

**Before  
The Council of the City of New Orleans**

In Re: RESOLUTION AND ORDER  
ESTABLISHING A DOCKET AND  
PROCEDURAL SCHEDULE TO  
ENHANCE DISTRIBUTED ENERGY  
RESOURCE PROGRAMS

DOCKET NO. UD-24-02

**COMMENTS OF RECURVE**

On October 24, 2024, the City Council directed parties to submit proposals for changes to existing policies or programs, new programs, costs, and proposed funding mechanisms to support programs that increase the availability of DERs, battery storage, and related facilities, including any changes to ENO-related policies, funding mechanisms, and establishing a vendor-neutral program to facilitate these goals. Recurve appreciates the opportunity to comment and looks forward to contributing our technical expertise to the discussion in this docket.

**I. Introduction to Recurve**

Recurve is an industry leader in providing software solutions to utilities and vendors to enable and enhance the short and long-term demand flexibility derived from distributed energy resources. Recurve's FLEX platform assists utilities and vendors in pinpointing the best locations to deploy distributed energy resources, monitors their performance, and facilitates market settlements between utilities and vendors based on the value provided. The FLEX platform is crucial for creating market-based program designs that give utilities easier access to the benefits provided by various technologies and vendor solutions available today. It facilitates a coordinated response to manage load growth, enhance system resilience, and lower the carbon intensity of the energy system. Recurve's measurement platform quantifies

the impacts and performance of DER assets using advanced open-source methods and code developed in collaboration with industry partners. This transparency and consistency gives regulators, utilities, and vendors clear visibility into the value delivered. With this actionable intelligence, they can confidently scale investments in distributed energy resources (DERs), ensuring they deliver reliable benefits to the grid, communities, and energy consumers.

## II. **Overview of optimal DER policy recommendations.**

Our comments focus on three recommendations for optimal DER policy that can enhance and accelerate the adoption of distributed energy resources by building in essential feedback loops on performance and a layer of accountability for the investment to instill confidence that the delivered impacts are real and provide actionable intelligence for improvements. These core principles serve as the foundation for successful vendor-neutral open-market program models.

Recurve recommends that the City Council adopt the key following policy guidelines to increase the availability of DERs, confidently scale demand side investments, and enable a vendor-neutral program:

1. The **hourly and locational valuation of grid benefits** (energy, capacity, avoided transmission and distribution costs, ancillary services recognized by load-serving entities) **should anchor planning and deployment decisions** for locating DERs and compensation to motivate vendors' and customers' short- and long-term investments.
2. **Advanced open-source measurement and verification (M&V) methods and code should be a foundation for consistently and transparently assessing performance** to reduce friction and increase the confidence of utilities, vendors, and regulators that the impacts are real.
3. The Council should **enable market access for a wide range of vendors** by supporting a program model with standardized criteria for utilities to select

vendors eligible to offer services in their territory and be paid based on the system benefits delivered and support consumer protections.

### **III. Hourly and locational value of grid benefits anchor DER deployment and compensation and support the hydrogen economy of the future.**

One key component of optimal DER policy is establishing uniform hourly compensation for the various grid services, including capacity, energy, avoided and deferred generation, transmission and distribution costs, resilience benefits, environmental compliance savings, and other benefits recognized by stakeholders and approved by the City Council. Benefits should be reasonable and measurable to provide visibility and accountability relative to the impacts delivered to the grid, participants, and the citizens funding the investment. Compensation should be measured by the hour to be consistent with the existing pricing methodology of the MISO electric energy market. Hourly measurement would also provide consumer benefits from Entergy New Orleans' investment in Advanced Meter Infrastructure ("AMI"), which measures both the amount of energy used and the hour in which it was used.

The establishment of hourly value will allow the City Council to facilitate direct compensation to DERs for their value to the grid and enable the city's vision of a vendor-neutral program that provides value to New Orleans's citizens. This streamlined model can accommodate other value streams in the future, like Energy Attribution Credits (EAC), which will emerge as part of the hydrogen economy.

For example, a flexible program model that includes hourly carbon impacts could greatly benefit the City of New Orleans residential electricity customers. This approach could make home resilience and energy efficiency improvements eligible for federal tax benefits related to hydrogen production and carbon capture investments. The current federal hydrogen guidance seeks to create a market for additional hourly time-matched clean energy produced using Energy Attribute Certificates (EACs), which represents one unit of clean

energy time matched to the hour of production. The City of New Orleans policy could make DERs eligible to produce EACs for sale in this market by facilitating hourly valuation.

In addition, hourly-monitored and valued energy efficiency impacts qualify for carbon capture tax benefits under the EAC, even though it does not qualify for the hydrogen tax benefit because electricity is not put into the system. Carbon capture has significant potential in the State of Louisiana.<sup>1</sup>

Even if some of these tax benefits do not persist in a new federal administration, the City of New Orleans can still prepare, with little incremental effort, for a future where the citizen the hydrogen economy and/or carbon capture takes off and the citizens of the City of New Orleans can fully benefit. Hourly time-matched emissions measurement is an important trend in clean energy development to maximize the benefits of renewable resources.<sup>2</sup>

The hydrogen economy and its various outputs, including sustainable shipping and aviation fuel, have enormous economic potential in Louisiana and the entire Gulf Coast. A program designed to recognize multiple value streams could use the benefits of the hydrogen economy to systematically upgrade the housing stock and provide hurricane resilience to the citizens of the City of New Orleans. The council could also further this vision by aligning the existing energy efficiency program of the City of New Orleans to measure hourly benefits.

#### **IV. Advanced open-source measurement and verification (M&V) methods and code should be a foundation for consistently and transparently assessing performance.**

Consistent and transparent measurement provides the foundation for assessing the performance of DERs aggregated to provide a variety of grid services. When compensation is anchored in the time and locational value of shedding or shifting load, meter-based

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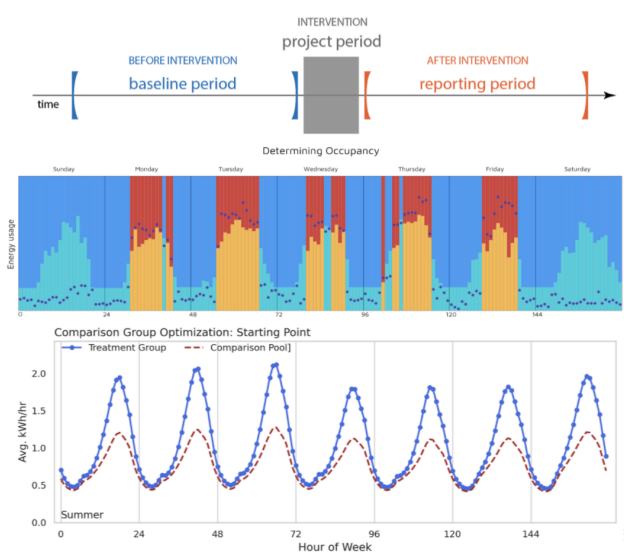
<sup>1</sup>*On the Leading Edge of Carbon Capture and Storage Technology - Louisiana Economic Development*  
<https://www.opportunitylouisiana.gov/key-industry/energy/carbon-reduction/carbon-capture-storage>

<sup>2</sup> *24/7 Carbon-Free Electricity Transition Tariffs: A Regulatory Tool for Accelerating Decarbonization*  
<https://www.raponline.org/wp-content/uploads/2024/03/rap-linville-enterline-farnsworth-kadoch-lebel-seidman-24-7-carbon-free-electricity-transition-tariffs-summary-2024-march.pdf>

measurement is critical to understanding the direct and incremental impact on the grid. Device-level telemetry may be essential for DERs injecting power (batteries) into the grid. Still, the overall demand flexibility delivered by aggregated DERs can be measured by analyzing the change in usage of program participants. This analysis can be augmented by looking at similar non-participating customers to establish what impacts are attributable directly to the program intervention.

DERs alone or in aggregate may vary in terms of the services they can provide, and variable compensation by type of service is appropriate. However, we support technology-agnostic models in which any DER can be compensated as long as it can demonstrate delivered impacts within the prescribed measurement requirements.

Transparency of measurement and compensation methods is essential to enabling visibility of the value delivered so that the City Council and other stakeholders can have confidence that public funds are providing the expected results. Grounding performance in a shared value framework and monitoring it at the utility meter for individual sites and aggregate populations allows for comparison to "normal" grid activity. This approach provides a comprehensive understanding of how interventions on the demand side impact overall performance.



Recurve's FLEX platform operationalizes this framework by anchoring impact analysis in advanced open-source M&V. [OpenDSM](#) (formerly OpenEEmeter) is an open-source method and codebase that provides a consistent, standardized approach to quantify avoided energy

use at the meter from a range of demand-side interventions. It is a weather-dependent model that allows for disaggregation of loads sensitive to heating and cooling needs. The hourly methods are based on the Lawrence Berkeley National Lab Time of Week and Temperature model originally designed for demand response impact assessment. [GRIDmeter](#) is a standardized approach to selecting comparison groups to examine the impacts of intentional demand-side interventions relative to the overall grid. Comparison group methods are widely accepted as a best practice to understand incrementality and augment site-specific analysis.

New Orleans has the essential ingredients to track and monitor demand side impacts derived for the city. With open-source temperature-dependent modeling methods and code base, widespread AMI, and advanced computing capability, it is now conceivable for the city to expect project-level tracking and non-participant comparison groups as part of the counterfactual analysis and settlement standards around any DER compensation model adopted.

Utilizing a standardized baseline and complementing with comparison group approaches, Recurve analyzes full-service territory data sets before and after interventions. This analysis provides program managers and load-serving entities with resource planning insights, performance monitoring and tracking, and an audit trail for every project's impact and resulting payment.

The adoption of open-source measurement methods builds trust among market actors to operate demand flexibility markets at scale. Comparability provided by a consistent M&V framework can serve as the foundation for assessing the range of solutions that may be adopted in this proceeding. It would provide consistency in how the initiative is targeted, tracked, and monitored and serve as a consistent record of impacts. It could also align impacts from this DER initiative with the recently adopted statewide energy efficiency programs' expectations for measurement.

While most energy efficiency programs use a “deemed savings”<sup>3</sup> method to estimate the sound of savings of energy the result from employing energy efficiency measures like weatherization and more efficient lightbulbs, the new energy efficiency program adopted by the Louisiana Public Service Commission in January of 2024 only permits use of deemed savings when “energy and peak demand savings estimated through measurement and verification (M&V) activities are infeasible or impractical.”<sup>4</sup> The City Council has an opportunity in this review of DERs to align existing energy efficiency programs with a similar measured-by-default paradigm and quantify hourly impacts for all demand-side initiatives under their jurisdiction. This would support comparability and synergies with the programs to amplify their overall impacts and streamline implementation.

**V. Enable market access for vendors to deliver DER and demand flexibility services in alignment with customer protections and utility criteria.**

The City Council recognized one of the key policies for accelerating DER adoption and harnessing the value of demand flexibility - vendor-neutral program design. All technologies and qualified vendors with innovative business models that can provide services to the grid should be eligible to offer those services and receive consistent compensation that delivers value to the citizens of New Orleans. A vendor-neutral program fosters innovation by enabling existing and new technologies to contribute value to the grid based on the grid services provided rather than by the type of technology used.

Anticipating and accepting a wide breadth of DER solutions will provide the City Council with more opportunities to meet its goals. It would also align with conventional

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<sup>3</sup> Deemed savings are fixed estimates of the incremental impact of replacing an old technology with a new, more efficient technology, rather than measuring the impact at the meter.

<sup>4</sup> LOUISIANA PUBLIC SERVICE COMMISSION GENERAL ORDER Docket No. R-31106, In re: Rulemaking to study the possible development of financial incentives for the promotion of energy efficiency by jurisdictional electric and gas utilities. (Decided at the January 24, 2024 Business and Executive Session <https://lpscpubvalence.lpsc.louisiana.gov/portal/PSC/ViewFile?fileId=WJ2jCAjOyf0%3D>)

definitions of DERs, like the Federal Energy Regulatory Commission's recognition of the breadth of potential technologies in its definition of DERs in Order No. 2222-A:

*“These resources may include, but are not limited to, resources that are in front of and behind the customer meter; electric storage resources, intermittent generation, distributed generation, demand response, energy efficiency, thermal storage, and electric vehicles and their supply equipment.”<sup>5</sup>*

The energy transition and advent of advanced metering infrastructure have resulted in an industry simply teeming with ideas. Customers are engaging in their energy future by buying rooftop solar, power walls, and electric vehicles at record rates. Utilities and regulators need mechanisms to assess the multiple dimensions of demand-side resources: protect consumers, provide qualified vendors opportunities to demonstrate their capabilities, and attempt to discern which solutions have the most potential to prioritize future investment. Leveraging market forces as part of program designs allows utilities and regulators to sift and winnow. By sending a clear price signal (value stack), aligning incentives (pay for delivered hourly value), and streamlining processes (standardized vendor eligibility screening), they can accelerate the adoption of DERs and gain visibility into the demonstrable impacts they deliver. Solutions that don't deliver impacts for customers or the grid will not survive, and those that do are compensated based on the value delivered.

Several vendor-neutral compensation models have emerged over the past several years to accelerate DER adoption and enhance demand flexibility. One was the Demand FLEXmarket pioneered by Recurve in 2020 in partnership with a community choice aggregator, adopted statewide in 2021 to address summer reliability<sup>6</sup>, and mandated in utility portfolios in 2022 by the California Public Utilities Commission. The Commission outlined the core values of the "market access" program model in their summer reliability decision:

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<sup>5</sup> FERC Order No. 2222-A, P1, fn 2.

<sup>6</sup> [Decision 21-12-011 December 2, 2021 ENERGY EFFICIENCY ACTIONS TO ENHANCE SUMMER 2022 AND 2023 ELECTRIC RELIABILITY](#)



*The concept behind this program is that it utilizes population NMEC [meter-based quantification of impacts] and a PFP [pay for performance] concept to incentivize [vendors] to find energy efficiency [DER] projects that deliver measurable peak or net peak demand savings.*

*The major benefits of the program are that funds are only expended for portfolios of projects that deliver verifiable energy savings at peak times. In addition, any implementers that can deliver those savings and meet standardized eligibility criteria will be able to participate in this type of standardized program." CPUC- [D.21-12-011](#) p.24*

As innovators on vendor-neutral DER models like the Demand FLEXmarket<sup>7</sup> (or Market Access), Recurve has been intimately involved in providing the software and analytic infrastructure to make open-market models for DER acceleration a success. Recurve's FLEX platform provides the core infrastructure for planning and optimizing the location of DERs within a utility service territory. Our core program tracking and monitoring services offer best-in-class measurement and verification that can be made accessible to administrators, regulators and vendors for consistent visibility on progress and identify course corrections. Finally, our platform enables vendor-neutral programs like FLEXmarkets by providing end-to-end project eligibility, enrollment, tracking, documentation, settlement, and reporting.

Recurve's FLEX platform is designed to operationalize the core components of any vendor-neutral DER programs the City Council may consider by providing:

- Visibility to value by project and time and locational system benefits
- Eligibility screening and vendor management
- Standardized embedded Measurement and verification (M&V)
- Project documentation, settlement, audit trail, and reporting

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<sup>7</sup> More detailed versions of this program model are available in the following references:

- [Recurve Comments on Texas PROJECT NO. 51603 Distributed Energy Resources](#)

- [Demand FLEXmarket — Creating a Market Access Model to Unleash Solutions Providers and Scale Demand Flexibility](#), ACEEE Summer Study 2022

- Tri-County Regional Energy Network hosts a [Residential FLEXmarket](#) that provides kicker incentives for low income projects and local contractors amplifying incentives that drive equity and local economic impacts.

- An independent evaluation of this vendor-neutral program model was conducted by Opinion Dynamics [California Statewide Market Access Programs Process Evaluation Report Draft](#) May 2024 and found high satisfaction among both vendors and customers.

Utilities play a crucial role in the success of a vendor-neutral program by aligning the value with grid needs and optimizing the system. They support secure data flows, ensuring benefits reach customers and the community. Additionally, they help review vendor eligibility based on essential business principles and safety certifications, balancing consumer protection with accessibility.

Utilities also could take a much more active role, as envisioned in recently introduced models like Distributed Capacity Procurement<sup>8</sup> where utilities can deploy DERs at scale by integrating them into planning as a capacity resource and serve as the wholesale purchaser of DERs to serve specific grid needs. In this model, a utility can support vendor-neutral access and tap into innovation across the industry by providing standardized eligibility screening, and streamlined contracting models anchored in performance-based compensation for delivered impacts that drive value for customers and the grid.

We anticipate the City Council will consider multiple program models in this docket. With the continuity of value, measurement, and visibility to these results as proposed in our policy recommendations, any number of them could drive outcomes that successfully accelerate DER adoption for system reliability, enhanced resiliency, and affordability.

## **VI. Conclusion.**

Recurve respectfully offers the above comments and looks forward to engaging with the City Council and other stakeholders.

Respectfully submitted,

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<sup>8</sup> As highlighted recently in Utility Dive: [Distributed capacity procurement: A new model for utilities to deploy DERs at scale](#)