Noda Advances Next-Generation Demand Flexibility in Commercial Buildings

WASHINGTON, DC, DC, UNITED STATES, September 3, 2025 /EINPresswire.com/ -- Noda, the leading energy data and automation solution for commercial real estate, today announced the release of new advanced demand flexibility capabilities, developed and tested in collaboration with the U.S. Department of Energy's Lawrence Berkeley National Laboratory (LBNL). Focused on Noda's Command solution, the new capabilities are documented in a case study that validates the role of advanced analytics and AI-powered automation in unlocking cost-effective, scalable demand flexibility across the commercial built environment.

The new functionality embedded within Noda Command enables building operators to automate peak demand reduction and grid-responsive load shedding – critically, without compromising occupant comfort or day-to-day operational performance. These advancements come at a crucial time, as building owners and operators face mounting energy costs, rising grid instability, and increasing expectations for building performance .

"By combining real-time analytics, expert engineering services, and AI-based automation, Noda is delivering the new and complete standard for energy intelligence and responsiveness," said Kate Henningsen, CEO of Noda. "Together with Lawrence Berkeley National Laboratory, we've shown that buildings can be both cost-effective and grid-supportive."

Intelligent Control for Grid-Responsive Buildings

Noda Command includes performance-assured demand flexibility capabilities designed to help building teams avoid costly peak demand charges and respond to grid emergencies while also reducing overall energy consumption. Built on Noda's scalable Connect AI data backbone, Command orchestrates coordinated load shedding across diverse HVAC assets, guided by AI and real-time site feedback.
Rather than requiring local controller reprogramming, Noda's "push" paradigm uses a digital building twin and automated control sequences to modulate power draw in line with operator-set priorities and zone-level comfort thresholds. This ensures peak demand targets are met without degrading building performance.

In a series of field demonstrations with retail real estate leader Macerich, Noda Command reduced peak HVAC power demand by as much as 40%, achieving over $60,000 in cost avoidance across three sites within six months. These results show the potential for scalable, verified

demand-side value that extends beyond traditional efficiency savings.

The Case for Demand Flexibility

While energy monitoring alone can deliver 3% energy savings on average according to a 2020 study by LBNL, the broader opportunity in demand flexibility remains largely untapped. Peak demand charges can account for up to 70% of a commercial building's utility bill, and yet less than 40% of available demand flexibility capacity is realized in current programs. The Command module is engineered to change that, empowering real estate teams to capture daily cost savings and reduce overall building consumption while supporting grid resilience.

This capability is increasingly critical as the energy landscape evolves. Across the U.S. and globally, utilities are grappling with unprecedented grid strain driven by aging infrastructure and rapid load growth. In many regions, grid emergencies – once rare – are becoming seasonal or even routine, and the financial impact of uncontrolled peak demand is rising rapidly.

At the same time, electricity prices are becoming more volatile. As time-of-use pricing and demand response incentives become more common, building operators who can flexibly manage their loads stand to benefit not just from lower bills, but from access to new revenue opportunities tied to grid services. The demand flexibility enabled by Noda Command is thus no longer a nice-to-have; it's fast becoming a strategic imperative for real estate portfolios aiming to future-proof operations while playing a proactive role in grid reliability.

"The future of high-performing, low-cost commercial buildings depends on integrating robust analytics with advanced control," says Dr. Jessica Granderson, Division Director, Building Technology and Urban Systems Division at LBNL. "These innovations are increasing value for building owners and making our grid more reliable."

About Noda
Noda is the leading analytics partner for commercial real estate. Powered by hands-on expertise and intuitive technology, we build end-to-end solutions for more adaptive, efficient, and sustainable buildings. We target your portfolio's most significant operating costs, helping you save time, money, and carbon and transforming your buildings into intelligent, responsive ecosystems. Noda operates in the US, UK, and via our trusted partner network in selected markets across Europe. Learn more at www.noda.ai.

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