



Turning Data into Action

How Orange and Rockland Built a Pathway to Smarter Energy Use

BY AEIC'S ELIZABETH COOK

For years, energy efficiency has been described as the first fuel of the clean energy transition. But before buildings can reduce consumption, electrify systems, or decarbonize operations to achieve regulatory compliance goals, one prerequisite must be met: visibility. Without a clear understanding of how energy is used, when it peaks, and how it compares to similar buildings, efficiency remains an abstract goal rather than an actionable plan.

That insight sits at the heart of the Building Energy Usage Portal (BE-UP) developed by Orange and Rockland Utilities (O&R). The portal, launched in 2024, represents a shift in how utilities support customers by turning raw meter data into accessible, decision-ready information. In addition to being a valuable compliance tool, BE-UP is a strong example of the innovative approaches AEIC's member utilities are developing to achieve operational excellence throughout the industry.

From Benchmarking Mandates to Customer Empowerment

The origins of BE-UP trace back to

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building energy benchmarking laws that emerged in major U.S. cities in the 2010s. These policies, supported by the U.S. Department of Energy's ENERGY STAR Portfolio Manager, require large commercial buildings to track and report their energy use, often comparing performance against similar properties.

While the concept is straightforward, implementation is not – especially for large, multi-tenant buildings. Unlike a single-family home with just one meter, commercial buildings can contain dozens or even hundreds of meters, each tied to individual tenants. Aggregating that data accurately and securely is a complex task, one that utilities are uniquely positioned to support.

Phil Madnick, Section Manager,

Customer Energy Services at O&R, has seen this challenge from multiple angles. When he joined O&R in 2022, having spent twelve years at Con Edison, he noticed a critical gap.

While benchmarking requirements were expanding – particularly in New Jersey – much of the process still relied on paper forms and manual handling, a method increasingly misaligned with regulatory expectations and customer needs. O&R needed to purpose-build a modern, web-based system to deliver aggregated energy data to customers.

Building the Portal at a Pivotal Moment

The timing was both challenging and opportune. O&R had recently completed two major infrastructure upgrades: full deployment of advanced metering infrastructure (AMI) and a comprehensive customer care and billing system modernization. Together, these projects replaced systems that, in some cases, dated back to the 1970s.

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Rather than rushing to layer a new portal on top of freshly implemented systems, Madnick and his team requested additional time from regulators. The goal was to ensure data accuracy and system stability before launching a customer-facing platform. Regulators agreed, granting a six-month extension that proved critical to the project's success.

Development began in earnest in late 2023 with support from internal IT teams and external vendors. Drawing on experience from a similar platform at Con Edison, O&R focused on automation, scalability, and ease of use. Within seven to eight months, BE-UP went live – just in time for the second year of New Jersey's benchmarking requirements.

How BE-UP Works

At its core, BE-UP allows customers to securely access aggregated electric and gas usage data for their buildings and automatically connect that data to ENERGY STAR Portfolio Manager. Once enrolled, customers no longer need to submit annual paperwork or manually upload data. The system establishes a recurring data feed, updating energy usage year after year.

Although the regulatory requirement applies only to large commercial buildings – typically those over twenty thousand square feet – O&R made a strategic decision to open the portal to all customers. That choice reflects a broader philosophy: if the utility is investing in digital infrastructure, it should maximize customer value.

Today, building owners, property

managers, and authorized representatives such as energy consultants can all use the platform. Roughly half of current users fall into that consultant category, highlighting the growing ecosystem of third-party firms that help translate energy data into efficiency strategies.

Information as the First Step to Efficiency

Benchmarking alone does not reduce energy use – but it enables every step that follows. By showing customers how their buildings perform relative to peers, BE-UP helps identify oppor-

tunities for improvement. High energy use intensity may signal aging HVAC equipment, poor insulation, or operational inefficiencies that can be addressed through targeted upgrades.

For O&R, the portal also serves as a gateway to broader energy efficiency and decarbonization programs. Customers flagged through benchmarking can be directed toward commercial retrofit initiatives, electrification incentives, or weatherization support. In some cases, the insights feed directly into non-wires alternative planning, helping utilities manage local grid constraints without building new infrastructure.

This alignment between customer

behavior and grid planning marks a significant evolution in utility operations. Historically, grids were designed around aggregate demand and peak forecasts. Today, granular data enables more precise, cost-effective solutions that benefit both utilities and communities.

Lessons for the Industry

The success of O&R's BE-UP tool offers several lessons for utilities navigating similar transitions:


Infrastructure matters first: AMI and modern billing systems are prerequisites for meaningful data access.

Time and sequencing are critical: Allowing systems to stabilize before launching customer-facing tools prevents downstream issues.

The Building Energy Usage Portal (BE-UP) developed by Orange and Rockland Utilities represents a shift in how utilities support customers by turning raw meter data into accessible, decision-ready information.

Stakeholder collaboration is essential: Success depended on close coordination between IT, data analytics, regulatory teams, and external partners.

Visibility creates opportunity: When customers understand their energy use, markets for efficiency services, consulting, and innovation grow.

As states continue to roll out ambitious clean energy policies, tools like BE-UP demonstrate how utilities can move beyond compliance to become active partners in efficiency and decarbonization. By turning data into insight – and insight into action – O&R has shown that the path to a smarter grid starts with giving customers the information they need to lead the way. 

Visibility transforms raw data into a powerful efficiency tool. When consumers understand their usage, they can turn insights into action for a sustainable future.