How cheap power, inefficient ACs are pushing Delhi to the brink

TNN | Jun 13, 2018, 01.22 AM IST

New Delhi: Cheaper electricity, combined with a lack of regulation to ensure efficient performance of air conditioners, is pushing up Delhi’s electricity demand to record levels.

A new analysis by the Centre for Science and Environment (CSE) released on Tuesday shows subsidised electricity and severe heat, combined with heavy use of air conditioners by the domestic sector, is fuelling this huge demand.
On June 8, 2018 Delhi’s peak demand hit an all-time high of 6,934 MW at 3.20pm, about 6.25% higher than last year’s 6,526 MW recorded on June 6, 2017. Electricity in the capital is cheaper than most other cities. Delhi Electricity Regulatory
Commission (DERC) has slashed electricity rates for domestic consumers by 12-25% across all consumption slabs this year. Delhi government makes it even cheaper by providing a 66% subsidy on the rate for households that consume less than 400 units a month, and an additional rebate of Rs 100 on the fixed charge to households that consume less than 100 units a month.

The CSE analysis has found that the subsidised 400 units can easily accommodate use of one AC, lights, fans and other appliances. “If a 3-star split AC runs for six hours a day for 30 days in a month, it will consume about 260 kWh of electricity, which can be easily covered under the subsidised 400 units a month. Delhi government data shows that the subsidy was availed by 82% of homes last year — which means even higher income households are benefitting from the low rates, since there is no mandate for energy audits or compulsory disclosure of annual energy consumption,” says the analysis.

Even the highest slab with maximum rate in Delhi kicks in only if the monthly consumption crosses 1,200 units and is charged just Rs 7.75 per unit; in comparison, the maximum tariff in Mumbai is of Rs 9.95 per unit and is applicable on monthly consumption above 500 units. This is exacerbated by weak energy efficiency standards for air conditioners in India. For example, between 2013 and 2018, India produced more than 26.5 million AC units but more than 60% of those were 3-star rated as opposed to 5-star rated that is most energy efficient. The International Energy Agency recently found that India has the worst market average measure of energy efficiency compared to major economies like US, Europe, Canada, China, Japan, Korea and Singapore.

CSE’s analysis also reflects that the residential sector has a major footprint on electricity demand. This is evident from the fact that peak demand is often highest at night compared to afternoon. During the month of May, for as many as 21 days, late night peak demand has been higher — up from 14 days in 2016. A typical summer day in Delhi has two peaks, one during the day (driven by commercial activities) and other around midnight (driven by residential sector). On an average, these two peaks have become almost identical now, says the analysis.
Electricity consumption in Delhi has increased by almost 42% between 2006-07 and 2017-18. On an average, electrified households in Delhi consumed about 260 kiloWatt-hour (kWh) of electricity monthly in 2016-17, similar to the electricity consumption of an average German household, the analysis added.