

# AEG 20Q2

## New York Stakeholder Challenge Buildings & Grid Modernization

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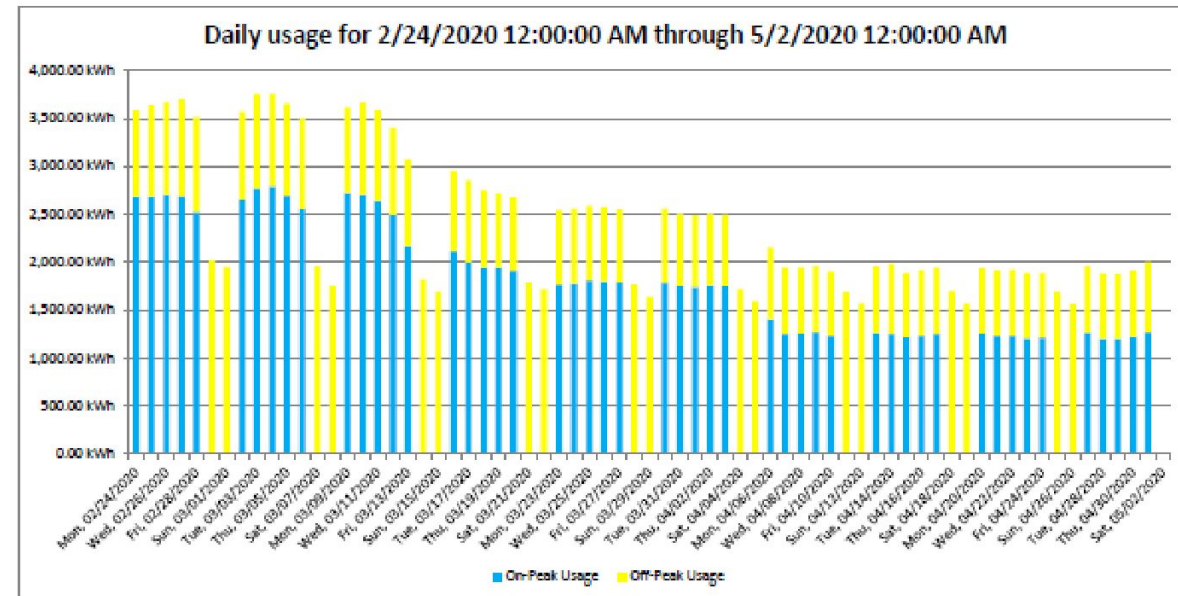
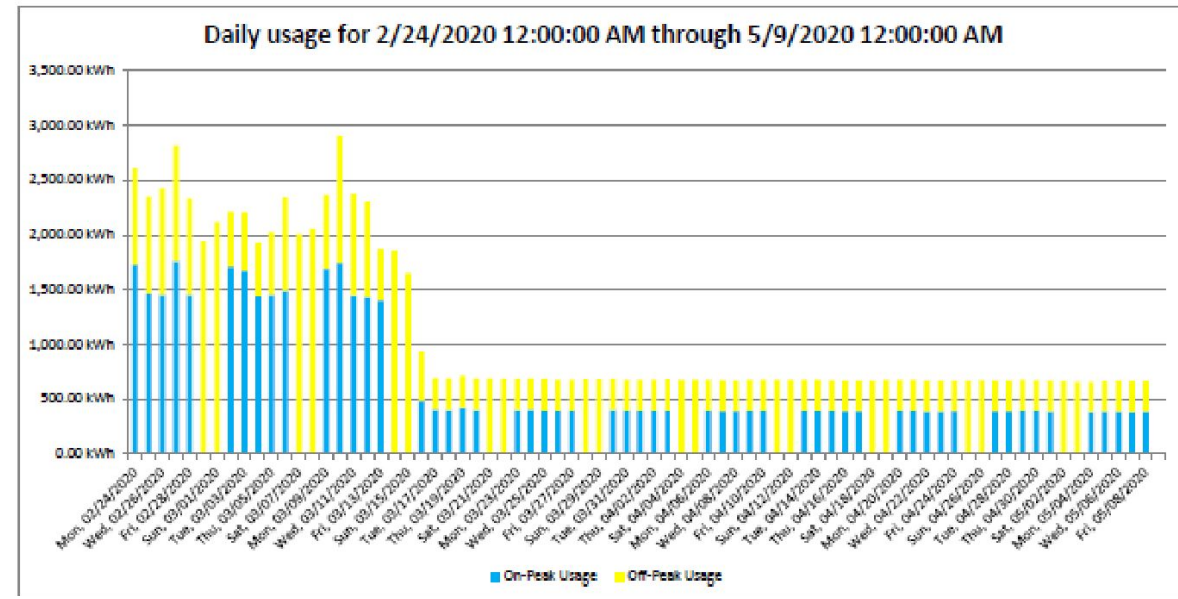
# Context

- Real Estate companies strive to meet sustainability goals as demanded by investors, tenants, employees. Commercial Property Owners in NYC must reduce energy consumption to meet overall carbon emissions caps as required by LL97.
- Tenants control the majority of electricity in the building, but often operate blindly, or do not prioritize or understand how to be more energy efficient.
- Commercial Property Owners cannot meet efficiency goals, or comply with LL97, without contributions from tenants.
- COVID-19 has exposed a wide disparity in office and retail tenants' ability to go into "sleep mode" while not at work – also indicative of wasteful consumption both after hours and on weekends.



# Benefits

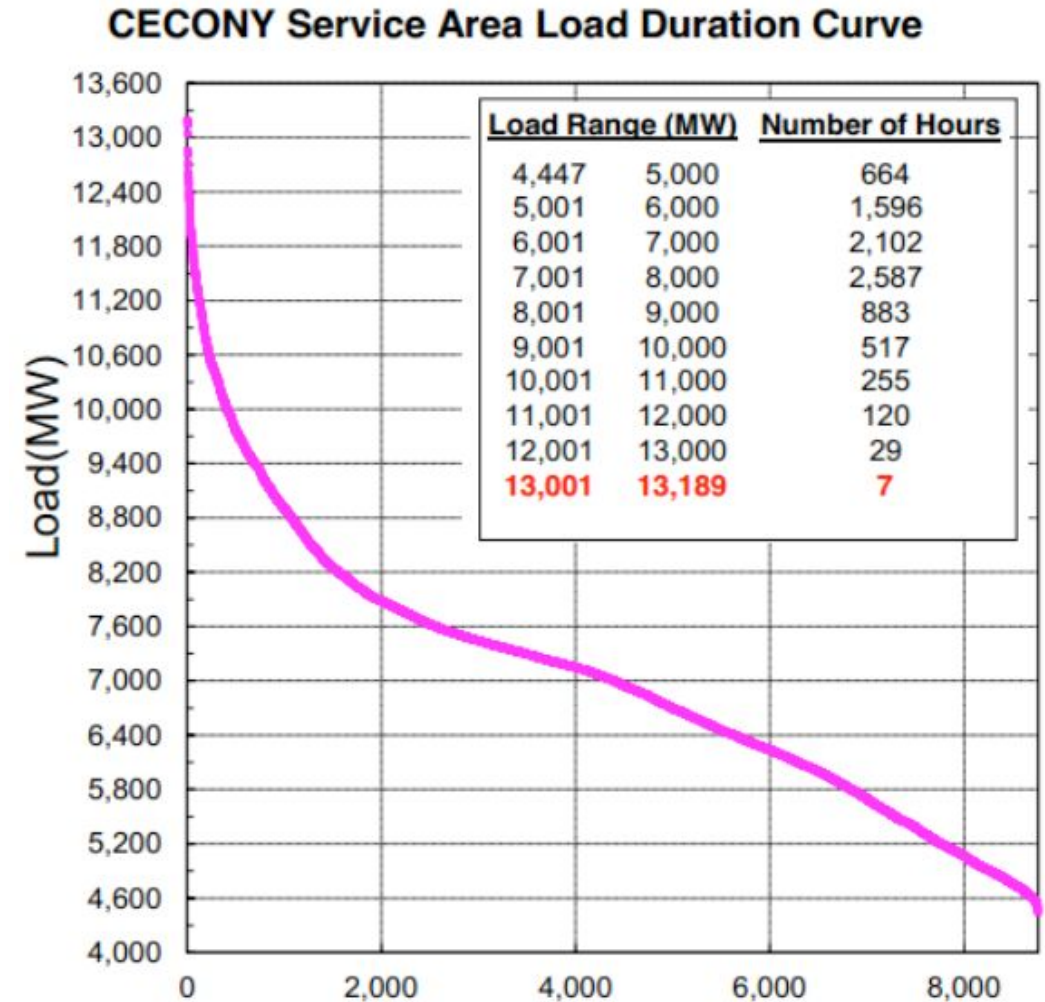
- Providing tenants with not only the visibility, but also the awareness of their energy consumption can establish a more elastic relationship between energy and occupancy.
- Awareness is a combination of granular knowledge of where and when energy is being consumed with the ability to control it – either onsite or remotely.
- Lessons from COVID-19 should foster awareness of the sources of energy consumption are truly necessary, versus those which are true vampire or parasitic loads.





# Consequences

- Building owners will incur penalties in 2025 for failure to comply with LL97.
- Violations will be “resolved” by paying penalties instead of reducing carbon emissions.
- As electrification and EV progress, electricity grid will continue to cost \$\$\$ to support growing peak demands and inefficient load factors.
- Without energy efficiency, we aren't really solving the problem, we are just shifting it.



# Regarding Buildings & Modernization

**... to enable a Carbon Free New York, we must first address the lack of tenant-level energy audits and tenant-level control capabilities to improve energy awareness between Landlords and Tenants.**

- **Design office and retail spaces with electrical panel schedules that are organized by use type (lighting vs plugload vs supplemental HVAC, quadrant by quadrant, floor by floor).**
- **Provide affordable, cybersafe solutions (both new and retrofit) for automation of energy sources within tenant spaces, so they can respond more nimbly when occupancy fluctuates, and can be more centrally and remotely controlled.**
- **Make more aggressive breakthroughs in energy efficiency for IT – equipment, server rooms, supplemental cooling.**
- **Provide funding to commission and retro-commission all of the above. Many times things stop working and no one notices, or they never worked properly to begin with.**
- **Notice I have not mentioned submeters. That goes without saying.**
- **We cannot wait for code to address this – need this solution now.**

