

**BEFORE THE
COUNCIL OF THE CITY OF NEW ORLEANS**

**Establishing a Docket and Opening a Rulemaking
Proceeding to Establish Renewable Portfolio
Standards**

Docket No. UD-19-01

COMMENTS OF THE ALLIANCE FOR AFFORDABLE ENERGY

Pursuant to City Council Resolution R-19-109 (“Resolution”), the Alliance for Affordable Energy (“AAE” or “The Alliance”) respectfully submits these comments. AAE is a member of the Energy Future New Orleans (“EFNO”) coalition. Collectively, the EFNO coalition member organizations have proposed a framework for a Resilient Renewable Portfolio Standard (“R-RPS”), while also noting that individual coalition members will also submit additional comments.

The Alliance for Affordable Energy works to safeguard Louisiana’s future by protecting consumers’ right to an affordable, equitable and environmentally responsible energy system. The Alliance is the only dedicated consumer advocate in Louisiana working for residential utility customers. We monitor, educate and participate in state and city utility regulation to advocate for the public's best interests. Ratepayers are more than the rate they pay or the bill at the end of the month. We believe the cost of climate change, pollution and social injustices related to traditional energy systems should be part of public interest policymaking.

The Alliance is a member of the EFNO coalition, which filed its R-RPS proposal in July 2019 in the instant proceeding. The core motivation behind this collaborative proposal is to begin implementation of a vision for a new, platform-based electric system that fosters renewable technology innovation and also, and perhaps more significantly, innovation in regulatory models based on open market principles that prioritize customer choice and autonomy.

Fundamental objectives of the EFNO proposal are twofold: (1) to emphasize the crucial role of local communities within New Orleans in achieving RPS goals, decarbonizing society more generally, and creating greater resilience to major disruptions; and, (2) to recommend a practical structure for the city to incorporate in its ultimate RPS decision, including certain regulatory reforms for the ENO distribution system that will facilitate equitable, cost-effective adoption of clean distributed energy resources (DER's) at the household and community levels, providing near-term local economic and resilience benefits for all New Orleans residents. Given the immense possibilities presented by the advance of DER technologies and the growing awareness of resilience and economic equity as necessary elements of a clean energy transition, these core components of the EFNO proposal are both feasible and well-aligned with the city's goals and values. Moreover, the movement towards bottom-up policy reforms that encourage the proliferation of DER's and the services they can provide (including integration of renewable resources at scale) is a national and global trend.

The EFNO proposal holds a vision to achieve an electrical system in New Orleans that incorporates clean energy at the same time that it hardens critical infrastructure with microgrids and installations of distributed energy resources ("DER") owned by customers, communities and new market participants. A different kind of system is needed to solve the problems that have

been created by the existing system. The ENFO proposal envisions an innovative path that accelerates decarbonization, reduces costs for all, creates value for customers, builds the local economy and creates a more equitable and resilient city.

Under the EFNO proposal these resources can provide significant benefits in at least four ways. First, they provide emergency power during extraordinary, unanticipated and disruptive events. Second, they can provide valuable customer and electric grid services during periods of ordinary, predictable grid operations. Third, if planned in coordination with ENO, can be designed to minimize grid operational impacts and reduce the need for costly distribution grid investments. And fourth, if combined with a market framework that provides commercial opportunities for third-party DER developers, will place more of the performance and obsolescence risks associated with new and evolving technologies on these new market participants and DER providers rather than on ratepayers.

The Renewable Portfolio Standard (“RPS”) rules eventually approved by the New Orleans City Council can and should do more than simply direct Entergy to procure clean energy as an isolated least-cost compliance or procurement endeavor. The RPS can and should integrate with other policy objectives, citizen goals, and industry trends to move New Orleans into the future.

These comments reinforce the EFNO coalition proposal for an R-RPS and offer several guiding principles that enhance resilience, leverage motivated capital and, most importantly, prioritize customer choice and local community-level DER deployment, without excluding the essential complementary role of utility-scale renewable generation and storage resources. We believe

these guiding principles will enhance the implementation of any RPS rule established by Council by orienting the impact of RPS in support of resilience and equity goals.

The electricity system of the future will connect distributed energy resources on both sides of the customer meter, alternately consuming and producing energy and providing services that support the entire network. In this way, the distribution system of the future becomes a platform connecting a wide range of resources and integrating them into power system operation in a manner that can be described as “integrated decentralization.”¹ Where the electricity system of today was well-suited to meet the demands of the past, the electricity system of the future will similarly be well-suited to address new customer demands and societal priorities, including:

- Reduced greenhouse gas emissions from the electricity sector;
- Increased resilience in the face of extreme weather events and system disruptions, particularly at the local level where the impacts are immediate and life-threatening;
- Economic development and investment opportunities, particularly in low-to-moderate income (LMI) communities;
- Beneficial electrification of other sectors, especially vehicles and buildings; and
- Elimination of health risks and pollution from energy resources and prevent racially disproportionate pollution burdens from the energy sector;
- Fostering a competitive arena that promotes innovation and efficient allocation of risk;
- Customer and community-level choice, control and autonomy; and
- Community ownership and citizen input.

DER that are part of an integrated distribution system platform promote resilience in at least two ways. First, they provide localized emergency power during extraordinary, unanticipated and disruptive events. Second, they can provide valuable customer services during periods of ordinary, predictable grid operations.

¹ A more detailed discussion of the technical and operational requirements of “integrated decentralization” can be found in Kristov, L. (2019) “The Bottom- Up (R)Evolution of the Electric Power System”. IEEE Power & Energy Magazine (March/April 2019).

The electricity system of the future includes innovative technology, to be sure. It also involves innovation in regulatory and business models. New Orleans can begin creating that system today with the decision to establish an open access regulatory model consistent with the fundamental priorities of today's energy regulators.

General Remarks

The energy industry, and the electricity sector in particular, is in a period of tremendous change. Technological capabilities are increasing while costs of clean and distributed energy resources are dropping at an accelerating rate.² For example, the International Renewable Energy Agency (IRENA) has projected cost declines through 2025 for wind and solar energy of up to 35% and nearly 60%, respectively. These changes are causing citizens, utilities, and policy makers alike to consider new opportunities and interrelations between once disparate or distinct objectives. The Council itself has pointed out that, "New Orleans stands at the edge of this technological frontier and how we respond will either make us a true twenty-first century city or consign us to a being a technological backwater laggard."³

The New Orleans City Council and the City itself have both stated their intention to respond to the climate crisis in a holistic way that benefits everyone. Most recently, Mayor LaToya Cantrell noted, "We all want a safer city, with affordable energy, renewable technologies, reliable and

² IRENA (2016) "The Power to Change: Solar and Wind Cost Reduction Potential to 2025". See: <https://e9radar.link/IRENA2016>

³ Resolution R-18-36, Feb 8, 2018 Resolution and Order Opening an Inquiry into Establishing a Smart Cities Initiative for the City of New Orleans and Directing Entergy New Orleans LLC to Report with Respect to Matters Related to Grid Modernization

efficient transportation, healthy air, and green jobs that create opportunity for our residents.”⁴

In the same report, “Taking Steps together on Equity and Climate Change: A Report By and For New Orleanians,” developed from of a year of listening to and prioritizing local community concerns, some of the same goals of the EFNO R-RPS proposal are represented: ownership of resources through Community Solar, reduced energy bills for low-income customers, and opportunities to support further rate-payer input. New Orleanians are now painfully aware of the outcomes for residents when community voices are ignored and utility ownership of un-economic resources are approved. We are recommending a path that puts the power in the hands of the people and uses smart policy to achieve multiple public interest goals with stacked and overlapping benefits. EFNO’s R-RPS is the only submission to this docket that articulates the public’s voice and the Alliance urges the Council to consider this while making public interest decisions.

In this context, it is clear that the questions raised in the RPS Rulemaking extend into realms beyond simply procuring energy and include questions of the best market and regulatory models that support the goals stated by communities, this Council, and the Mayor’s office. Accordingly, we emphasize several observations that help frame these suggestions in the comments and the EFNO coalition proposal to prioritize resilience and equity.

The New Orleans City Council has a long-standing and multi-faceted interest in supporting clean energy and empowering its citizens. The Council also has many responsibilities and overlapping objectives that can be simultaneously supported with a thoughtful RPS strategy.

⁴ October 2, 2019, *Taking Steps together on Equity and Climate Change: A Report By and For New Orleanians*. Pg 4. [<https://www.all4energy.org/uploads/1/0/5/6/105637723/climateactionequityreport.pdf>]

These multiple responsibilities are noted in the Advisors’ Report, which also highlights that the RPS Rulemaking builds on over a decade of prior, interrelated initiatives.⁵ Similarly, Entergy New Orleans, LLC, (“ENO”) has expressed interest in supporting the goals established by Council related to these responsibilities. The Council has long supported both increasing community access to renewable energy and safeguarding citizens with more reliable systems.⁶ The Council has also established objectives to promote “smart cities” strategies for community infrastructure, including the electricity system as a core backbone infrastructure.⁷

New energy technologies present stacked benefits and opportunities to pursue multiple objectives – such as decarbonization, resiliency, reliability, and economic opportunity – that are mutually reinforcing, not mutually exclusive. Decarbonization, clean energy, and resilience all benefit from aligning investments.

The power system of the twenty-first century – a clear goal of the New Orleans City Council – is a blend of centralized systems and decentralized resources, owned across utilities, citizens, private companies, and communities. The Renewable Portfolio Standard can support resilience and encourage distributed energy resources that complement the bulk power system and wholesale markets in a way that is beneficial and cost-effective for ratepayers.

⁵ September 3, 2019. Advisors’ Report on Renewable Portfolio Standards, p.2.

⁶ *e.g.*, R-19-111, Resolution and Order Establishing Rules for Community Solar Projects (Docket No. UD-18-03)

⁷ *e.g.*, R-18-36, Resolution and Order Opening an Inquiry into Establishing A Smart Cities Initiative for the City of New Orleans and Directing Entergy New Orleans, LLC to Report With Respect to Matters Related to Grid Modernization (Docket No. UD-18-01)

The Advisors' Report proposes several versions of an RPS, including a Clean Energy Standard ("CES") as proposed by Entergy. While the differences matter and are quite significant, regardless of the details of the rules established by Council, each possible strategic pathway can be strengthened by ensuring support for the development of customer- and community-owned resources and technology capabilities.

The R-RPS proposes an innovative path to a decarbonization (accelerating and expanding opportunities for customer benefits). Despite the suggestion by Entergy and The Advisors that EFNO is recommending over-reliance on a single resource, neither the R-RPS nor these supporting comments suggest reliance on a single set of technologies or strategies. To the contrary, the R-RPS proposes a tiered approach where the overwhelming majority of renewable resources would come from diverse, familiar, traditional, and existing clean energy resources that leverage various sources of investment to align with consumer interests, including keeping costs low and enhancing customer choice.

Comments

The consideration of RPS rules is occurring within a broader context of how New Orleans City Council objectives align with the realities of a changing industry. As has been articulated by the National Association of Regulated Utility Commissions (NARUC), "The rapid adoption of DER also signals a shift away from the centralized utility model."⁸ The legacy utility model assumes a natural monopoly in which economies of scale are so pervasive that society benefits from a single, vertically-integrated company regulated for the public good. But in networked industries,

⁸ NARUC (2016) Distributed Energy Resources Rate Design and Compensation (NARUC Staff Subcommittee on Rate Design). 11/1/2016.

such as electricity, when economies of scale change – as they are with clean and distributed energy – regulators have replaced cost-of-service regulation with a combination of (1) unbundling costs, (2) equal access to monopoly facilities, and, (3) open markets mechanisms for competitive services.⁹

These regulatory strategies provide a roadmap for the New Orleans City Council to establish targeted reforms when implementing regulatory reforms necessary to maximize Tier 1 (Resilient DER) and Tier 2 (DER) resources – and to minimize R-RPS costs. Four overarching comments underscore the benefits of orienting the RPS rules in support of cross-cutting goals of renewable energy, resilience and community empowerment.

Specifically:

1. Resource investment strategies should leverage private capital investments of customers and communities;
2. Renewable energy procurement should rely on competitive mechanisms and access to open markets;
3. The RPS should prioritize capital investments that enhance grid resilience and integration of distributed energy resources; and,
4. A resilient grid strategy will mitigate ratepayer exposure to investment risk.

Collectively, following these principles allows savings to be targeted at much-needed investments that establish the distribution grid as a platform for distributed and community-owned energy resources.

⁹ For a detailed discussion of natural monopoly and regulatory changes, see, *e.g.*, Gellhorn, E. and Pierce, R. J. (West Group, 1999) *Regulated industries in a nutshell*.

Comment 1: Resource investment strategies should leverage private capital investments of customers and communities.

The distribution system of the twenty-first century is one that integrates customer-, community- and utility-owned resources at the distribution level and within the bulk power system. This system is structured to manage flow of electricity both to and from customers. The Council has the opportunity to begin establishing the foundation of this twenty-first century model in a deliberate, thoughtful manner that leverages investments being made by customers and communities with multiple, layered benefits. AAE believes that the appropriate and prudent response to changes in technology and goals established by Council is to prioritize investment in a distribution system that is based on open access principles and can serve as a platform to integrate distributed energy resources that complement traditional infrastructure resources.

By following a strategy that prioritizes investments in a more resilient and flexible grid, the Council will be able to better leverage private investment and community capital, rather than rely solely on ratepayer dollars. In the rapidly evolving technology landscape of today, ensuring that competitive activities remain outside the scope of the regulated monopoly will limit the exposure of ratepayers to risks from technology performance, obsolescence and misguided cost projections.

In order to leverage private and community investments, the distribution system should adhere to open access principles and promote grid services. Historically, technology innovation has changed the transactional boundary of the utility industry, prompting regulators to re-introduce competitive markets where appropriate. The defining technological innovations of this century

are broad expansions of general-purpose technologies with powerful decentralizing forces. As described by a noted scholar and industry observer, these innovations are “changing the opportunity cost of electricity regulation. When few alternatives exist to the electro-mechanical distribution grid and standard commodity electricity service, that opportunity cost of regulation is relatively low. As digital and distributed energy technologies . . . have evolved, more alternatives are available or could be available through entrepreneurial action. Consumers could prefer those alternatives, if they had opportunities to experiment with them.”¹⁰

The Federal Energy Regulatory Commission (FERC) changed the transactional boundary of the utility industry when it created the framework for wholesale markets in the 1990’s because new technologies had changed the economies of scale for large-scale generation, allowing customers to take advantage of new technologies that could operate effectively at smaller scales (driven primarily by natural gas turbines). The market design was built around a central principles of unbundling costs, open access to the transmission system and competitive procurement. Today, we are experiencing a second wave of innovation-induced unbundling, primarily due to advances in digital, smart grid and distributed energy technologies. As with previous technology evolutions in the electric industry, the same principles of fair, open access to the electric network should be protected, whether or not there are organized wholesale markets, vertically integrated utility systems or newly created distribution grid services mechanisms.

This same organizing principle should also sit at the center of a framework for the distribution system. As with large-scale generation decades ago, the economies of scale surrounding

¹⁰ Kiesling, L. (2015) “A Prosperous and Cleaner Future: Markets, Innovation and Electricity Distribution in the 21st Century.” Prepared for Conservation Leadership Council.

distributed energy resources have changed and will continue to change in the decades ahead. These changes create a new urgency for the Council to articulate boundary principles between the regulated monopoly distribution functions and the domain of supporting vibrant DER technology innovation driven by open investment and fair markets.

Open access principles for the distribution system also ensure that competitive market mechanisms can be established so that energy customers, DER providers, and community resources can develop and deliver grid services for fair value. These services include deferral of grid asset investment and real-time operational services such as voltage support, load balancing, and enhanced utilization of clean energy resources.

The Council, in developing Community Solar Rules, was similarly motivated to create a market to, “leave as much flexibility as possible for developers to design community solar programs that they believe will be attractive to New Orleans citizens, consistent with the Council’s responsibility to protect New Orleans citizens and to ensure the continued provision of safe, reliable, electric power to New Orleans at just and reasonable rates.”¹¹

An open access model can be implemented by the existing distribution utility with certain key elements, including:

- Well-defined grid services that independent and community DER providers can provide to the distribution system through transparent rates and procurement mechanisms;
- An open, participatory distribution planning process that provides sufficient information on identified upgrade needs and opportunities;

¹¹ March 28, 2019. Resolution R-19-111 Resolution and Order Establishing Rules for Community Solar Projects. (Docket No. 18-03)

- Streamlined interconnection processes to facilitate development of customer-owned systems, community-level DER and community microgrids, especially at critical and priority facilities in the event of major system disruptions; and,
- Transparent real-time operating protocols that support load balancing and govern curtailment of DER or other mandatory operating instructions.

It is well-established that the traditional regulatory model of vertical integration and rate-of-return regulation based on utility capital investment has significant opportunity costs and is incongruent with many aspects of today's societal priorities. Past NARUC President Travis Kavulla puts it well when he observes that:

This so-called cost-of-service regulation suggests to the utility that it should spend as much as possible, even when less might do. Innovative products often make the old ways of doing things cheaper, reducing a utility's capital spending and thus its regulated earnings. Innovation and the utility's profit motive are frequently misaligned... This revenue model no doubt causes significant measures of deadweight in the system. Furthermore, it deprives customers of choice, and causes them to bear an undue amount of risk that would more properly be allocated to private business.¹²

Other experienced regulators have observed that, "These biases, which result in part from the incentives that traditional regulation provides to utilities, encourage utilities to invest more than is optimal for their customers—which is to say, more than is optimal for the provision of safe, reliable, affordable and environmentally sustainable electricity—and discourage them from investing in the lowest-cost, lowest-risk resources (namely, demand-side resources such as energy efficiency) that provide substantial benefits to ratepayers and local economies."¹³

¹² Kavulla, T. (2018) There Is No Free Market for Electricity: Can There Ever Be? American Affairs. I(2).

¹³ Binz, R., Sedano, R., Furey, D. and Mullen, D. (2012) Practicing Risk-Aware Electricity Regulation: What Every State Regulator Needs to Know. CERES. April 2012.

By establishing and clarifying the distinct roles of distribution service and the retail energy function, as would be the case with the proposed open access model for the distribution system, the Council will create a far more efficient capital strategy than relying on all utility-owned generation assets. This also provides an opportunity to build community assets and wealth. This is especially true when the ownership and operation of end-use facilities such as electric vehicle (EV) charging stations or battery storage devices on customer premises have compelling customer benefits and competitive offerings that are inconsistent with rate-base cost recovery. An R-RPS that can use non-ratepayer dollars will achieve higher levels of clean energy at lower cost, reducing ratepayer risk and encouraging innovation.

The primary reason to establish and maintain a regulated monopoly framework is where conditions of “natural monopoly” exist, such that economies of scale make competition impossible or undesirable. While these conditions may persist with regard to the distribution grid itself, they do not apply to wholesale resources in the bulk power system or to distributed energy resources operating and interconnected to the grid at the distribution level.

In a growing number of situations, renewable energy and distributed energy are the most cost-effective solutions available. A recent analysis by Rocky Mountain Institute compared traditional and existing generation facilities to portfolios combining solar, wind and storage, concluding, “RMI’s analysis finds that, because of recent innovation and rapid cost declines in renewable energy and DER technologies, clean energy portfolios can often be procured at significant net cost savings, with lower risk and zero carbon and air emissions, compared to building a new gas

plant.”¹⁴ As two regulators recently observed, “Large centralized power plants are increasingly in competition with newer technologies and distributed energy resources that are just as (or more) reliable and cost-effective. Further, as the grid transitions from analog systems to digital platforms, a wide range of smart, connected devices offered by a diversity of providers are revolutionizing energy generation and management. The result is that customers no longer have to choose between reliability and innovation; competitive markets can deliver both. . . Moreover, an array of customers from tech to retailers to heavy industry to rural electric cooperatives are seeking to break with traditional power companies in order to access cleaner, more cost-effective power that is readily available in competitive markets. Energy customers demand — and deserve — the outcomes that only competition brings.”¹⁵

Our observation is that many customers today want the benefits of ownership and wealth generation that distributed energy can bring. In contrast to this observed desire of ownership on the part of customers, the recent program from ENO with regard to “in front of the meter” solar highlights opportunity cost of relying on traditional utility ownership models. The guiding question should focus on how the greatest public benefit be realized from every ratepayer dollar invested.

ENO is currently advertising a pilot program to deploy solar on 100 residential rooftops for “in front of the meter” solar¹⁶. In this program, participating customers receive a \$30 per month bill

¹⁴ See, .e.g., Rocky Mountain Institute, *The Economics of Clean Energy Portfolios* (May 2018).

¹⁵ Suedeen Kelly and Pat Wood III, “Let Competition Drive the Next Energy Debate”, *Morning Consult*, April 11, 2019. <https://morningconsult.com/opinions/let-competition-drive-the-next-energy-debate>

¹⁶ <https://www.energynewsroom.com/news/entergy-new-orleans-pilots-residential-rooftop-solar-program/>

credit. However, customers do not benefit directly from the energy generated nor do they benefit from the long-term price hedge value. Furthermore, this program does little to promote the development of market offerings. While no information is available from the Entergy New Orleans concerning the total cost expected to be collected from rate payers for this program¹⁷, some assumptions may be made from available information from already approved programs¹⁸.

We do not dispute that distributed resources may be more expensive on a per watt basis than utility scale solar because of economies of scale. However, the public interest is not just about pure cost. It is about who bears those costs and the balance of costs and benefits.

Table 1. Increased Renewables and Overall Benefit through Private Ownership

	Ratepayer Capital (incl. rooftop rent)	Additional Ratepayer Funds	Cost per Watt to Ratepayer	New Households with Solar	Total New MW installed
ENO 100-home program	\$2,112,000	O/M+ ROR ?	\$2.32 + \$1.20 + O/M + ROR	100 homes	0.6 MW
Private ownership using ratepayer dollars	\$2,112,000	\$0	\$0.60	587 homes	3.52 MW

Table 1 above roughly illustrates the ratepayer value of encouraging private ownership.

Assuming each installation for Entergy’s 100-homes project is 6 kW (average for New Orleans), the total goal of the program is 600 kW. Using a \$2.32 per watt figure¹⁹, \$1,392,000 is the up-front capital cost to ratepayers for 600 kW of deployed solar. In addition to this figure, just for materials, permitting, and installation, Entergy will pass along the cost of “renting” each of these

¹⁷ Docket UD-18-07, ENO response to AAE 4-2.

¹⁸ June, 21, 2018. R-18-222. 5 MW distributed rooftop solar project was approved, to be deployed by ENO on commercial rooftops around the city. The target per-watt cost was \$2.32.

rooftops for \$30 per month. Assuming the benefit to the homeowner never changes over the 20-year life of the panels, this adds an additional \$720,000 to the lifetime cost. Finally, any maintenance required by the utility to ensure the panels are working properly is an additional annual cost. This example works out to \$2,112,000 for 600 kW of solar, plus the utility's rate of return and operations and maintenance over the life of the panels.

Alternatively, if Entergy were to replicate a successful rebate program from Duke Energy²⁰ that offers \$0.60 per watt for homeowners who deploy solar, the same figure, \$2,112,000, could deploy solar on 587 homes instead of 100 homes. That's 3.52 MW of new local capacity as compared with .6 MW. A program like this could reduce the energy burdens of nearly six times as many families. The basics of such a program work similarly to the Energy Smart energy efficiency program, which pays a portion of the cost of efficiency upgrades to incentivize home and building owners to invest their own money in efficiency measures. The incentive is then recovered from rate-payers and is only a portion of the total cost of the measure. The idea is the same: use ratepayer dollars to incentivize private spending, reduce costs for everyone, and deploy nearly six times as much renewable energy. Leveraging private capital rather than leveraging ratepayer capital is inherently less expensive and more efficient.

For technical and economic reasons, distribution and energy service platforms make sense structured as a monopoly but, in a modern energy system there is no reason for the utility to use ratepayer dollars to pay for 100% of generating assets any longer. In a city with the second most

²⁰ <https://www.duke-energy.com/home/products/renewable-energy/nc-solar-rebates>

severe energy burden in the country²¹, where over 19,500 households spent 28% of their income²² on their home energy bills in 2018, every ratepayer dollar counts. The knock-on local benefits of local job creation, reduced peak demand, more local generation, and private ownership of wealth-building assets, and increased tax sales in Orleans Parish is all in *addition* to the 6-to-1 value in rate-payer spending.

Comment 2: Renewable energy procurement should rely on competitive mechanisms and access to markets

Entergy's RPS implementation proposal assumes significant utility development and ownership of generation assets. While understandable, this assumption is misguided and will result in unnecessary ratepayer costs and long-term commitments. Recent experiences from around the country highlight the falling costs of competitively procured renewable energy resources and strong interest in ownership of customer and community energy resources. The Council should prioritize a strategy of market procurement of renewable energy resources and should require competitive solicitations to achieve the lowest cost resources.

Prices for clean energy resources have fallen dramatically. Recent utility RFP's and other analysis demonstrate fundamentally new realities of low-cost renewable energy. For example, in Colorado, an all-source solicitation from Xcel Energy made headlines in 2018 with the median price bids for wind-plus-storage projects and solar-plus storage at \$21/MWh and \$36/MWh,

²¹ April, 2016. American Council for an Energy Efficient Economy, Lifting the High Energy Burden in America's Largest Cities.

²² April, 2019. Louisiana Home Energy Affordability Gap, 2018. Fisher, Sheehan & Colton, *pg. 2*

respectively.²³ While we would not suggest that the results of one solicitation are conclusive, we do note that these prices are substantially below the reference prices suggested for RPS implementation and are consistent with industry trends.

For example, a March 2019 report from Energy Innovation determined that over 70% of the United States coal fleet could be economically replaced by local wind and solar resources today, representing a new cost “crossover” point.²⁴

Coupled with these declining costs, the demand for renewable energy resources is increasing. Recent analysis from the National Renewable Energy Laboratory revealed that voluntary renewable energy purchases have increased nearly 300% since 2010 and now represent almost 3% of total electricity sales.²⁵ This suggests that an RPS rule that is coupled with appropriate open access mechanisms as proposed here could support voluntary purchases above and beyond the requirements established by Council, further accelerating the achievement of decarbonization goals.

Another recent example of an approved solar investment by the utility highlights the value of market competition and purchased power contracts over utility ownership models. Through Docket UD-18-06, Entergy New Orleans received Council approval to acquire three projects comprising 90 MW of utility scale solar. 70 MW was acquired through Purchased Power

²³ See: <https://www.utilitydive.com/news/xcel-solicitation-returns-incredible-renewable-energy-storage-bids/514287/> and 30-day report: <https://www.documentcloud.org/documents/4340162-Xcel-Solicitation-Report.html>

²⁴ See: <https://energyinnovation.org/publication/the-coal-cost-crossover/>

²⁵ See: <https://www.axios.com/renewable-electricity-energy-customers-0e4efc13-7edd-489c-9957-76b7e2a8ee9c.html>

Agreements with third parties, and 20 MW will be built and owned by Entergy New Orleans. Upon approval of this “portfolio” of supply resources it was acknowledged that the two PPAs represent net savings to ratepayers, while the 20 MW Entergy portion represented a net cost to ratepayers, overwhelming the savings from the other two projects and rendering the total portfolio a net cost. Council pointed out that the 20 MW portion included positive local economic impacts, as well as resilience and reliability benefits. While we enthusiastically agree that local, distribution-level solar installations bring additional benefits to New Orleans, it is also clear that competitive solicitations that leverage non-utility investment and third-party ownership represented the most effective and efficient investment strategies for ratepayers.

Comment 3: The RPS should prioritize capital investments that enhance grid resilience and integration of distributed energy resources

By pursuing the R-RPS strategy focused on microgrids and distributed energy resources, the New Orleans City Council will be joining a wide range of regulatory bodies around the country who are pursuing resilience strategies. In 2019, in a report focused on resiliency strategies, NARUC observed:

Recent extreme weather events, natural disasters, and cyber incursions have brought the vulnerability of the electric system into sharp focus. These events have demonstrated that planning for long-duration power interruptions caused by high-impact, low-probability events will require new approaches to power system resilience above and beyond previous hardening efforts. At the same time, the rapid growth and declining costs of distributed energy resources (DERs) such as microgrids, solar photovoltaics, and batteries have introduced new technology options for energy resilience. Consequently, state policymakers across the country have established electricity resilience policies and programs, with several states

focusing specifically on resilient DERs as part of clean energy programs and grid modernization efforts.²⁶

The report continues to highlight programs across the country that are targeting microgrids and distributed energy resources as part of larger resilience strategies, with public sector programs dedicated specifically targeting resilient solar in at least 16 states.

As noted in Resolution R-19-109 opening this proceeding, “Council has repeatedly expressed support for the efficient use of clean, sustainable technology to improve the quality of life for our citizens and businesses.” Elsewhere, the Council has declared that it, “wishes to expand the renewable options available to New Orleans residents.” Many of these resources will be customer- and community-owned, while other options will come from the bulk power system. Thus, the Council’s recent vote to complete Community Solar Rulemaking was an important and timely step that unlocks more customer-owned resources beyond the 40 MW of residential and commercial solar already installed.

Further, Council has expressed “deep concern” about the pace of and visibility into Entergy’s previous efforts pursue renewable energy resources.²⁷ Concerns regarding the reliability and associated investments into maintenance of the distribution grid inspired Council’s opening of a ongoing investigation into reliability.²⁸

²⁶ NARUC (2019) *The Value of Resilience for Distributed Energy Resources: An Overview of Current Analytical Practices*. April 2019.

²⁷ Resolution R19-293 (July 25) (Docket UD 18-06)

²⁸ Docket No. UD-17-04.

A resilient distribution grid that maximizes the capabilities of these local, customer-owned assets that can complement competitively procured clean energy resources should be a high priority for the Council and is consistent with previous policy statements. At the local level, resilience consists of the capability for essential services and infrastructure to continue service during extreme events, to quickly restore service and to isolate service disruptions safely. These same resources can then provide benefits during the course of normal business. A local resilience strategy will encourage and integrate power systems that can operate independently and also be coordinated together.

As of this filing, California's largest utility, Pacific Gas & Electric (PG&E), has recently returned service to hundreds of thousands of customers who were without essential electricity services for days. As a result of poor utility planning, customers were either left in the dark or resorted to running polluting and expensive emergency diesel generators that introduce increased fire hazards in their own right, as reported in local media.²⁹ The R-RPS proposed by EFNO aims to provide the platform for smart planning in New Orleans that doesn't depend on turning on fossil fueled generators when extreme weather events driven by climate change or other major disruptions cause outages. We urge the Council to take these recent lessons to heart as a renewable energy future is contemplated. Enabling and improving these capabilities will require significant capital investment, consistent with Entergy New Orleans capabilities and priorities. Accordingly, the Council should target smart investments of ratepayer dollars that develop an interactive distribution grid that provides the highest practical level of resilience.

²⁹ See, e.g., Los Angeles Times, October 9, 2019. <https://e9radar.link/latimes20191009>; and Washington Post, October 9, 2019. <https://e9radar.link/WAPO20191009>

Furthermore, distributed resources have greater benefits than just traditional “market” value. The equation is not just about total cost, but includes the benefit stack of distributed energy, including the resilience benefits. In the recent report *Resilient Southeast: Exploring Opportunities for Solar + Storage in New Orleans, LA*, analysis prepared by the Clean Energy Group and Greenlink considers the value of resilience for combined distributed solar and storage projects in New Orleans.³⁰ Using the Department of Energy’s Interruption Cost Estimate Calculator confirms that the resilience benefit of combined solar and storage to facilities like nursing homes, fire stations, and multifamily housing is undeniable.³¹

The Council recently voted to require all nursing homes in Orleans Parish to have backup power³². The Alliance understands that as of the September 1, 2019 all backup power that has been deployed to comply with the ordinance is gas or diesel. That power is not only expensive, but adds new emissions when Entergy’s power goes down. If renewable back up had been deployed in these locations, rather than diesel or gas generators, the nursing homes would have had the benefit of resilient power, but also have provided savings to the nursing home and benefits to others on the grid year-round, rather than only being used in a crisis.

Regulating for Outcomes

Incentivizing needed investments in grid infrastructure can be supported with performance incentives and known regulatory tools. Many jurisdictions are developing performance-based regulatory (“PBR”) rules and performance incentives mechanisms (“PIMs”) to shift utility

³⁰ See: <https://www.cleangroup.org/wp-content/uploads/Resilient-Southeast-New-Orleans.pdf>

³¹ See: <https://icecalculator.com>

³² June 20, 2019. New Orleans Ordinance No. 28150,

financial motivations away from capital investment and toward well-defined metrics that align with the quality of service and specific policy goals.

For example, in September 2019, the Minnesota PUC issued an order establishing performance metrics for its electric utilities, addressing; affordability, reliability, customer service quality, and environmental performance. The order directs Xcel to propose specific methodologies for each of these metrics, and to work with stakeholders to file a progress report and implementation timeline for future metrics identified in the order (e.g., locational reliability and equity). For some metrics, the commission referenced existing reporting and measurement as a starting point for discussions.³³

In August 2019, the Hawaiian Electric Company (HECO) filed a its initial draft proposal for its multi-year rate plan and performance incentive mechanisms (PIMs), addressing interconnection experience; DER asset effectiveness; grid investment efficiency (shared savings mechanism based on NWA utilization); customer engagement (to reward AMI opt-ins); cost control (to measure/track O&M responses); GHG reduction; electrification of transportation; resilience (incident and emergency response); affordability; and customer equity (measuring participation of low income customers).³⁴

In March, Rhode Island PUC Commissioner Anthony opened a proceeding with the stated intention to develop principles to guide performance incentives mechanisms. In October 2019,

³³ Minnesota Public Utility Commission, Order Establishing Performance Metrics, September 28, 2019 (Docket CI-17-401). See: <https://e9radar.link/toi>

³⁴ Hawaiian Electric Companies, Initial Comprehensive Proposal, August 14, 2019, (Docket 2018-0088), See: <https://e9radar.link/2469a>

the PUC plans to hold a public, in-person technical session to discuss the draft principles, the related issues in the memorandum, the commenting party submissions, and a draft or to-be-drafted guidance document. ³⁵

And more immediately, just two weeks ago, the Massachusetts Department of Public Utilities issued an order approving National Grid's request for a rate increase, which included a five-year Performance-Based Ratemaking (PBR) mechanism.³⁶ Of particular note, the DPU rejected PIM's proposed by National Grid because the proposed reporting metrics did not include a metric related to distribution system resilience and directed the utilities to work through a collaborative process to develop resilience metrics going forward.

These and other regulatory initiatives could be informative to the Council in considering incentives for activities that are beyond established and existing system requirements and could target metrics such as:

- Critical facilities strengthened
- Resilient assets installed
- Energy burdens reduced
- Customer and community systems interconnected
- Data sharing systems established
- Sustainability goals achieved (including transportation and building decarbonization)

Consistent with regulatory best practices from jurisdictions across the country, the Alliance does not endorse the idea of providing additional incentives to the utility to perform their basic

³⁵ Rhode Island Commissioner Abigail Anthony, Memorandum, March 5, 2019 *See:* <https://e9radar.link/9f0d7>

³⁶ Massachusetts Department of Public Utilities, Order, September 30, 2019. (DPU 18-150) "Petition of Massachusetts Electric Company and Nantucket Electric Company, each doing business as National Grid, pursuant to G.L. c. 164, § 94 and 220 CMR 5.00, for Approval of General Increases in Base Distribution Rates for Electric Service." *See:* <https://e9radar.link/l0x>.

function of providing reliable power. We could support, however, a business model that encourages the Council's priorities with metrics like those listed above.

Comment 4: A resilient grid strategy will mitigate ratepayer exposure to investment risk

The Advisors' Report highlights that there are "new technologies coming to market that may well be in position to provide true zero-emissions fossil fuel resources in the near- to mid-term future, both in the development of cost-effective generation technologies that capture 100% of carbon emissions and in the development of technologies to convert the carbon that is captured to a useable product...."

In addition to carbon capture and storage ("CCS") technologies, the Advisors' Report highlights the benefits of existing nuclear facilities in the resource mix. While we agree with the Advisors' overall observation of the benefits of "leaving flexibility to explore such potential solutions", we believe that developing a complementary portfolio of distributed energy assets, customer-owned technologies and community-based energy resources is a prudent, cost-effective hedge against the risks of ratepayer exposure to investment risks of large-scale energy projects. The concerns the Alliance and the EFNO coalition have voiced in this docket remain: while existing nuclear assets *should* represent low-carbon resources, their inconsistency means they are not dependable clean resources, and the extreme costs passed to ratepayers are cause for concern. Thus, we suggest planning for new cost-effective assets that are reliable and renewable.

Recent experiences in the region with both nuclear and carbon capture and storage technologies have resulted in notable cost overruns that have needlessly increased customer rates. In 2018, the

Institute for Energy Economics and Financial Analysis (IEEFA) examined four CCS projects and concluded that, “Carbon capture technologies, after 15 years of research and development, remain expensive and technologically challenged and are rapidly being priced-out by renewable energy generation and natural gas.”³⁷

Among those projects, the CCS portion of the Kemper project in Mississippi was cancelled after project costs exceeded \$7.5 billion, well beyond an originally projected \$3 billion.³⁸ In April 2019, the Department of Justice informed Southern Company of “an investigation related to the Kemper County energy facility,” prompting the Chair of the Mississippi Public Service Commission to rebuke any notion that ratepayers should bear any additional burden in a statement issued shortly afterward.³⁹ Similarly, the V.C. Summer nuclear facility in South Carolina faced cost overruns, ultimately leaving customers in the state with substantial rate burdens for a project that was eventually cancelled.⁴⁰

While the industry may have learned valuable lessons from these experiences that will benefit customers in New Orleans, encouraging DER has important local benefits that further mitigate operational risks of centralized generation. In addition, as Entergy New Orleans has applied for expensive resources in the name of “reliability” in the last few years, the Alliance has no confidence that if nuclear and CCS are included in a future energy standard for New Orleans that these resources would not be favored by the utility at any cost.

³⁷ See: http://ieefa.org/wp-content/uploads/2018/11/Holy-Grail-of-Carbon-Capture-Continues-to-Flude-Coal-Industry_November-2018.pdf

³⁸ See: <https://e9radar.link/EIA20171031>

³⁹ See: <https://e9radar.link/AP20190501>

⁴⁰ See: <https://e9radar.link/PC20181222>

Furthermore, from an environmental justice standpoint, the inclusion of technologies that purport to reduce emissions, and thus enable continued pollution, represent a risk to communities who have been promised for years that the energy assets in their back yard are perfectly safe. The health outcomes tell a different story. Traditional energy systems in Louisiana were developed without meaningful community engagement, and continue to harm people of color the most. According to EPA data, in Louisiana, 92% of power plants are located in communities of color⁴¹. Investing ratepayer dollars into CCS continues to send a signal that fossil fuels should be supported at the cost of those who live near fossil fuel development sites, whether in New Orleans or not. This is not a signal consistent with policy that the Council's RPS should support. This is why we are insisting that as New Orleans considers a landmark renewable energy plan, the policy should go beyond procurement, and consider innovative and multi-bottom line benefits, rather than think of an RPS as simply a business as usual scenario with an additional renewable energy layer.

Conclusion

The Council has a unique and exciting opportunity to transform the electric system in New Orleans. Now is the time to take advantage of advances in distributed energy and accelerating cost declines of existing, robust clean energy technologies that fundamentally change the strategies that Council, as regulators of the electric system, can implement. The R-RPS proposal

⁴¹ US Environmental Protection Agency (EPA), EJ Screening Report for the Clean Power Plan, July 30, 2015, pp. 85 – 86

and the principles described in these comments offer a new path that establishes the distribution system as a platform to interconnect, integrate and coordinate a wide range of customer and community technologies and installations.

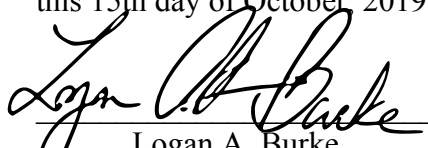
Rather than encouraging or approving expensive utility investments in generation, Council should implement RPS rules that replace cost-of-service regulation with an open-access distribution network incorporating (1) unbundled interconnection and distribution costs, (2) equal access to the distribution network, and, (3) open markets mechanisms for competitive clean energy supply and grid services.

The tiered approach presented in the R-RPS proposal means that this transformative approach to climate action can be implemented alongside, and without disrupting, the existing provision of centralized energy from wholesale market transactions. Our recommendations for RPS implementation are not isolated goals, but are inextricably linked to the regulation and design of the distribution system. A platform approach that is grounded in the best thinking of the nation's leading regulators will accelerate and leverage private investment and community initiatives focused on resilience.

If Council seeks a twenty-first century electric system that enables and decarbonization goals and is responsive to the needs of New Orleans, they have the opportunity to begin that evolution today with immediate resilience benefits and long-term economic and sustainability benefits that work for everyone.

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing has been served by hand delivery to the Clerk of Council with a copy to the Director, Council Utilities Regulatory Office, and upon all known parties of record via electronic mail. New Orleans, Louisiana
this 15th day of October, 2019.


Logan A. Burke

**RULEMAKING PROCEEDING TO ESTABLISH RENEWABLE PORTFOLIO
STANDARDS
DOCKET UD-19-01**

Lora W. Johnson, lwjohnson@nola.gov

Clerk of Council
City Hall - Room 1E09
1300 Perdido Street
New Orleans, LA 70112
(504) 658-1085 - office
(504) 658-1140 - fax
Service of Discovery not required

Erin Spears, espears@nola.gov

Chief of Staff, Council Utilities Regulatory Office

Bobbie Mason, bfmason1@nola.gov

City Hall - Room 6E07
1300 Perdido Street
New Orleans, LA 70112
(504) 658-1110 - office
(504) 658-1117 – fax

Andrew Tuozzolo, CM Moreno Chief of Staff, avtuozzolo@nola.gov

1300 Perdido St. Rm. 2W40
New Orleans, LA. 70112

David Gavlinski, 504-658-1101, dsgavlinski@nola.gov

Council Chief of Staff
City Hall - Room 1E06
1300 Perdido Street
New Orleans, LA 70112

Sunni LeBeouf, Sunni.LeBeouf@nola.gov

Law Department
City Hall - 5th Floor
New Orleans, LA 70112
(504) 658-9800 - office
(504) 658-9869 - fax
Service of Discovery not required

Norman White, Norman.White@nola.gov

Department of Finance
City Hall - Room 3E06
1300 Perdido Street
New Orleans, LA 70112
(504) 658-1502- office
(504) 658-1705 – fax

Jonathan M. Rhodes, Jonathan.Rhodes@nola.gov

Director of Utilities, Mayor's Office
City Hall – Room 2E04
1300 Perdido Street
New Orleans, LA 70112
(504) 658-4928 - Office

ADMINISTRATIVE HEARING OFFICER

Hon. Jeffrey S. Gulin, judgegulin@gmail.com

3203 Bridle Ridge Lane
Lutherville, MD 2109
(410) 627-5357

NEW ORLEANS CITY COUNCIL CONSULTANTS

Clinton A. Vince, clinton.vince@dentons.com

Presley Reed, presley.reedjr@dentons.com

Emma F. Hand, emma.hand@dentons.com

1900 K Street NW
Washington, DC 20006
(202) 408-6400 - office
(202) 408-6399 – fax

Basile J. Uddo (504) 583-8604 cell, buddo@earthlink.net

J. A. “Jay Beatmann, Jr. (504) 256-6142 cell, (504) 524-5446 office direct,

jay.beatmann@dentons.com

c/o DENTONS US LLP
650 Poydras Street
Suite 2850
New Orleans, LA 70130

Joseph W. Rogers, jrogers@elegendcgl.com

Victor M. Prep, vprep@legendcgl.com

Byron S. Watson, bwatson@legendcgl.com

Cortney Crouch, ccrouch@legendcgl.com

Legend Consulting Group

6041 South Syracuse Way, Suite 105

Greenwood Village, CO 80111

(303) 843-0351 - office

(303) 843-0529 – fax

Errol Smith, (504) 284-8733, ersmith@btcpas.com

Bruno and Tervalon

4298 Elysian Fields Avenue

New Orleans, LA 70122

(504) 284-8296 – fax

ENTERGY NEW ORLEANS, LLC

Brian L. Guillot, 504-670-3680, bguill1@entergy.com

Entergy New Orleans, LLC

Vice-President, Regulatory Affairs

Polly S. Rosemond, 504-670-3567, prosemo@entergy.com

Derek Mills, 504-670-3527, dmills3@entergy.com

Keith Wood, kwood@entergy.com

Seth Cureington, 504-670-3602, scurein@entergy.com

Kevin T. Boleware, 504-670-3673, kbolewa@entergy.com

1600 Perdido Street, L-MAG 505B

New Orleans, LA 70112

504-670-3615 fax

Tim Cragin (504) 576-6571, tcragin@entergy.com

Alyssa Maurice-Anderson (504) 576-6523, amauric@entergy.com

Harry Barton (504) 576-2984, hbarton@entergy.com

Entergy Services, LLC

Mail Unit L-ENT-26E

639 Loyola Avenue

New Orleans, LA 70113

(504) 576-5579 - fax

Joe Romano, III (504) 576-4764, jroman1@entergy.com

Suzanne Fontan (504) 576-7497, sfontan@entergy.com

Therese Perrault (504) 576-6950, tperrau@entergy.com

Entergy Services, LLC

Mail Unit L-ENT-4C
639 Loyola Avenue
New Orleans, LA 70113
(504)576-6029 – fax

ALLIANCE FOR AFFORDABLE ENERGY

Logan Atkinson Burke, logan@all4energy.org
Sophie Zaken, regulatory@all4energy.org
4505 S. Claiborne Ave.
New Orleans, LA. 70125

350 NEW ORLEANS

Renate Heurich, 504-473-2740, renate@350neworleans.org
1407 Napoleon Ave,#C
New Orleans, LA, 70115

Andy Kowalczyk, a.kowalczyk350no@gmail.com
1115 Congress St.
New Orleans, LA 70117

Benjamin Quimby, 978-505-7649, ben@350neworleans.org
1621 S. Rampart St.
New Orleans, LA 70113

Marion Freistadt, 504-352-2142, marionfreistadt@yahoo.com
1539 Adams St.
New Orleans, LA 70118

CENTER FOR CLIMATE AND ENERGY SOLUTIONS

Bob Perciasepe, 703-516-4146, PerciasepeB@c2es.org
Marty Niland, Press@c2es.org
3100 Clarendon Blvd, Suite 800
Arlington, VA 22201

GULF STATES RENEWABLE ENERGY INDUSTRIES ASSOCIATION

Stephen Wright, 318-663-3810, swright@gsreia.org
522 Marilyn Dr.
Mandeville, LA 70448

Jeff Cantin, 877-785-2664, jcantin@gsreia.org
2803 St. Philip St.
New Orleans, LA 70119

NATIONAL AUDUBON SOCIETY

Karen J. Profita, 225-768-0820, kprofita@audubon.org
Gary Moody, gmoody@audubon.org
5615 Corporate Blvd., Suite 600B
Baton Rouge, La. 70808

SOUTHERN RENEWABLE ENERGY ASSOCIATION

Simon Mahan, 337-303-3723, simon@southernwind.org
5120 Chessie Circle
Haltom City, Texas 76137

AIR PRODUCTS AND CHEMICALS, INC.

Katherine W. King, Katherine.king@keanmiller.com
Randy Young, randy.young@keanmiller.com
400 Convention St. Suite 700
Baton Rouge, LA. 70802
Or
P.O. Box 3513
Baton Rouge, LA 70821-3513

Carrie R. Tournillon, carrie.tournillon@keanmiller.com
900 Poydras St., Suite 3600
New Orleans, LA 70112

Maurice Brubaker, mbrubaker@consultbai.com
16690 Swigly Ridge Rd., Suite 140
Chesterfield, MO 63017
Or
P.O. Box 412000
Chesterfield, MO. 63141-2000

NEW ORLEANS CHAMBER

G. Ben Johnson, (504) 799-4260, bjohnson@neworleanschamber.org
1515 Poydras Street, Suite 1010
New Orleans, La. 70112

SIERRA CLUB

Grace Morris, 973-997-7121 Grace.Morris@sierraclub.org
4422 Bienville Ave
New Orleans, LA 70119

Dave Stets, 804-222-4420, Davidmstets@gmail.com

2101 Selma St.

New Orleans, LA 70122

Joshua Smith, joshua.smith@sierraclub.org

Lauren Hogrewe, lauren.hogrewe@sierraclub.org

2101 Webster Street, Suite 1300

Oakland, California 94612-3011

(415) 977-5660

POSIGEN SOLAR

Elizabeth Galante, 504-293-4819, bgalante@posigen.com

Ben Norwood, 504-293-4819, bnorwood@posigen.com

819 Central Avenue, Suite 201

Jefferson, La. 70121

VOTE SOLAR

Thadeus B. Culley, 504-616-0181, thad@votesolar.org

1911 Ephesus Church Road

Chapel Hill, North Carolina 27517

DEEP SOUTH CENTER FOR ENVIRONMENTAL JUSTICE

Monique Harden, 504-510-2943, moniqueh@dscej.org

3157 Gentilly Boulevard, #145

New Orleans, La. 70122