricity used in buildings globally, the IEA said. After the industry sector, air conditioning use is due to be the second biggest source of global electricity demand growth, it added.

"Growing electricity demand for air conditioning is one of the most critical blind spots in today's energy debate," Fatih Birol, the IEA's executive director, said in a statement.

"Setting higher efficiency standards for cooling is one of the easiest steps governments can take to reduce the need for new power plants, and allow them at the same time to cut emissions and reduce costs," said Birol.

"With rising incomes, air conditioner ownership will skyrocket, especially in the emerging world. While this will bring extra comfort and improve daily lives, it is essential that efficiency performance for ACs be prioritized. Standards for the bulk of these new ACs are much lower than where they should be." The report offers up a remedy for the looming uptake of air conditioning. It found that a number of measures, including tough minimum energy performance standards, could help to more than double the average energy efficiency of air conditioning stocks globally between now and 2050.

Source: CNBC, May 15, 2018.

Publications/Regulations

- Status of Power System Transformation 2018, May 2018, Click here.
- World Energy Prices 2018: an overview May 2018, Click here.

Renewables 2018: global status report

Top ten countries in hydropower capacity and addition —2017