

May 30, 2019

Council of the City of New Orleans
Room 1E09, City Hall
1300 Perdido Street
New Orleans, Louisiana 70112

Re: Docket No. UD-19-01

Thank you for the opportunity to comment on the Resolution and Order Establishing a Docket and Opening a Rulemaking Proceeding to Establish Renewable Portfolio Standards (“RPS Rulemaking Proceeding”) in Docket Number UD-19-01, in which the Council of the City of New Orleans (“Council”) seeks comment on any aspect of a potential RPS for New Orleans. This document constitutes the comments of the Center for Climate and Energy Solutions (“C2ES”) on the RPS Rulemaking Proceeding. C2ES has substantial expertise and experience advising governments at all levels on best practices for establishing electricity portfolio standards such as renewable portfolio standards (“RPS”) and clean energy standards (“CES”).

For the record, let it be known that Entergy, and therefore Entergy New Orleans (“ENO”) is a funder of C2ES and a member of its Business Environmental Leadership Council (“BELC”). However, C2ES is an independent, nonprofit, nonpartisan organization dedicated to advancing practical and effective policies and actions to address our global climate change and energy challenges. As such, the views expressed here are those of C2ES alone and while informed by our conversations with Entergy and other business leaders, do not necessarily reflect the views of members of the C2ES BELC.

Key comments:

- New Orleans should pursue an RPS with 30 percent of electricity sales coming from renewable sources by 2030, and 60 percent from renewable sources by 2050; both targets should be mandatory.
- Expanding the RPS to a clean energy standard would ensure that the city achieves nearly 90 percent clean energy by 2030, easily achieves 100 percent clean energy by 2050 and helps support existing in-state clean generation facilities.
- Due to limitations on resource availability, ENO should be allowed to purchase certified renewable energy credits in Louisiana and throughout the United States.
- We recommend the use of alternative compliance payments and cost caps in the design of the RPS.

We appreciate the efforts of the City of New Orleans to take concrete steps like adopting an electricity portfolio standard (i.e., a Renewable Portfolio Standard or Clean Energy Standard) to transition toward cleaner energy. The more jurisdictions that do their part to reduce greenhouse gas emissions, the greater the impact we can make toward mitigating the risk of dangerous climate change. And after Hurricanes Katrina and Rita, constant land loss due to relentless sea level rise, and numerous extreme precipitation events, few cities like New

Orleans (and coastal Louisiana) know what those devastating effects can be like. Though unfortunately, a growing number of cities are beginning to feel the impacts of climate change as well.

Our responses to the questions posed by the Council:

1. *What would an appropriate RPS target for New Orleans be, and should it be a requirement or a goal?*

We believe that it would be appropriate to set a mid-term (i.e., 2030) and a long-term (i.e., 2050) target and that each target should be a mandatory goal. Given the urgency of addressing climate change, voluntary goals would not be sufficient in reducing emissions on a timeline consistent with avoiding the worst impacts of climate change. A recent report from the Intergovernmental Panel on Climate Change (IPCC) found that at the current rate of carbon dioxide emissions, global warming is likely to exceed 1.5 degrees Celsius (2.7 degrees Fahrenheit) as early as 2030, increasing the risk of dangerous climate change.¹

Governments and other parties seeking to reduce greenhouse gas emissions responsible for climate change are looking to climate science, peer governments, and leaders in the environmental community and elsewhere for guidance on appropriate target setting.

Broadly, New Orleans should consider establishing an economy-wide greenhouse gas reduction target as part of a multi-sectoral framework to tackle the climate challenge. It should adopt a target based on the IPCC fifth assessment report (AR5) recommendation of a 70 – 95 percent economywide reduction in carbon dioxide emissions by 2050 from the 2010 level.² And, a mid-term goal of 40 – 45 percent reductions by 2030 would put the city on track to achieve these deeper reductions. The *Climate Action For a Resilient New Orleans* vision to reduce the city's emissions 50 percent by 2030 (from 2014 levels) is a good start toward achieving this goal.³ Given that a significant proportion of the city's emissions come from electricity usage, the RPS recommended here would serve as a major contributor to the overall emissions reduction strategy.

With regard to the power sector, the city is already receiving a substantial portion (i.e., 57 – 58 percent) of its electricity from zero-emission nuclear power plants. In the state of Louisiana, electricity-related carbon dioxide emissions have fallen nearly 15 percent from 2010 levels,

¹ IPCC Special Report: Global Warming of 1.5°C, (2018),

<https://www.ipcc.ch/sr15/chapter/summary-for-policy-makers/>.

² IPCC Fifth Assessment Report (AR5): Summary for Policymakers, (2014), https://ar5-syr.ipcc.ch/topic_summary.php.

³ Climate Action for a Resilient New Orleans, (2017), <https://nola.gov/resilience/climate-action/>.

primarily as it shifted from coal- to natural gas-fired generation.⁴ However, the state has no RPS, no wind generation, relatively low levels of solar generation, but around 2.5 percent of its (2018) generation came from biomass. Additionally, the state gets around 17 percent of its electricity from nuclear power and nearly 1 percent from hydropower.

As the cost of wind and solar power continue to decline, many peer jurisdictions are increasing the ambition of their RPS goals with some leading states establishing mandatory RPS goals of 50 percent clean electricity sales by 2030 and 100 percent by 2050. As noted in the docket, the District of Columbia has recently passed an RPS. The City of Austin, Texas, which oversees the municipal-owned utility, has passed a long-standing RPS that can serve as a useful reference. More broadly, hundreds of U.S. cities have set ambitious, non-binding targets to achieve 100 percent clean and renewable energy for their city operations and communities and are now working to develop the plans to achieve those goals. Many of these cities are not in a position to regulate their local utilities, which is a unique and strategic position for the City of New Orleans.

Acknowledging that New Orleans (and Louisiana) is starting from a very low level of deployed renewable electricity sources, has limitations on renewable potential within the city and the state (see response to question 2), taking into account where the science tells us that we need to be, and looking at the level of ambition that other peer jurisdictions are aiming to achieve, we believe that the city should pursue an ambitious but achievable RPS mandatory target of 30 percent by 2030 and 60 percent by 2050.

Moreover, we believe that the Council should consider expanding the RPS to create a CES, which would include other zero-emission electricity sources like nuclear power, and fossil fuel-fired generation with carbon capture and storage (CCS). Both an RPS and CES are electricity portfolio standards, requiring power companies to generate or purchase a set percentage of clean electricity. An inclusive technology approach like a CES would ensure that the city could expand the amount of clean energy it procures sooner, send a low carbon innovation signal to all clean energy sources, and allow the city to achieve a nearly 90 percent clean target by 2030 (i.e., the city already receives nearly 60 percent of its power from nuclear plants) and easily achieve a 100 percent clean electricity target by 2050.

2. How should a New Orleans RPS be satisfied?

To achieve the necessary level of renewable electricity, ENO should be allowed to purchase certified renewable energy credits (“RECs”) from renewable projects in Louisiana and the rest of United States.

We would recommend that all of these resources be eligible in the definition of resources that may be used to meet the RPS target: solar water heat, solar space heat, geothermal electric,

⁴ Emissions decline is measured from 2010 to 2016 using data from the U.S. Energy Information Administration.

solar thermal electric, solar thermal process heat, solar photovoltaics (PV), wind (large, small, and offshore), biomass, hydroelectric (large and small), geothermal heat pumps, combined heat and power, municipal solid waste, landfill gas, tidal, wave, ocean thermal, geothermal direct-use, anaerobic digestion, and fuel cells using renewable fuels.⁵

New Orleans may wish to use its RPS mandate to help develop in-state renewable resources due to the economic benefits (e.g., jobs and air quality benefits) that these projects can bring to the city and the state. Louisiana has a fair solar potential in the 4.5 – 5.5 kW/m²/Day range.⁶ Additionally, it has a decent offshore wind potential, but this is currently a much more expensive renewable option.⁷ Onshore wind (at higher hub heights) could also be an option for the state, but these taller turbines are more expensive than traditional turbines, which are used where wind is more prolific (e.g., Central Plains). We would recommend that an economic study be conducted to determine realistic targets for development (i.e., 1,000 MW of offshore wind by 2030) of wind and solar for consumption by New Orleans using a geographic information system (GIS) filter. The results of this study should inform the suitability of any specific RPS carve outs (e.g. 10 percent solar PV).

To lock-in higher levels of clean energy earlier, the city should consider expanding the RPS to a CES. For example, the River Bend and Waterford nuclear power plants provide nearly one-fifth of Louisiana's electricity (and a much higher percentage of the city's electricity), nearly all of the state's zero-emission electricity, and support hundreds of local jobs. By entering into a long-term power purchase agreement (PPA) with these facilities, the city of New Orleans can help sustain some of the cleanest power plants in Entergy's electricity portfolio. These plants have been recently relicensed for 60 years of operation – through the mid-2040s. Recently, some U.S. plants have applied for 80-year licenses. Support from the city (in the form of a PPA) could ensure the operational usefulness of these reliable, dispatchable, zero-emission electricity resources is maximized well beyond 2050.

3. How should the RPS standard be enforced, should the Council consider a penalty or an alternative compliance payment

The Council should employ an alternative compliance payment (ACP) to enforce the RPS. This is a common enforcement option in use in many states with an RPS. In some jurisdictions, the ACP is recoverable in rates – so, there may be an impact to consumers if a utility cannot or does not comply with the RPS. In other jurisdictions, the ACP is not recoverable in rates, so it represents a true non-compliance penalty for the utility. Some jurisdictions use the ACP to support future renewable energy deployments and energy efficiency programs.

⁵ Database of State Incentives for Renewables & Efficiency (DSIRE), <http://www.dsireusa.org/>.

⁶ National Renewable Energy Maps, <https://www.nrel.gov/gis/solar.html>

⁷ DOE Office of Energy Efficiency and Renewable Energy, Computing America's Offshore Wind Potential, <https://www.energy.gov/eere/articles/computing-america-s-offshore-wind-energy-potential>.

4. *What protections should be put in place to protect ratepayers from unreasonable increases in rates due to the RPS?*

Cost containment mechanisms like cost caps can be implemented to protect ratepayers from excessive costs due to RPS programs. RPS legislation can explicitly state an amount (i.e., typically a percentage) by which ratepayers bills cannot increase due to the RPS program.⁸ In this way, a limitation is placed on the amount of expenditures a utility can make in procuring renewable resources to comply with the RPS.

In conclusion, we appreciate the efforts of the Council to secure cleaner electricity for the city in coming years. The collective efforts of all jurisdictions will help in our endeavor to solve the climate challenge. Thank you again for the opportunity to comment on the RPS. We would like to offer our assistance to you throughout the process.

Sincerely,

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⁸ Notably, Austin's Affordability Goal (set in 2011 and reaffirmed in August 2014) calls for rate increases to residential, commercial, and industrial Austin Energy customers to not exceed 2% per year, with a goal of maintaining Austin Energy's rates in the lower 50 percent of Texas rates overall. <https://www.energy.gov/savings/city-austin-renewables-portfolio-standard>.