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April 23, 2021

Ms. Lora W. Johnson, CMC, LMMC
Clerk of Council
Council of the City of New Orleans
Room 1E09, City Hall
1300 Perdido Street
New Orleans, LA 70112

VIA E-MAIL

Re: Resolution and Order on the Proposed Renewable and Clean Portfolio Standard Regulations; Docket No. UD-19-01

Dear Ms. Johnson,

The Edison Electric Institute (EEI) respectfully submits this letter to the Council of the City of New Orleans (Council) to provide further information as the Council evaluates responses to Resolution No. R-21-109 in the above referenced docket.¹ EEI monitors various proceedings across the country, including those that relate to the current and future operation of clean energy resources, as well as proposed regulations to achieve Renewable and Clean Portfolio Standards (RCPS) and appreciates the opportunity to provide the Council with a perspective on how including beneficial electrification and advanced technologies, like carbon capture, can better help Entergy New Orleans reach carbon neutral by 2040 and 100 percent carbon-free electric generation for New Orleans by 2050.

EEI is the association that represents all U.S. investor-owned electric companies. Our members provide electricity for 220 million Americans and operated in all 50 states and the District of Columbia. EEI member, Entergy New Orleans, provides electric service for the city. Collectively, the electric power industry supports more than 7 million jobs in communities across the United States. EEI's member companies deliver safe, reliable, affordable, and increasingly clean electricity that powers the economy, preserves our health, and enhances the lives of all Americans.

Electric power companies are well-positioned to be, and want to be, part of the climate solution. With the right policies and the right technologies, a 100-percent clean energy future can be more than a goal. It can be a reality. Across the nation, EEI's member companies are leading an economy-wide clean energy transformation and are making significant progress in reducing greenhouse gas (GHG) emissions. EEI members are committed to a clean energy future and are working to get the energy that they provide as clean as they can, while keeping affordability and reliability for customers front and center. A wide range of factors are driving the electric power industry's transformation, including declining costs for natural gas and renewable energy resources, technological improvements, changing customer expectations, federal and state regulations and policies, such as those at issue here, and the increasing use of distributed energy resources. As a result, the mix of resources used to generate electricity in the United States has changed dramatically over the last decade and is growing cleaner. The power sector also will play a key role

¹ EEI previously submitted a letter dated May 28, 2019 at this Docket.

in reducing emissions economy-wide through electrification, which will allow this cleaner electricity to reduce emissions from other sectors—particularly transportation and buildings.

EEL's member companies support policies at the federal, state, and local levels that provide regulatory certainty and maximum flexibility to make investments necessary to provide reliable, affordable, secure, and clean energy to all customers—all while reducing emissions. Starting in 2016, natural gas surpassed coal as the main source of electricity generation in the United States. Over the past eight years, more than half of the industry's investments in new electricity generation have been in non-synchronous wind and solar generation resources,² and 40 percent of America's electricity in 2020 was generated from carbon-free resources, including nuclear energy, hydropower, solar, and wind.³ Coal-based generation fell to only 19 percent of generation in 2020.⁴

Notably, electric companies provide 67 percent of the solar energy in the U.S. This trend of increasing renewable energy deployment will continue: EIA projects that the United States will add 117 gigawatts (GW) of new wind and solar capacity between 2020 and 2023 and that demand for new electric generating capacity will be met, long-term, by renewables and efficient natural gas as older coal-based and less-efficient natural gas-based generating units retire.⁵ By 2021, the EIA forecasts electricity from renewables such as wind and solar will surpass nuclear and coal generation.

The other environmental benefits of this clean energy transition include significant reductions in criteria pollutants, as well as acid gases and other hazardous air pollutants (HAPs), like mercury. As of 2020, emissions of sulfur dioxide (SO₂) and nitrogen oxides (NO_x) have been reduced by 95 and 88 percent, respectively, from 1990 levels.⁶ The industry has likewise reduced mercury emissions by approximately 95 percent since 1990, and emissions of both acid gases and of total HAPs have been reduced by 96 percent.⁷ This rapid change has also led to significant improvements in terms of the sector's impact on water resources as the volume of chemical discharges by the electric sector have decreased by at least 82 percent since 2005.⁸

² See EIA, *Renewables Account for Most new U.S. Electricity Generating Capacity in 2021* (Jan. 11, 2021), <https://www.eia.gov/todayinenergy/detail.php?id=46416>. See also EEI, Industry Data, Statistical Highlights: Capacity and Generation (2020), <http://www.eei.org/resourcesandmedia/industrydataanalysis/industrydata/Pages/default.aspx>.

³ See EIA, *Electricity Explained: Electricity in the United States* (Apr. 2018), https://www.eia.gov/energyexplained/index.php?page=electricity_in_the_united_states.

⁴ See Energy Information Administration (EIA), *Electric Power Monthly* (Mar. 2020). According to EIA, in April 2019, U.S. monthly electricity generation from renewable sources exceeded coal-based generation for the first time. Renewable sources provided 23 percent of total electricity generation in comparison to coal's 20 percent. See EIA, *U.S. Electricity Generation from Renewables Surpassed Coal in April* (June 26, 2019), <https://www.eia.gov/todayinenergy/detail.php?id=39992>. According to EIA, this outcome reflects both seasonal factors as well as long-term increases in renewable generation and decreases in coal generation.

⁵ See EIA, *Annual Energy Outlook 2020: With Projections to 2050* (Jan. 29, 2020) at 71-73, <https://www.eia.gov/outlooks/aeo/pdf/AEO2020%20Full%20Report.pdf>. While EIA notes in the Annual Energy Outlook that the amount of renewable and natural gas-based generation deployed are dependent on the price of natural gas, this does not impact the expected closure of coal-based and other less efficient generation. See *id.* at 88.

⁶ See U.S. Environmental Protection Agency (EPA), *Power Plant Emission Trends*, <https://www.epa.gov/airmarkets/power-plant-emission-trends>

⁷ See EPA, *National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units—Reconsideration of Supplemental Finding and Residual Risk and Technology Review*, 84 *Fed. Reg.* 2,670, 2,689 (Feb. 7, 2019).

⁸ Based on an EEI analysis of overall discharges reported in EPA's Toxic Release Inventory (TRI) program for 2005 and 2018 from coal- and oil-fired generating facilities.

Advancing clean energy and mitigating climate change are top of mind for New Orleans, as illustrated by the engagement of the Council for the past two years to advance an RCPS design that calls for Entergy New Orleans to reach carbon neutrality by 2040 and 100% carbon-free electric generation for the city of New Orleans by 2050. The Council’s decision to advance a policy that credits all clean resources that contribute to reducing emissions as part of its approach to addressing climate change will help ensure that these goals are achieved affordably and reliably.⁹

But, there are other important tools that are needed to provide the flexibility needed to ensure that these goals can be met in the most cost-effective ways, while driving reductions in other sectors that may be both more impactful and less expensive. While the initial RCPS design contemplated numerous compliance flexibilities and options to achieve the Council’s goals – including carbon capture, utilization and sequestration, as well as beneficial electrification as a Tier I resource – the most recent resolution released by the Council, Resolution R-21-109, removes these important technologies as eligible methods for compliance with the RCPS. Not only would removal of these technologies slow Entergy’s ability to meet their carbon-free compliance targets, it also would require customers to pay for other, potentially more expensive, opportunities to meet compliance goals and avoid alternative compliance payments.¹⁰

Regulatory flexibilities are a practical and longstanding method of helping affected sources—both mobile and stationary—comply with environmental regulations in efficient, cost-effective, and commonsense ways. The broad and continued success of America’s environmental statutes is largely due to these flexibilities: namely, regulators have set standards and then provided compliance pathways that enhanced options available to industry instead of limiting the methods and manners that sources have used to meet those standards. At the federal level, the U.S. Environmental Protection Agency (EPA) acknowledges this reality: the many flexible compliance regimes promulgated by the Agency have resulted in significant emissions reductions and a marked reduction in unhealthy air quality days, all at lower than predicted costs to industry.¹¹ Many of the regulatory programs enacted by EPA have contained significant regulatory flexibilities—from market-based trading,¹² to wide ranging averaging provisions,¹³ to creative permit terms,¹⁴ to innovative methods of estimating reductions from new industry activities.¹⁵ In sum, regulators set targets, and American industry engineers the least cost and most effective way to get there.

⁹ It also is widely recognized that an approach that focuses on all clean energy sources provides a range of benefits, including that it sends signals to emerging carbon-free technologies that there is a market for them when they become commercially viable. A broader approach also allows states and other regulators to set more ambitious targets. *See, e.g.,* Ryan Fitzpatrick, et al., *Third Way, Clean Energy Standards: How More States Can Become Climate Leaders* at 6-7 (June 27, 2018), <file:///C:/Users/efisher/Downloads/clean-energy-standards-how-more-states-can-become-climate-leaders.pdf>.

¹⁰ *See, e.g.,* Jesse D. Jenkins and Samuel Thernstrom, Energy Innovation Reform Project, *Deep Decarbonization of the Electric Power Sector: Insights from the Recent Literature* at 1, 7 (Mar. 2017) (“In addition, there is strong agreement in the literature that a diversified mix of low-CO₂ generation resources offers the best chance of affordably achieving deep decarbonization. While it is theoretically possible to rely primarily (or even entirely) on variable renewable energy resources such as wind and solar, it would be significantly more challenging and costly than pathways that employ a diverse portfolio of resources. In particular, including dispatchable low-carbon resources in the portfolio, such as nuclear energy or fossil energy with carbon capture and storage (CCS), would significantly reduce the cost and technical challenges of deep decarbonization.”).

¹¹ EPA, *Our Nation’s Air*, <https://gispub.epa.gov/air/trendsreport/2019/#naaqs>.

¹² *See, e.g.,* EPA’s NO_x Budget Trading Program, 63 *Fed. Reg.* 57356 (Oct. 27, 1998); the Clean Air Interstate Rule, 70 *Fed. Reg.* 25,161 (May 12, 2005); the Cross-State Air Pollution Rule (CSAPR), 76 *Fed. Reg.* 48,208 (Aug. 8, 2011); and the CSAPR Update Rule, 81 *Fed. Reg.* 74,504 (Oct. 26, 2016).

¹³ *See* Florida State Implementation Plan Approval for Hillsborough County, 82 *Fed. Reg.* 30,749 (Jul. 3, 2017).

¹⁴ *See* Prevention of Significant Deterioration/Title V Greenhouse Gas Tailoring Rule, 75 *Fed. Reg.* 31,513 (Jun. 3, 2010).

¹⁵ *See* EPA, Roadmap for Incorporating Energy Efficiency/Renewable Energy Policies and Programs into State and Tribal Implementation Plans, https://www.epa.gov/sites/production/files/2016-05/documents/eermanual_0.pdf.

Regulatory compliance flexibilities—especially those focused on leveraging the ongoing progress in the sector to reduce emissions through the rest of the economy through electrification—will help incentivize real emissions reductions in a cost-effective way. Beneficial electrification as used in this docket means any program or process that replaces fossil fuel as a source of power and/or heat with electricity in a way that reduces overall emissions once the electric company’s emissions are counted. This technology includes charging infrastructure supporting electric vehicles (EVs), electrification of home and commercial appliances that use natural gas, and electrification of municipal and other commercial operations that currently rely on fossil fuels to power equipment. By providing enhanced incentives, credits, and support for the continued development and deployment of electrification options in the near-term, the Council can ensure not only more rapid emissions reductions, but also strengthen the domestic manufacturing base and promote the infrastructure investment necessary to support continued emission reductions in later years.

EVs provide numerous benefits to drivers and non-drivers, including potential downward pressure on overall electricity rates, but it is also important to emphasize that electric companies’ direct participation in the EV market is vital to ensure that these benefits are realized by all customers, regardless of socio-economic situation, geographic location or whether they own an EV. Approximately a quarter of all approved investment in electric company programs have an equity component.¹⁶ However, when evaluating whether an EV program should qualify for RCPS compliance, the Council should not only consider equity in customer rates, but also the impacts on the community, including increasing access to zero-emission transportation options, impacts on jobs, and reductions in air pollution.

In addition to the customer benefits summarized above, EVs emit less air pollution than traditional gasoline powered vehicles and improve local air quality. The transportation sector is also currently the leading source of domestic GHG emissions. When looking to reduce these emissions, light-duty vehicles should not be the only vehicle segment up for consideration. Trucks, buses, and fleets (both cars and ports) should also be prioritized as they usually account for a larger share of air pollutants and have lower fuel efficiency when compared to light-duty vehicles.¹⁷ Many states have recognized the value of electrifying this vehicle segment and have dedicated more than \$890 million in public funds to this technology.¹⁸

EVs are simply one avenue by which beneficial electrification can benefit New Orleans—the benefits of incentivizing increased electrification of all other sectors applies broadly and furthers the Council’s goals of tackling climate change by reducing the overall emissions profile of the City. The Council should maintain flexibilities that incentivize this activity and should keep these provisions of the RCPS since they further the Council’s goals while also doing so in an affordable manner.

In summary, an RCPS that allows for maximum flexibility by remaining technology neutral provides a least-cost way to preserve and grow clean affordable generation in New Orleans,

¹⁶ See Atlas Public Policy EV Hub, “25 Percent of Approved Utility Investment Going to Underserved Communities,” December 2, 2019, https://www.atlasevhub.com/data_story/25-percent-of-approved-utility-investment-going-to-underserved-communities/

¹⁷ See ChargeEVC, “Full Market Vehicle Electrification in New Jersey,” October 7, 2020, <http://www.chargevc.org/wp-content/uploads/2020/10/ChargeEVC-Full-Market-Electrification-Study-FINAL-Oct-7-2020.pdf>

¹⁸ See Atlas Public Policy, “Public and Electric Utility Support for Electric Buses and Trucks,” (Dec. 2019), <https://atlaspolicy.com/wp-content/uploads/2020/02/Electric-Buses-and-Trucks-Public-and-Utility-Funding.pdf> .

especially in light of the ongoing pandemic, while minimizing impacts on consumers. In addition, recognizing the benefits of using this lower-carbon electricity to reduce emissions in other sectors could not only help the City of New Orleans reach its 100% clean goals sooner but equally as important could spur the creation of new, good-paying jobs in the city and surrounding area. Finally, including a wide range of compliance flexibility provisions, such as recognizing the use of technologies like carbon capture and crediting beneficial electrification to meet RCPS compliance, is consistent with the goal of keeping electricity affordable for all customers without compromising on Entergy's or the city's clean energy targets.

EEI thanks the Council for the opportunity to provide additional considerations in this important proceeding and urges the Council to thoughtfully contemplate these comments before rendering a decision in the above-referenced docket.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Emily Sanford Fisher". The signature is fluid and cursive, with a large initial "E" and "F".

Emily Sanford Fisher
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