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Harry M. Barton Assistant General Counsel Legal Department -- Regulatory

April 26, 2021

<u>Via Electronic Delivery</u> Lora W. Johnson, CMC, LMMC Clerk of Council Room 1E09, City Hall 1300 Perdido Street New Orleans, LA 70112

Re: Resolution & Order Establishing a Docket and Opening Rulemaking Proceeding to Establish Renewable Portfolio Standard Council Docket No. UD-19-01

Dear Ms. Johnson:

Enclosed please find attached for electronic filing, Entergy New Orleans, LLC's ("ENO") Reply Comments, in accordance with Council Resolution No. R-21-109 in the above referenced docket. As a result of the remote operations of the Council's office related to COVID-19, ENO submits this filing electronically and will submit the requisite original and number of hard copies once the Council resumes normal operations, or as you or the Council otherwise directs. ENO requests that you file this submission in accordance with Council regulations as modified for the present circumstances.

Should you have any questions regarding the above, I may be reached at (504) 576-2984. Thank you for your assistance with this matter.

Sincerely, Harry M.Barton

HMB/ddm

Enclosures

cc: Official Service List (via electronic mail)

BEFORE THE

COUNCIL OF THE CITY OF NEW ORLEANS

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RESOLUTION AND ORDER ESTABLISHING A DOCKET AND OPENING RULEMAKING PROCEEDING TO ESTABLISH RENEWABLE PORTFOLIO STANDARD

DOCKET NO. UD-19-01

ENTERGY NEW ORLEANS, LLC'S REPLY COMMENTS TO COUNCIL RESOLUTION R-21-109

Now before the Council of the City of New Orleans (the "Council"), through the undersigned counsel, comes Entergy New Orleans, LLC ("ENO" or the "Company"), who respectfully submits these Reply Comments, in accordance with Council Resolution No. R-21-109. Council Resolution No. R-21-109 (the "Revising Resolution") submitted for consideration and comment revisions to the Council's proposed rules for a Renewable and Clean Portfolio Standard ("RCPS"). These proposed revisions include the removal of Carbon Capture, Utilization, and Storage ("CCUS") as a compliant resource for reducing emissions, and disincentivizing Beneficial Electrification ("BE") projects and increasing compliance costs associated with BE.

BE has the potential to account for 16-67% of the carbon reduction necessary to mitigate climate change and can directly improve air quality in Orleans Parish. CCUS technology could also make the air cleaner in Orleans Parish by, as the name implies, capturing carbon emissions from power plants before they make it into the atmosphere. And yet, the recently proposed amendments to a previously sound emissions policy (the "Revised Rules") would seek to eliminate, or disincentivize, these important resources, one of which (BE) is also among the cheapest for customers and, the other of which (CCUS) is presently being targeted for significant investment and development by the Biden-Harris administration and the private sector. It is unclear what led the Council to consider diverging from an approach that every serious climate scientist has universally accepted—that deep decarbonization by mid-century is only possible when leaving no resource that reduces carbon behind, including BE and CCUS technologies.

What is clear, however, is that the Revised Rules represent a step in the wrong direction. The Council previously endorsed the right approach in Resolution No. R-20-104 (the "RCPS Resolution") and the directed development of technology-neutral rules that included BE and CCUS. Rules that adhered to the Council's RCPS directives (the "Originally Proposed RCPS Rules") were developed through a lengthy and transparent rulemaking process and submitted for consideration in October 2020.¹ Adoption of the framework developed pursuant to the RCPS Resolution's directives and embodied in the Originally Proposed RCPS Rules would:

¹ See Appendix A to Advisors' Reply Comments, filed October 13, 2020.

- Create a climate policy consistent with the "all the tools in the toolbox" approach that is universally recommended by the scientific community, supported by the evidentiary record of this proceeding, and that the Biden-Harris administration is pursuing at a national level;
- Allow for achievement of aggressive and needed emissions reductions at the lowest possible cost to customers through a technology-neutral approach;
- Incentivize improvement of air quality in Orleans Parish through BE; and
- Allow for development of a wide array of clean energy resources, including renewables and CCUS, and facilitate associated economic opportunities through that development.

On the other hand, the Revised Rules, if adopted as written would:

- Conflict with the policy direction of the Biden-Harris administration;
- Ignore evidence in the record and the universal recommendations of climate scientists and industry experts by limiting the technologies available for use in reducing emissions;
- Needlessly hinder ENO's ability to achieve aggressive and necessary emission reductions in a cost-effective manner;
- Reduce potential opportunities that allow ENO and the Council to partner with other commercial sectors to achieve their carbon reduction goals in a cost-effective manner;
- Eliminate incentives for cleaning the air in Orleans Parish; and
- Create powerful disincentives from pursuing BE projects like the electrification of the New Orleans Sewerage and Water Board ("SWB") in the process.

Compliance with the RCPS policy ultimately adopted in this proceeding and the pursuit of emissions-reducing electrification projects like the electrification of the SWB should not be, and do not need to be, at odds with each other. Instead, these emissions-reducing actions can and should be part of a comprehensive, coordinated, and scientifically supported climate strategy, as outlined in the City of New Orleans' 2017 Climate Action Plan and as described in the RCPS Resolution. Unfortunately, the Revised Rules, if adopted as written,² could preclude the possibility of such a coordinated climate strategy from coming to fruition and would undercut New Orleans' ability to aggressively combat climate change with the technology-neutral approach that is needed to make a meaningful difference at the lowest cost to customers. Similarly, compliance with the RCPS policy and the pursuit of a climate strategy that is aligned with that of the Biden-Harris administration, and which could invite investments from the private sector,³ need not be mutually exclusive. Yet, the proposals of the Revised Resolution, if adopted, would create such an incongruous result by adopting a technology-restricted policy that arbitrarily excludes CCUS.

² As is explained in detail in Section II of these Reply Comments, the Revising Resolution has the effect of imposing an additional cost on all carbon-reducing BE projects. By design, electrification increases electric demand (by shifting energy consumption away from a sector with higher carbon intensity). In the Originally Proposed Rules, the RCPS requirements were adjusted for BE-related demand to prevent what would be, in effect, a Clean Energy Credit ("CEC") surcharge. But the Revised Rules would remove that adjustment, so that BE projects, despite reducing net carbon dioxide ("CO₂") emissions, would trigger a requirement for additional CECs. Simply stated, the Revising Resolution increases the cost of BE.

³ *See, e.g.*, <u>https://corporate.exxonmobil.com/News/Newsroom/News-releases/2021/0201_ExxonMobil-Low-</u>Carbon-Solutions-to-commercialize-emission-reduction-technology

In the hopes of achieving a technology-neutral, comprehensive emissions reduction policy that aligns with the recommendations of scientists and the policies being pursued by the Biden-Harris administration and other progressive regulators like Vermont, New York, California, and Washington state, ENO has provided Proposed Edits to the Revised Rules (attached hereto as Exhibit A)⁴ in conjunction with the filing of these Reply Comments. To illustrate the need for these Proposed Edits to the Revised Rules, ENO's Reply Comments: (i) briefly remind the Council of the voluminous evidence in the record supporting a technology-neutral approach, (ii) emphasize the unique localized health benefits of Beneficial Electrification, which served as the basis of its Tier 1 or Tier 2 status in the Originally Proposed RCPS Rules, (iii) describe the disincentive for pursuing BE measures that the Revised Rules can potentially create, and (iv) illustrate how much more costly achieving emissions reductions will be if BE is not appropriately valued. To be clear, ENO believes the record in this proceeding, and the consensus of climate scientists, supports adoption of the Originally Proposed Rules. However, ENO has provided the Proposed Edits to the Revised Rules as an alternative to the Revised Rules that would avoid penalizing BE.

I. The Record of this Proceeding, the Consensus of Experts, the City's Climate Action Plan, and the Council's RCPS Resolution Support a Technology-Neutral Approach to Emissions Reduction that Includes BE and CCUS.

Since the outset of this proceeding, the Council has received ample evidence and input from many entities⁵ indicating that a technology-neutral approach to emissions reductions policies provides the only viable path to deep decarbonization by midcentury. ENO and others have frequently referred to this approach as using "all the tools in the toolbox" in the fight against climate change and scientific, academic, and industry experts who study climate change agree that this approach is the only way to effectively combat climate change. Scientific studies cited in this proceeding that confirm this conclusion are legion;⁶ conversely, scientifically valid studies supporting a technology-restricted approach are non-existent – in the record or otherwise.

⁴ ENO's Proposed Edits are incremental to the redlined version of the Revised Rules and represented in highlighted text and bolded font.

⁵ These entities include Air Products and Chemicals, Inc., the Center for Climate and Energy Solutions, the Clean Air Task Force, America's Wetland Foundation, Environmental Progress, Third Way, the United States Business Council for Sustainable Development, Jensen Companies, South Coast Solar, STEM Nola, Joule Solar, Professors Smith and Connor of the Tulane Energy Institute, and the American Association of Blacks in Energy. The Edison Electric Institute also submitted comments cautioning against adoption of a climate policy that limits flexibility and the number of compliant technologies. These comments are attached hereto as Exhibit B.

⁶ See, e.g., Moniz, Ernest J., et al. (February 2019), Advancing the Landscape of Clean Energy Innovation, IHS Markit, available at https://ihsmarkit.com/Info/0219/clean-energy-innovation.html; CLEARPATH, Center for Climate and Energy Solutions, American Council for Capital Formation Center for Policy Research, Bipartisan Policy Center, Cresforum (February 2019), Clean Energy Solutions Must Include Nuclear: A Briefing for Everyone Concerned about Climate Change, available at https://static.clearpath.org/2019/02/ce-solutions-must-include-nuclear.pdf.; International Energy Agency, Nuclear Power in a Clean Energy System (May 2019) available at https://webstore.iea.org/download/direct/2779?fileName=Nuclear Power in a Clean Energy System.pdf; Editorial, A Warming World Needs Nuclear Power, Bloomberg.com (Dec. 31, 2018) available at www.bloomberg.com/opinion/articles/2018-12-31/nuclear-power-is-part-of-the-solution-to-climate-change; Parsons, John, Buongiorno, Jacopo, Corradini, Michael, Petti, David, "A Fresh Look at Nuclear Energy," Science

In addition to the studies previously cited and included in the record of this proceeding, other studies have been published that also call for a technology-neutral approach to decarbonization, including harnessing the emissions reducing potential of BE.:

- Wiser, R. *Halfway to Zero: Progress towards a Carbon-Free Power Sector*, Lawrence Berkeley National Laboratory, 2021.⁷
- NRDC and E3, *America's Clean Energy Frontier: The Pathway to a Safer Climate Future*, 2017.⁸
- Mulvaney, K., *Using Climate and Energy Scenarios to Inform Strategy and Policy*, Rocky Mountain Institute, 2021.⁹
- Naimoli, S. and S. Ladislaw, *Deep Decarbonization Pathways*, Center for Strategic and International Studies, 2020.¹⁰

Magazine (Jan. 11, 2019), available at sciencemag.org, Vol. 363, Issue 6423, at p. 105 ("Parsons, et al., 2019"); Achieving Energy for Sustainable Development, Outcome Document of the Ministerial Conference and the Ninth International Forum on Energy for Sustainable Development, Kiev (Nov. 12-15, 2018), available at https://www.unece.org/fileadmin/DAM/energy/se/pdfs/eneff/9th Forum Kiev Nov.2018/Outcome Document v05 pdf; Greenstone, Michael, McDowell Richard, Nath, Ishan, Working Paper No. 2019-62, Do Renewable Portfolio Standards https://bfi.uchicago.edu/wp-Deliver? (April 2019), available at content/uploads/BFIEPIC WP 201962 v3.pdf; Shreve, Dan, Schauer, Wade, "Deep Decarbonisation Requires Deep Pockets, Trillions Required to Make the Transition," June 2019, available at: http://www.decarbonisation.think.woodmac.com/summary/; Clack, Christopher, T.M., et al., "Evaluation of a Proposal for Reliable Low-Cost Grid Power with 100% Wind, Water, and Solar," Proceedings of the National Academy of Sciences of the United States of America, Vol. 114, No. 26., June 27, 2017, available at https://www.pnas.org/content/pnas/114/26/6722.full.pdf; MacDonald AE, Clack CTM, Alexander A, Dunbar A, Wilczak J, Xie Y (2016) Future cost-competitive electricity systems and their impact on US CO2 emissions. Nat Clim. Change 6:526-531; Deep Decarbonization Pathways Project (2015) Pathways to Deep Decarbonization (Sustainable Development Solutions Network and Institute for Sustainable Development and International Relations, Paris); Fawcett AA, Clarke LE, Weyant JP, eds, The EMF24 study on U.S. technology and climate policy strategies. The Energy Journal. June 1, 2017; Krey V, Luderer G, Clarke L, Kriegler E (2014) Getting from here to there – energy technology transformation pathways in the EMF27 scenarios. *Clim. Change* 123:369–382; Williams JH, et al. (2012) The technology path to deep greenhouse gas emissions cuts by 2050: The pivotal role of electricity. Science 335:53-59; Mileva A, Johnston J, Nelson JH, Kammen DM (2016) Power system balancing for deep decarbonization of the electricity sector. Appl. Energy 162:1001-1009; IEA (2015) Energy Technology Perspectives 2015: Mobilising innovation to accelerate climate action (International Energy Agency, Paris); Energy and Research Partnership (2015) Managing Flexibility Whilst Decarbonising the GB Electricity System (Energy Research Partnership, London); IPCC (2014) Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, eds Pachauri RK, Meyer LA (IPCC, Geneva); Energy Futures Initiative, "The Green Real Deal, a Framework for Achieving a Deeply Decarbonized Economy," available at:

https://static1.squarespace.com/static/58ec123cb3db2bd94e057628/t/5d41c61878b170000194e2af/15645916453 07/EFI+Green+Real+Deal.pdf; Tapia-Ahumada, K.D., J. Reilly, M. Yuan, and K. Strzepek (2019): *Deep Decarbonization of the U.S. Electricity Sector: Is There a Role for Nuclear Power*?. Joint Program Report Series Report 338, September, 2019 available at: http://globalchange.mit.edu/publication/17323.

⁷ <u>https://eta-publications.lbl.gov/sites/default/files/halfway_to_zero_report.pdf</u>

⁸ https://www.nrdc.org/sites/default/files/americas-clean-energy-frontier-report.pdf

⁹ <u>https://rmi.org/download/27220</u>

¹⁰ <u>https://www.csis.org/analysis/climate-solutions-series-deep-decarbonization-pathways</u>

- E3 and the California Energy Commission, *Deep Decarbonization in a High Renewables Future*, 2018.¹¹
- Phillips, B. and J. Reilly, *Designing Successful Greenhouse Gas Emission Reduction Policies: A Primer for Policymakers – The Perfect or the Good*, MIT Joint Program on the Science and Policy of Climate Change, 2019.¹²
- Schweizer, V.J., et al., *Integrated climate-change assessment scenarios and carbon dioxide removal*, One Earth, 2020.¹³
- Electric Power Research Institute ("EPRI"), U.S. National Electrification Assessment, 2018.¹⁴
- Morris, J., et al., Scenarios for the deployment of carbon capture and storage in the power sector in a portfolio of mitigation options, Climate Change Economics, 2021.¹⁵

The studies outlined above reflect a clear consensus among the scientific community that, to effectively combat climate change, no zero-emission, or emission-reducing, resources should be excluded from climate policies. The evidence in the record of this proceeding also overwhelmingly supports this technology-neutral approach and no credible evidence has been submitted to support removing any weapons from New Orleans' arsenal in the fight against climate change. It has been noted that "prioritizing the growth of the renewables industry over all other carbon dioxide emissions-free resources and rejecting the 'all of the tools in the toolbox' method will slow down decarbonization and make it more expensive for ratepayers by narrowing unnecessarily the range of options available to decarbonize."¹⁶ Yet, the Revised Rules would do just that by modifying the previously technology-neutral rules to affect the elimination of a potentially viable resource (CCUS) and the devaluation and penalization of a currently viable, least-cost resource (BE). The fight against climate change is too important to justify foregoing current or future opportunities to reduce emissions through any cost-effective means available.

a. Beneficial Electrification is a Currently Viable, Least-Cost Emissions Reduction Resource that Targets Emissions in New Orleans and Should not be Discouraged or Penalized.

The critical role of BE in achieving ambitious climate goals is universally acknowledged by scientists, industry experts, and all climate advocates whose positions are informed by facts and science. These experts include former Energy Secretary Ernest Moniz, the International Energy Administration ("IEA"), the National Resources Defense Council ("NRDC"), the National Renewable Energy Laboratory ("NREL"), the Environmental Protection Agency ("EPA"), and the

¹¹ <u>https://www.ethree.com/wp-</u> <u>content/uploads/2018/06/Deep_Decarbonization_in_a_High_Renewables_Future_CEC-500-2018-012-1.pdf</u>

¹² <u>https://globalchange.mit.edu/sites/default/files/MITJPSPGC_Rpt335.pdf</u>

¹³ <u>https://www.sciencedirect.com/science/article/pii/S259033222030364X</u>

¹⁴ https://ipu.msu.edu/wp-content/uploads/2018/04/EPRI-Electrification-Report-2018.pdf

¹⁵ <u>https://www.worldscientific.com/doi/epdf/10.1142/S2010007821500019</u>

¹⁶ See Advisors' Proposed RCPS Regulations, August 2020, at Appendix D pg. 30.

EPRI, among many others.¹⁷ In two studies that analyzed the preferred pathway to an 80% economy-wide reduction of CO_2 emissions by 2050, beneficial electrification accounted for 16% and 23% of the required greenhouse gas reductions, respectively.¹⁸ Analyzed a different way, two other studies that focused on electrification independently found that cross-sector electrification applications could reduce economy-wide CO_2 emissions by 17% and 19%, respectively, in conservative scenarios and by as much as 47% or 67%, respectively, under more transformative scenarios.¹⁹

Carbon emissions impact the climate, whether they originate from electric generators – as did 32% of U.S. carbon dioxide emissions in 2020 – or from other sectors.²⁰ An approach that ignores or limits the potential of cross-sector electrification is too narrow – leaving as much as two thirds of addressable emissions reductions on the table. It misses the substantial benefits that can be provided by replacing fossil fuel consumption by other sectors with ENO's supply, which is already among the cleanest in the country and is poised to become even cleaner. An approach that penalizes BE actively impedes utilization of the least-cost resource for emissions reductions.

The City's Climate Action Plan also expressly recognizes the importance of BE to achieving the City's carbon reduction goals and highlights significant opportunities for reduction in the City's emissions through electrification. According to the Climate Action Plan, in 2014, 17% of the City government's greenhouse gas emissions came from the City's vehicle and transit fleets. This number increases for the greenhouse gas inventory conducted for the entirety of New Orleans, with 44% of emissions resulting from the transportation sector.²¹ Based on these and other observations, the Climate Action Plan states that "We must dramatically clean the fuel mix of our transit fleet and have several options from renewable diesel to electrification drawing from our cleaner grid."²² The Climate Action Plan also recommends expanding access to electric vehicles as an action item towards achieving emissions reductions goals.²³ The City Administration recently announced a commitment to begin transitioning the City's vehicle fleet to an electric one with an eye toward "helping to cut greenhouse gas emissions that are warming the

¹⁷ See Energy Futures Initiative (2019) The Real Green Deal (EFI, Washington, D.C.); IEA (2015) Energy Technology Perspectives 2015: Mobilising innovation to accelerate climate action (International Energy Agency, Paris); NRDC (2017) America's Clean Energy Frontier: The Pathway to a Safer Climate Future, Report R-16-06-A; NREL (2021) Electricity Futures Study (National Renewable Energy Laboratory, Golden, CO), Tech Rep NREL/TP-6A20-72330; EPA (2017) Shore Power Technology Assessment at U.S. Ports (EPA Office of Transportation and Air Quality) Tech Report EPA-420-R-17-004; EPRI (2018), U.S. National Electrification Assessment (EPRI, Palo Alto, CA).

¹⁸ See Williams JH, et al. (2012) The technology path to deep greenhouse gas emissions cuts by 2050: The pivotal role of electricity. *Science* 335:53–59 and NRDC (2017) America's Clean Energy Frontier: The Pathway to a Safer Climate Future, Report R-16-06-A.

¹⁹ See Murphy, Caitlin, et al. (2021) Electrification Futures Study: Scenarios of Power System Evolution and Infrastructure Development for the United States, NREL, at pg.61 and EPRI (2018), U.S. National Electrification Assessment, at pg. 8.

²⁰ See EIA (March 2021), Monthly Energy Review, at pgs. 197-207.

²¹ See Climate Action Plan at pgs. 18-20.

²² *Id.* at pg. 42.

²³ *Id.* at pg. 43.

planet, saving taxpayer money, improving public health, and reducing our nation's dependency on oil."²⁴ Additionally, the City's own audit of its emissions revealed that, in 2014, 62% of greenhouse gas emissions resulted from "water and wastewater treatment facilities."²⁵ These findings confirm that there is a significant opportunity to reduce carbon and other pollutant emissions through electrifying the SWB's facilities, among other applications, but the Revised Rules would needlessly undercut these opportunities for reducing emissions in New Orleans.

Many other forward-thinking, progressive jurisdictions fully recognize these cross-sector emissions reduction benefits in their clean energy programs. These jurisdictions recognize that electrification efforts need to proceed in parallel with efforts to make the electricity supply cleaner. States recognizing the value of BE include:

- <u>Vermont</u>: Vermont's RPS includes a Tier III encompassing "energy transformation projects ... that reduce fossil fuel consumed by [Distribution Utility] customers." Programs include electric forklifts, heat pumps, water heaters, electric lawnmowers, low-income weatherization, electric vehicle ("EV") charging, and electric bikes.²⁶
- <u>Washington</u>: The state's 2019 Clean Energy Transformation Act includes as compliance options the use of "energy transformation projects" that reduce fossil fuel consumption.²⁷
- <u>New York</u>: New York's energy efficiency program sets an efficiency savings target denominated in BTU of cumulative savings on an "all-fuels" basis, with a subtarget of electricity demand reductions desired. The program commits to "reduce emissions from all fuels and across all market segments" and specifically notes the need to "embrace beneficial electrification" to reach state-wide decarbonization targets.²⁸
- <u>Massachusetts</u>: The state's Energy Act of 2018 expanded the state's energy efficiency programs to include "strategic electrification" measures. The state's 2018 Comprehensive Energy Plan notes, "Increasing electrification in the thermal and transportation sectors achieves greater emission reductions than increasing renewable supply alone."²⁹
- <u>California</u>: California has a cap-and-trade emissions trading program that covers multiple sectors, including "sources responsible for 85 percent of California's greenhouse gas emissions."³⁰ Cross-sector emissions reductions between covered sources are recognized by design.

These states are clean energy leaders with ambitious climate goals: Washington, New York, and California have requirements to have a net zero emissions electric supply by 2030, 2040, and 2045,

²⁴ See <u>https://nola.gov/mayor/news/june-2019/city-of-new-orleans-announces-partnership-with-climate-mayors-ev-purchasing-collaborative,-one-of-12/</u>

²⁵ See Climate Action Plan at pg. 20.

²⁶ See Vermont Public Service Department, RES Tier III Verification Report – 2019, at pg. 6.

²⁷ See Washington Senate Bill 5116, at pgs. 4, 7, and 9.

²⁸ See NYSERDA New Efficiency: New York, April 2018, at pgs. 3, 64.

²⁹ See MA DER, Massachusetts Comprehensive Energy Plan, at pg. xiv.

³⁰ See CA EPA, Overview of ARB Emissions Trading Program.

respectively, Massachusetts has a goal of reducing greenhouse gas emissions to 80% below 1990 levels by 2050, and Vermont has a 75% RPS requirement by 2032.

Prior to proposing the Revised Rules, the Council acknowledged these facts and appeared poised to join other progressive regulators in the fight against climate change by pursuing a climate policy reflective of the scientific community's recommendations. In the RCPS Resolution, the Council directed the Advisors to pursue the RCPS concept after highlighting the following characteristics, citing its inclusion of all emissions-free resources and specifically mentioning BE:

- "[A]n RCPS would allow all emissions-free resources, including renewables, to be included in the utility's resource portfolio. This has the advantage of giving the utility maximum flexibility to acquire the resources most closely matched to the needs of ENO's load at the lowest reasonable cost;"
- "[I]n addition to zero emissions sources of generation, ... [the RCPS] include[s] energy efficiency, demand-side management ('DSM'), <u>and Beneficial Electrification</u> as resources."³¹

The Originally Proposed Rules adhered to these directives by incentivizing emissions reductions from BE by prioritizing it as a Tier 1 Resource. The Revised Rules, on the other hand, reverse course completely and effectively disincentivize ENO from pursuing emissions reducing opportunities that would contribute to cleaner air in New Orleans. By doing so in conjunction with the removal of CCUS, the Revised Rules could strip the Council's climate policy of any and all means for directly reducing emissions from, and cleaning the atmosphere in, New Orleans.

b. BE is a Valuable Compliance Option that is Uniquely Able to Deliver Localized Benefits Beyond Carbon Reductions.

BE can be a uniquely potent means of reducing CO_2 emissions. Zero emissions electric supply resources and energy efficiency reduce consumption of grid power and avoid its associated emissions, but BE can displace a different emissions profile by reducing consumption in other sectors. As illustrated below, electrifying one megawatt-hour of the energy needs at the SWB can produce three to four times the CO_2 reductions as one megawatt-hour of new renewable generation.

³¹ See Council Resolution No. R-20-104 at pgs.7-8 (emphasis added).

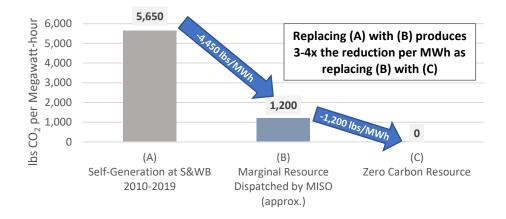


Figure 1 – CO₂ Emission Rates of Various Sources³²

This enhanced emissions reduction potential may make a project like SWB electrification particularly cost-effective. SWB electrification alone carries the potential to reduce carbon dioxide emissions in New Orleans by 78,000 tons annually based on 2010-2019 data.

Other BE projects may have unique cost structures that make their emissions reductions especially cost-effective. The capital costs of providing shore power for docked ships, for example, may be offset by operating cost savings when ships avoid burning diesel fuel in favor of using cleaner, more efficiently generated grid power. The same may be true for electric vehicles or buses, which typically provide significant ongoing fuel and maintenance costs savings to counteract higher upfront purchase and charging infrastructure costs.

These kinds of BE projects target in-city emissions sources. This not only reduces local CO_2 emissions, it also greatly benefits local air quality by reducing other pollutant emissions like nitrous oxide, sulfur dioxide, particulate matter, carbon monoxide, volatile organic compounds, and ammonia and provides for a means to extend the Council's policies and goals to a space that would otherwise be unable to reach third parties. The health benefits of these reductions are significant. A recent academic study of the health benefits of electric vehicles – a BE application that the Revising Resolution would downgrade from a Tier 1 resource to a Tier 3 resource and could possibly further disincentivize for reasons discussed below – estimated that EV adoption would produce aggregate air quality benefits to New Orleanians exceeding four cents per mile driven and greenhouse gas benefits of over 1.5 cents per mile driven.³³ If the Council desires a climate policy that will also lead to cleaner air in New Orleans, BE is a resource that should be incentivized, not penalized.

³² SWB emission rate based on data from SWB's Comprehensive Annual Financial Report, 2019 at pg. IV-6.

³³ See Choma, Ernani et al., Assessing the health impacts of electric vehicles through air pollution in the United States, 2020 at pg. 7.

c. Excluding CCUS from the RCPS is Out of Step with the Biden-Harris Climate Plan, is not Supported by the Record, and Needlessly Rejects a Technology that may Prove Essential as the Grid Moves Towards Complete Decarbonization.

One reason to pursue a technology-neutral, all-tools-in-the-toolbox approach is to leave open the possibility that a technology option which is not preferred today may someday become viable if it achieves cost reductions or fills an emerging need in managing the grid. CCUS is the quintessential example of such a technology. A technology-neutral climate policy would "leave room for effective and economical CCUS technology that might develop in the future."³⁴

As with BE, many experts expect that CCUS will play a critical role in meeting mid-century climate goals. The International Energy Agency says this most bluntly: "Reaching net zero will be virtually impossible without CCUS."³⁵ It elaborates, "CCUS will need to form a key pillar of efforts to put the world on the path to net-zero emissions. ... Alongside electrification, hydrogen and sustainable bioenergy, CCUS will need to play a major role. It is the only group of technologies that contributes both to reducing emissions in key sectors directly and to removing CO₂ to balance emissions that cannot be avoided – a critical part of 'net' zero goals."³⁶ CCUS has several characteristics that many other clean energy options do not. It can be retrofitted onto existing facilities, which may involve lower per megawatt-hour capital costs than other options. Perhaps most importantly, it can be applied to dispatchable electricity sources.

As ENO and other utilities incorporate more intermittent resources (*i.e.*, solar and wind) on the grid, dispatchable resources will become increasingly important to meeting system reliability requirements. ENO will not be the only entity in the region to make deep cuts to its carbon emissions. The Entergy Corporation has made a commitment to achieving net zero carbon emissions by 2050; other load serving entities or retail customers may also follow suit.³⁷ As shown in ENO's October 15th, 2019 comments, there are diminishing returns to higher reliance on a single intermittent resource, like solar.³⁸ If solar is the only, or primary, technology option pursued by ENO, it becomes increasingly likely that the solar output is delivered at times when it is in excess to ENO demand and would be used to serve Midcontinent Independent System Operator, Inc. ("MISO") wholesale sales. This carries wholesale price risk borne by ENO customers and assumes that other entities will be willing to accept ENO's excess energy at these times, which may not occur if others have similar generation profiles.

A viable climate policy should not count on New Orleans being the only entity to take action; it should work even, and especially, when others in the region adopt similar goals. Only with collective action will progress be made against climate change, and the RCPS policy must be robust enough to function under all circumstances and consider long-term resource planning. This

³⁴ See Advisors' Proposed RCPS Regulations, August 2020, at Appendix D pg. 29.

³⁵ See IEA (2020) Energy Technology Perspectives 2020: Special Report on Carbon Capture Utilisation and Storage, at pg. 13.

³⁶ *Id.* at pg. 13.

³⁷ <u>https://www.entergynewsroom.com/news/achieving-net-zero-carbon-emissions-by-2050/</u>

³⁸ See ENO's October 2019 Comments, at Appendix B pgs. 1-5.

flexibility should be included from the outset of the rule to influence and support the long-term decision-making that must be taken into account in resource planning. Toward that end, it would be unwise to exclude and discourage a clean resource that may fill an essential system need.

Excluding CCUS is also inconsistent with federal policy. The Biden-Harris administration is targeting a goal "to make CCUS a widely available, cost-effective, and rapidly scalable solution to reduce carbon emissions to meet mid-century climate goals. Toward this end, the administration has stated that it will double down on federal investments and enhance tax incentives for CCUS. At the same time, to bring new carbon capture technologies to market, Biden is proposing to continue to fund carbon capture research, development, and demonstration."³⁹ Congress passed a two-year extension of the Section 45Q tax credit for CCUS in December 2020 and a bipartisan Senate bill was proposed in March 2021 to expand the credit.⁴⁰ And the American Jobs Plan, the Biden-Harris administration's infrastructure proposal, notes that "to accelerate responsible carbon capture deployment and ensure permanent storage, President Biden's plan reforms and expands the bipartisan Section 45Q tax credit, making it direct pay and easier to use for hard-to-decarbonize industrial applications, direct air capture, and retrofits of existing power plants."⁴¹

CCUS may soon become a preferred, economic, and even essential, clean energy resource. As of 2020, over 20 CCUS facilities were in operation worldwide, with another 44 under development.⁴² According to a database maintained by the Clean Air Task Force, there are 15 proposed U.S. power sector CCUS projects, at least nine of which have received Department of Energy ("DOE") grants.⁴³ Yet, without any rationale or justification, the Revised Rules would foreclose any future opportunities to utilize this potential resource in New Orleans' efforts to fight climate change.

The rationale underlying the proposed removal of CCUS from New Orleans' set of emissions reduction tools has not been explained, nor is it supported by the record in this matter. The Revising Resolution identifies no harm avoided, or benefit gained, by singling out this technology for exclusion and, in doing so, eschewing the technology-neutral approach that scientists agree is needed to fight climate change. The Revising Resolution offers no justification for proposing an action that so directly contravenes the recommendations of experts and which is unsupported by any substantive evidence contained in the record of this proceeding. The Revising Resolution simply states that the proposal to remove these emissions reducing options was based on a review of the parties' comments.

However, as has been thoroughly documented throughout this proceeding, no party has offered any evidence, analysis, or scientifically-sound study that supports adopting a technology-restricted climate policy. Indeed, the handful of individuals who have authored comments calling

³⁹ <u>https://joebiden.com/climate-plan/</u>

⁴⁰ <u>https://www.eenews.net/eedaily/stories/1063721309</u>, <u>https://www.eenews.net/eedaily/stories/1063728511/</u>

⁴¹ <u>https://www.whitehouse.gov/briefing-room/statements-releases/2021/03/31/fact-sheet-the-american-jobs-plan/</u>

⁴² <u>https://www.iea.org/data-and-statistics/charts/world-large-scale-ccus-facilities-operating-and-in-development-2010-2020</u>

⁴³ <u>https://www.catf.us/2020/07/ccus-interactive-map/</u>

for a technology-restricted policy on behalf of the various entities that comprise the Energy Future New Orleans coalition recently implored the Council to delay adoption of a climate policy so that "data and analysis can be gathered to properly inform and support" their positions.⁴⁴ Of course, no such data or analysis in support of a technology-limited climate policy has ever been submitted in this proceeding.⁴⁵ Even a cursory review of the record reveals that no party has provided any substantiated evidence that would support removal of a potentially viable future resource, like CCUS, from the Council's climate policy. As such, no plausible justification for the Revising Resolution's proposed changes can be found in the record of this proceeding, or climate science literature and research at large. ENO respectfully recommends maintaining a technology-neutral approach and not singling out CCUS as non-compliant; the Company's Proposed Edits to the Revised Rules reflect this recommendation.

II. The Revised Rules Disincentivize Beneficial Electrification in Multiple Ways.

BE is currently a least-cost resource for reducing carbon emissions and the only resource that can directly target emissions from within Orleans Parish. BE is also the only solution capable of reducing emissions from beyond the electric sector. Yet, the Revised Rules could foreclose New Orleanians' opportunity to benefit from this important resource.

The Revised Rules do several things to reduce or eliminate the potential benefits of BE projects. The first, and most readily apparent, is the removal of BE from qualification as a Tier 1 Resource eligible for multipliers reflective of BE's unique and substantial emissions reducing effects on air quality in New Orleans. The Originally Proposed RCPS Rules appropriately incentivized measures for reducing emissions inside of Orleans Parish. This version of the rules would have enacted a policy that could facilitate not only the reduction of carbon emissions in the City, but the reduction of many other pollutants that affect air quality in New Orleans. Without explanation, or support in the record, the Revised Rules abandon this aspect of the policy, which would have led to improvements in air quality for all New Orleanians. ENO urges the Council to return to the Originally Proposed Rules' treatment of BE.

The second change presented in the Revised Rules is the removal of the term Beneficial Electrification and its associated definition from the rules. This effectively relegates non-EV-related BE projects⁴⁶ to being treated as "Qualified Measures" under the Revised Rules. This means that, absent Council approval, BE projects are no longer assigned CECs that can be used by ENO towards compliance with the Council's policy even though they produce net CO_2 emissions reductions and, in some instances, greater reductions than resources that automatically qualify as compliant. Under the Originally Proposed RCPS Rules, all BE was put on an equal footing with

⁴⁴ See EF New Orleans' September 2020 Comments at pg. 1.

⁴⁵ While these groups are currently spreading misinformation about CCUS and BE through social media and other channels, these tactics do not constitute evidence in the record of this rulemaking and should not influence the Council to implement rules that diverge from the scientific consensus of what constitutes effective climate policy.

⁴⁶ Although EV charging infrastructure and other Qualifying Measures, like BE, are both treated as Tier 3 Resources under the Revising Resolution, a distinction is drawn between the two by the specific designation of EV charging infrastructure as a Tier 3 Resource versus the more general inclusion of BE which remains undefined and available only upon Council approval as a Qualifying Measure.

other CO₂-reducing alternatives: it would have received CECs at a level that was roughly proportionate to the net emissions reductions of other measures like renewable generation or energy efficiency ("EE"). Under the Revised Rules it is uncertain that BE measures could qualify for CECs. This uncertainty could prove to be a deterrent to business owners or other entities that are interested in pursuing BE options, but that are not accustomed to Council regulation of their business decisions. To alleviate this issue in the event that the Council does not return to the Originally Proposed Rules, ENO's Proposed Edits contain a proposal for a procedure whereby a project can be approved as a Qualified Measure through third-party assessment within forty-five days of submitting a certified engineering calculation or data demonstrating measured emissions reductions.

The final, and least obvious – but perhaps most detrimental – effect of the Revised Rules is to impose an additional cost that would further disincentivize pursuing any BE effort. Not only could some BE projects not receive credits for their emissions reductions, but all BE projects would impose an incremental obligation upon ENO to incur further costs to acquire more CECs. By design, electrification increases electric demand (by shifting energy consumption away from a sector with higher carbon intensity, *e.g.*, burning diesel fuel), and the RCPS requirements in the Revised Rules are calculated as a percentage of ENO customers' electric demand with no adjustment for BE-related increases. As such, an increase in electric demand from BE – regardless of its potential inclusion as a Tier 3 Resource – would increase ENO's compliance requirements, necessitating the acquisition of additional CECs. Despite reducing net CO_2 emissions, BE would carry additional costs. All else equal, the proposed policy changes in the Revised Rules discourage ENO from pursuing electrification, which is the least-cost emissions reduction tool in the toolbox. In effect, the Revised Rules would disincentivize ENO from pursuing several BE projects that would reduce emissions right here in New Orleans, some of which have been in development for many years and which this Council had previously encouraged ENO to pursue.

Table 1 below illustrates precisely how the Revised Rules will make the pursuit of BE projects impracticable or even impossible by tracing the treatment of four different carbon-reducing measures through proposed changes.

		Compliance Action					
		100 MWh Renewable	100 MWh Energy	100 MWh BE from an EV Bus		100 MWh BE from Ship Shore Power	
		Energy	Efficiency	Orig. Rule	Revised Rule	Orig. Rule	Revised Rule
a	RCPS Tier	1 or 2	1	1	3	2	N/A or 3
b	Net CO ₂ Avoided (tons/MWh)	0.6	0.6	0.5	0.5	0.2	0.2
c	CO ₂ Avoided (tons)	60	60	50	50	20	20
d	CECs Granted (Before Multipliers)	100	100	100	TBD (~83)	27	TBD (0 to ~33)
e	CECs Granted (After Multipliers)	100-125	125	150	TBD (~83)	33	TBD (0 to ~33)
f	Change to Retail Sales (MWh)	0	-100	+100	+100	+100	+100
g	Change to Retail Compliance Load (MWh)	0	0	0	+100	0	+100
h	Change to Total CECs Required in 2035 (90% RCPS)	0	0	0	+90	0	+90
i	Net Change to ENO CEC Position [= e - h]	+100 to +125	+125	+150	(7)	+33	(90) to (57)

Table 1: Illustrative Impact of Various Carbon-Reducing Measures Underthe Revised Rules

The first two columns illustrate how the provisions of the Originally Proposed RCPS Rules for renewable energy ("RE") and EE left largely untouched in the Revised Rules, place these two compliance options on similar footing. Each MWh receives one CEC, with a multiplier applied to Tier 1 resources, and both types of resources are expected to reduce CO_2 emissions by about 0.6 tons per megawatt-hour, the approximate average MISO South marginal emission rate. EE and RE are not identical resources, though; EE reduces ENO retail sales, while RE does not. Absent any adjustment, 1 MWh of EE would not only create CECs, but would lower the total number of CECs that ENO would need to procure if compliance obligations were calculated based on retail sales alone. To prevent this distortion, when calculating the Retail Compliance Load from which RCPS obligations are determined, the reduction to retail sales on account of EE is added back. This is shown in rows f and g of the EE column in the table above.

To be on an equal footing, BE needs the reverse – BE electric load needs to be deducted from Retail Compliance Load. Otherwise there is an uneven playing field and a disincentive for BE. The Originally Proposed RCPS Rules provided for this adjustment to Retail Compliance Load and created a level playing field. Under the Revised Rules, BE approved as a Qualified Measure and EV charging infrastructure may <u>seem, on its face</u>, to be on similar footing as Tier 3 resources as compared to other RCPS compliance measures included in the Revised Rules, but a closer inspection shows that they are not.

The third and fourth columns of the table compare a project that replaces an existing RTA bus with an electric bus under the Originally Proposed RCPS Rules and the Revised Rules, respectively. In the third column, this project would receive 150 CECs and would not incur any additional obligation to procure CECs due to the adjustment to Retail Compliance Load. It produces a level of emissions reductions similar to RE and EE, and receives a similar level of CECs (slightly more, in fact, since the previous RCPS rules provided a 1.5 credit multiplier for EV "in recognition of the critical role that buildout of charging station infrastructure throughout a City plays in encouraging large-scale adoption of EVs by residents and businesses.)⁴⁷

In the fourth column, under the Revised Rules, the outcome is very different. Though the number of CECs granted to this project would be subject to Council approval on a case-by-case basis, a reasonable estimate is that this project would receive 83 CECs per 100 MWh based on the relative net emission reductions and CECs granted to renewable resources and energy efficiency.⁴⁸ This project increases retail sales, which would increase ENO's requirements to procure CECs by an amount that could approach or exceed the CECs the project would be granted in the first instance. While retail compliance load is adjusted to account for changes in retail sales from EE, Section 4(a) no longer includes an adjustment to counteract the increase in retail sales from BE.⁴⁹ As shown in row g of the table, the sample EV bus project would generate a requirement in 2035 for ENO to acquire 90 additional CECs to demonstrate compliance, consuming all of the approximately 83 CECs the project would generate and creating an incremental obligation for ENO to procure 7 additional CECs.

The fifth and sixth columns examine another project for which this undesired consequence could occur: a project to provide shore power to docked cruise ships at the Port of New Orleans. Under the Originally Proposed RCPS Rules, its CEC allocation (at 25-33% of the rate of EE or RE) would be proportionate with its net emission reductions (at 33% of the rate of EE or RE). Yet under the Revised Rules, the obligation to acquire additional CECs would exceed the capacity of the measure to generate CECs as a Qualified Measure. In no year would the approximately 33 CECs from the project cover ENO's increased obligation to procure CECs for the additional 100 MWh of retail sales (an obligation which would start at 64 CECs in 2022 and rise from there). Under the Revised Rules, not only is the surviving BE placed on unequal footing with other compliance measures, it is actually possible for ENO to pursue a RCPS-recognized, emissions-reducing Tier 3 resource and end up farther from achieving RCPS compliance. In short, BE measures will be disincentivized under the Revised Rules.

This need not be the case; in fact, this perverse impact was considered and averted in the Originally Proposed Rule. Section 4(a) of the Originally Proposed Rules included an adjustment to retail compliance load – from which ENO's compliance obligation is calculated – to decrease

⁴⁷ Advisors' Reply Comments, October 2020, at pg. 11.

⁴⁸ According to Resolution R-21-109 at pg. 13: "The utility must also propose the annual amount of CECs in MWh associated with each proposed Tier 3 Resource for Council consideration." Because RE and EE receive 100 CECs (before multipliers) for 60 tons of carbon reductions, ENO assumes in these comments that the EV bus project would receive 83% of the CECs for generating 83% of the carbon reductions.

⁴⁹ *See* Resolution R-21-109 at pg. 16.

retail compliance load "by the additional MWh sales in that year related to a Beneficial Electrification measure," yet this provision was removed in the Revised Rules.⁵⁰ The Revised Rules are constructed so that increases to ENO's total retail sales from BE would in turn increase the CECs that the utility must procure to comply with the RCPS. In other words, the Revised Rules mean that pursuing BE also makes RCPS compliance more difficult to achieve.

This change to Section 4(a) affects all BE, even if the incremental obligation to acquire CECs is less than the CECs credited to a project. Table 2 follows the impact of the Revised Rules on the economics of SWB electrification. If SWB electrification was somehow not accepted as a Qualified Measure and a Tier 3 Resource, it would incur net CEC procurement obligations and swing the economics of the project by over \$10 per MWh electrified versus the Advisors' final version of the RCPS rules, assuming \$2/CEC as an approximate cost of replacement CECs or value to lost CECs. Even with SWB electrification recognized as Tier 3 resource, the additional costs of the previously included multiplier for BE translate to a \$4 to \$5 per MWh impact to costs, a change on the order of \$150,000 to \$175,000 <u>annually</u>. Remediating Section 4(a) by reinstating the adjustment to Retail Compliance Load would mitigate this impact by \$45,000 to \$70,000 annually. Adopting the Originally Proposed Rules would, of course, resolve the issue entirely.

	CECs Awarded, Net of Increased CEC Purchase Obligation (CECs per MWh) ⁵¹	Change to CEC Rate vs Advisors' Final Draft RCPS (CECs per MWh)	Annual Impact with \$2/CEC replacement (\$/MWh electrified)	Annual Impact at \$2/CEC (\$)
Originally Proposed RCPS Rules	4.45			
Revised Rules, SWB is not considered a Tier 3 Resource, Section 4(a) redlines adopted	(1.00) to (0.64)	(5.09) to (5.45)	(\$10.18) to (\$10.90)	(\$359,000) to (\$384,000)
Revised Rules, SWB as a Tier 3 Resource, Section 4(a) redlines adopted	1.97 to 2.33	(2.12) to (2.48)	(\$4.24) to (\$4.96)	(\$150,000) to (\$175,000)
Revised Rules, SWB as a Tier 3 Resource, Section 4(a) redlines rejected	2.97	(1.48)	(\$2.97)	(\$105,000)

Table 2: Impact of Revising Resolution on SWB Electrification

⁵⁰ *Id.* at pg. 16.

⁵¹ Assumes that SWB electrification, which would produce estimated net CO₂ reductions of 4,450 lbs/MWh, would receive CECs in proportion to the 1 CEC per 1,500 lbs net CO₂ reduction benchmark included in the Advisors' Final Draft RCPS Rules.

By fundamentally changing the RCPS rules from a technology-neutral framework to a technology-restricted one, the Revised Rules would add cost hurdles to transformational, carbon-reducing BE projects when it should be encouraging their adoption.⁵² These changes could be enough to tip a BE project from economic to uneconomic or make it less attractive relative to other available projects. Further, without acknowledgement of the value of BE through the RCPS, ENO's limited capital could be diverted to other prudent utility investment.

III. Penalizing or Disincentivizing Beneficial Electrification Projects Needlessly Makes Emissions Reductions More Difficult and Costly to Achieve.

Any effort that narrows compliance options under the RCPS not only diverges from universally acknowledged best practices for climate policy, it also risks increasing customer costs or falling short of the RCPS targets. Without recognizing "all tools in the toolbox" for reducing carbon emissions, achieving the RCPS goals can only get harder and more costly if more economic alternatives are excluded, particularly a least-cost resource like BE.

The RCPS customer cost cap provision limits the additional costs to customers on account of the RCPS program to 1% of annual utility retail revenues. When this incremental cost threshold is met, ENO is excused from acquiring additional CECs even if the RCPS clean energy target is not achieved in that year.

As ENO procures CECs in a least-cost fashion, excluding CCUS and penalizing BE will mean that ENO will have to select less cost-efficient sources of CECs in place of BE and CCUS (if those options were part of the preferred compliance mix). Depending on whether these increased costs lead to ENO reaching the cost cap, this will leave ENO facing higher costs or acquiring less clean energy, or both.

Figures 2 through 4 below illustrate this point graphically. Each year, ENO will address its need for additional CECs by acquiring clean energy credits until it reaches the RCPS requirement (black dotted line) or the customer cost cap (red line), whichever happens first. Figure 2 shows a scenario where ENO complies with the RCPS using a variety of new resources, including BE, increasing in cost until it reaches compliance at point A. In Figure 3, without BE, higher cost resources are selected, leading either to higher costs (shown at point B) or higher costs at the cost cap *and* less clean energy (point C).

⁵² The above discussion should dispel any arguments that may be advanced such as "ENO doesn't need any incentive to sell more electricity through BE" or "ENO would pursue these projects even without RCPS credit." The Revised Rules would in fact create a disincentive.

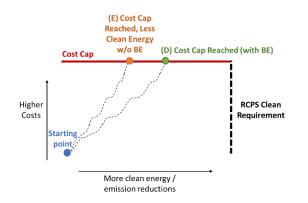


Figure 3 – Compliance without BE



Figure 4, below, shows a similarly negative outcome even if the cost cap is binding with BE in the compliance portfolio. Using more expensive sources of CECs than the BE leads to compliance at point E rather than point D, which achieves less clean energy for the same impact to customer costs.

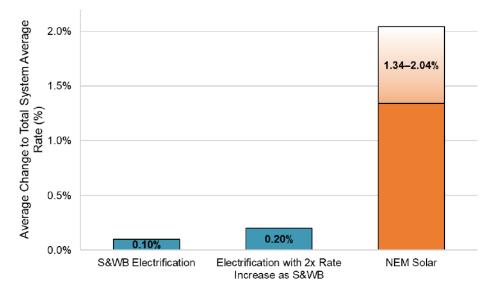
Figure 4 – Compliance with and without BE when Cost Cap is Binding



These scenarios are not theoretical; in fact, they describe situations that are likely to materialize. As ENO showed in its July 2019 comments, and reproduced below, a BE project like SWB electrification is projected to have low incremental costs while providing many tons of cross-sector emissions reductions.⁵³

⁵³ See ENO's July 2019 Comments, at pg. 14.

Figure 5 – Change to System Average Rates Required to Reduce CO₂ Emissions by 50,000 Tons Annually



BE is a useful compliance option in all years but may be especially attractive in the shortterm. Some compliance measures – such as a new utility-scale solar facility – may not be practical options for several years due to the time it will take to conduct and complete requests for proposals, secure Council approval, and construct the facility. BE may be implemented on a shorter time frame, which would be especially useful in the first few years of the RCPS and would result in near-term emission reductions in Orleans Parish.

Pursuing a suboptimal compliance option could not only increase customer costs and prevent ENO from meeting the RCPS targets in the year the measure comes online, but it also may consume spending capacity under the cost cap for years to come, further constraining ENO's ability to meet RCPS targets in the future. A technology-neutral, all-the-tools-in-the-toolbox approach is critical because it limits customer costs and provides the greatest probability that the Council's clean energy targets are achieved.

IV. The Council Should Ensure Consistency Between the CECs Granted to BE Projects and the Calculation of Retail Compliance Load.

In the event that the Council does not return to the framework contained in the Originally Proposed Rules and endorsed in the RCPS Resolution, ENO respectfully requests that the Council consider one of the following options to safeguard the integrity of the Tier 3 crediting process, either of which would avoid the deleterious effects described in the section above:

- Remove the Revised Rules' proposed redline changes to Section 4(a), which would restore the adjustment to retail compliance for BE, or
- If the redline changes to Section 4(a) are retained, indicate that the annual amount of CECs granted to Tier 3 Resources will be based on the project's gross, non-electric sector emissions reductions.

The details applicable to the crediting of BE resources were incorporated into the Originally Proposed RCPS Rules.⁵⁴ These provisions specified that CECs would be granted to BE projects according to their <u>net</u> carbon reductions (the "gross" non-electric sector emissions reductions subtracted by the increase to electric sector emissions). Equally important was the corresponding provision that adjusted retail compliance load to control for the impact of additional retail sales attributable to BE. When credits to BE reflect net emissions reductions, the consideration of increased electric sector emissions in the "net" calculation accounts for the impact to the electric sector; adding an incremental obligation to procure CECs from higher compliance load only saddles BE with additional costs and distorts the incentives to pursue BE. For this reason, the adjustment to retail compliance load to deduct incremental retail sales from BE was included in Section 4(a). The examples above demonstrate the perverse outcomes associated with crediting based on a net emissions reduction while simultaneously allowing incremental sales to increase CEC procurement obligations.

If there is no adjustment to Retail Compliance Load, the requirement to procure additional CECs when retail sales increase will ensure that the supply resources serving this incremental electric demand have the profile the Council desires. As a result, it would be consistent for the BE project to receive CECs based on the gross, non-electric sector emission reductions it provides in this scenario. The Revised Rules indicate that the "Utility must also propose the annual amount of CECs in MWh associated with each proposed Tier 3 Resource for Council consideration."⁵⁵ Should the Council retain its redlined changes to Section 4(a), ENO will submit proposals for Tier 3 CECs in accordance with the gross emissions reductions achieved by a project without netting any increased electric sector emissions.⁵⁶

V. Conclusion

Over the course of nearly two years, the Council has received voluminous evidence indicating that a technology-neutral approach to climate policy provides the only viable path to achieving significant emissions reductions by mid-century. The Council's Advisors, at the direction of the Council in the RCPS Resolution, worked with the parties through an extensive and transparent process to develop technology-neutral rules designed to aggressively reduce carbon emissions, directly incentivize carbon and other emissions reductions inside of New Orleans, and keep costs to customers at a minimum. The Revised Rules would needlessly eliminate many of the potential benefits of the framework that was developed based on the input of all parties and evidence in the record of this proceeding, and would diverge from the universal recommendation of climate scientists to adopt technology-neutral policies. ENO respectfully urges the Council to discard the unsupported and harmful changes proposed in the Revised Rules and to return to a

⁵⁴ See Advisors' Reply Comments, October 2020, at Appendix A pgs .2-3.

⁵⁵ Resolution R-21-109 at pg. 13.

⁵⁶ ENO's Proposed Edits also remove language from the Tier 3 definition (*i.e.*, "directly connected to the Utility's transmission or distribution system"), which appears to be holdover language from the Originally Proposed Rules, wherein Tier 3 included generating resources.

technology-neutral policy that would effectively combat climate change and improve air quality for all New Orleanians.

Respectfully submitted:

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ATTORNEYS FOR ENTERGY NEW ORLEANS, LLC

Appendix A

Redline of Council Renewable and Clean Portfolio Standard ("RCPS") Against Advisors' Final Draft Proposed Regulation

SECTION 1: OVERVIEW

- a) Intent: It is the intent of the Renewable and Clean Portfolio Standard ("RCPS") to:
- 1. Aggressively pursue reductions to carbon emissions to improve the health and quality of life of the citizens of New Orleans and to reduce the City's impact on climate change, which is an existential threat to the City's security: with a goal to eliminate carbon emissions associated with electricity production in 2050 and reach "net-zero" emissions in 2040.
- 2.Ensure that the City has a safe and reliable power supply at a reasonable cost and retain as much flexibility as possible to employ a wide range of currently known and yet to be developed zero carbon-emissions energy technologies.

This RCPS is intended to promote and foster these goals, and does not in any way limit the Council's authority to pursue these intentions through additional measures. The Council may waive any provision of these rules in advance upon a showing of good cause under the circumstances and upon a demonstration that such waiver serves the intent of this RCPS and may deem the Utility to be in compliance. In particular, this RCPS does not prevent parties from proposing and the Council from considering and approving projects consistent with the intent of this RCPS that do not conform precisely to the interim goals, Customer Protection Cost Cap, or other requirements set forth herein if the party(ies) proposing the project are able to successfully demonstrate to the Council that the project is nevertheless consistent with the intent of the RCPS, would benefit the Utility's customers, and meets any other Council standards or requirements applicable to that project (such as, for example, a project where interim goals and budget numbers are averaged and achieved over a block of years rather than strictly as provided in this RCPS). All proposals to modify or request to waive the goals or requirements of the RCPS shall be filed at the Council and served on parties to Docket No. UD-19-01, with opportunity for parties to issue discovery and provide comment.

b) Periodic Review: In order to ensure that this RCPS continues to meet the Council's intent as set forth in Section 1 (a), it is the Council's intention to conduct a review of this RCPS at least every five years. Such review shall consider a wide array of relevant factors, including, but not limited to: progress toward ultimate and interim goals, developments in climate science, impacts on customers, technological developments, market developments, and progress on actual emissions reductions of the Utility's portfolio. ¹⁹ At the end of such review, the Council will make a determination as to

¹⁹ Because the most significant of the utility's generation-related emissions is carbon dioxide, and the most urgent climate problems at the time of the adoption of this RCPS are being caused by carbon dioxide, this RCPS focuses specifically upon reductions in carbon dioxide emissions.

whether the RCPS remains appropriate for the City or whether it requires modification. Nothing in this provision prevents the Council from conducting a more immediate or frequent review of the RCPS than set forth in this provision should the Council determine that circumstances warrant more frequent or immediate review. Projects undertaken prior to any change in the RCPS would be grandfathered, such that they continue to receive the RCPS Compliance Credit they were entitled to receive prior to the change in RCPS.

SECTION 2: DEFINITIONS

"Alternative Compliance Payment" or "ACP": The ACP is a payment to be made by the utility when it is unable to comply with the RCPS through reasonable measures, but still has funding available to it under the cap set by the Customer Protection Cost Cap set forth in the rules. The ACPs (unit cost per MWh) shall be calculated in accordance with Section 5 of this RCPS, and will be placed in the CleanNOLA Fund established in Section 7 of this RCPS.

"Beneficial Electrification" means any program or process that replaces direct fossil fuel use as a source of power and/or heat with electricity in a way that when the electric utility's emissions are accounted for reduces overall emissions, including, but not limited to, charging infrastructure supporting electrification of motor vehicles, electrification of home and commercial appliances that use natural gas, and electrification of municipal and commercial operations that currently rely on fossil fuel use to power equipment. To qualify as a Beneficial Electrification resource in Tier 1 under this RCPS, the measure must qualify as a Beneficial Electrification resource in Tier 1 under this RCPS, the measure must reduce net carbon emissions by the Beneficial Electrification Tier 1 Minimum Threshold. Beneficial Electrification measures that create net reductions of carbon emissions of less than the Beneficial Electrification Tier 1 Minimum Threshold can qualify as a Beneficial Electrification resource in Tier 1 Minimum Threshold can qualify as a Beneficial Electrification resource in Tier 1 Minimum Threshold can qualify as a Beneficial Electrification resource in Tier this RCPS.

Beneficial Electrification Tier 1 Minimum Threshold" is equal to 1,500 pounds of CO2 per MWh.

"Carbon Sequestration" means the fixation of atmospheric carbon dioxide in a carbon sink through biological or physical processes. A carbon sink is a reservoir that absorbs or takes up released carbon from another part of the carbon cycle.

"CCUS" means carbon capture, utilization and sequestration.

"Clean Energy Credit" or "CEC" one Clean Energy Credit results from (1) each MWh of electricity produced by a Zero Carbon Emissions Resource, (2) each MWh reduction in

The Council recognizes that other forms of air emissions and pollution can also be harmful to the environment and human health, and does expect that this RCPS will also result in reductions of

consumption resulting from DSM installed after January 1, 2021, (3) or each MWh consumed or produced by a Tier 1 Beneficial Electrification measure of a Qualified Measure. For Beneficial Electrification measures that do not qualify for Tier 1, Clean Energy Credits are earned per MWh in proportion to the project's net CO2 emission reductions per MWh divided by the Beneficial Electrification Tier 1 Minimum Threshold²⁰ each MWh associated with a Tier 3 Resource.

"Council" refers to the Council of the City of New Orleans.

"Community Solar Generation Facility" or "CSG Facility" means a solar energy . facility that meets the definition of a Community Solar Generation Facility under the Council's Community Solar Rules.

"Community Solar Rules" means the Community Solar Rules for the Council of the City of New Orleans adopted by Council Resolution No. R-19-111 (and as modified by any subsequent Council action).

"Conservation Program" means a program, often relying on encouraging customers to reduce energy use, in which a utility company provides energy-saving guidance or provides free or low cost devices for saving energy, such as energy efficient light bulbs, flow restrictors, weather stripping, and water heater insulation To be applicable to RCPS compliance, the kWh reduction from a conservation program must be a deemed savings or prescriptive measure approved by the Council, such as with the Energy Smart program.

"Cost of Compliance" the cost of compliance with the RCPS shall be the incremental costs incurred by ENO over and above the costs to serve its load that are attributable solely to the compliance with the RCPS policy, as calculated in Section 4(d) of this RCPS.

"Customer" means a retail electric customer account holder of the Utility.

"CURO" means the Council Utilities Regulatory Office.

"Demand-Side Management" or "DSM" means an action, usually under a utility managed program, that reduces or curtails the load associated with end-use equipment or processes, often used to reduce customer load during peak demand and/or in times of supply constraint. DSM is the management of customer loads through programs such as energy efficiency and conservation measures, which actively reduce energy use, or demand response, which shifts customer loads from peak periods.

"Distributed Energy Resource" or "DLR" means a resource sited close to customers that:

(i)is interconnected to or on the distribution system, or

(ii)can provide all or some of the immediate electric and power needs of retail. customers and/or can also be used by the system to either reduce demand (such as energy efficiency) or provide supply to satisfy the energy, capacity, or ancillary service needs

²⁰ For example, at the outset of this RCPS, the Beneficial Electrification Tier 1 Minimum Threshold is qual to a net reduction of 1,500 lbs. of CO2 per MWh, so a project with a net emissions reduction of 750 lbs. per CO2 per MWh would receive 0.5 CECs per MWh.

of the grid. The resources, if providing electricity or thermal energy, are small in scale and close to load. Examples of different types of DER include solar photovoltaic, wind, combined heat and power, demand response, electric vehicles, microgrids, and energy efficiency.

"Energy Efficiency Programs" or "EE" means programs that are aimed at reducing the energy used by specific end-use devices and systems, typically without affecting the services provided. Examples include high-efficiency appliances, efficient lighting programs, high-efficiency heating, ventilating and air conditioning (HVAC) systems or control modifications, efficient building design, advanced electric motor drives, and heat recovery systems.

"Energy Storage Resource" means a resource that stores and manages energy and customer loads. Such resources may include chemical energy storage resources such as batteries, flow batteries, and fuel cells or mechanical energy storage resources such as pumped storage hydropower, flywheels, and pressurized gas storage systems.

"Green-e" means the formal certification of RECs provided by the Center for Resource Solutions' Green-e@ certification program, distinct from the tracking of RECs.

"Incremental DSM" costs and corresponding kWh would include the Energy Smart program budgets and cumulative kWh in excess of the Council's existing 2% goal.

"Low-Income Customer" means a Customer whose gross annual household income is at or below 50 percent of Area Median Income for the relevant period or who is certified as eligible for any federal, state, or local assistance program that limits participation to households whose income is at or below 50 percent of Area Median Income.

"M-RETS" means the Midwest Renewable Energy Tracking System, a web-based system used by power generators, utilities, marketers, and qualified reporting entities. M*RETS registers projects in all states and provinces across North America. M*RETS tracks Renewable Energy Certificates ("RECs") and facilitates REC transactions by issuing a unique, traceable digital certificate for every megawatt-hour ("MWh") of renewable energy generated by registered units or imported into its system.

"Microgrid" means a group of interconnected loads and distributed energy resources within clearly defined electrical boundaries that acts as a single controllable entity with respect to the grid. A microgrid can connect and disconnect from the grid to enable it to operate in both grid-connected or island mode,

"MISO" means the Midcontinent Independent System Operator, Inc., or its successor. "MISO-Connected Renewable Energy Resource" means a renewable energy resource that is interconnected to transmission-level voltage within the MISO's footprint.

"NEM Rules" means the New Orleans Net Energy Metering Rules adopted by Council Resolution No. R-07-132 (and as modified by any subsequent Council action).

"Net Zero Emissions" refers to the state in which the Utility has fully offset the carbon emissions associated with the resources serving its Retail Compliance Load through the acquisition of clean energy resources, as demonstrated by producing or purchasing enough RECs or CECs such that the resulting RCPS Compliance Credits offset 100% of the utility's Retail Compliance Load. RECs utilized to reach Net Zero Emissions may be purchased by the utility without the purchase of the associated energy to the extent permitted in Section 3 of this RCPS.

"Qualified Measure" means a project, program or measure within Orleans Parish which produces a measurable net reduction in carbon emissions in Orleans Parish, is cost effective from the utility perspective, and is approved by the Council for purposes of RCPS compliance.

"RCPS" means the Renewable and Clean Portfolio Standard.

"RCPS Compliance Credits" means the sum of RECs and CECs multiplied by the applicable tier multiplier.

"Renewable Energy Credit" or "RBC" means a contractual right to the full set of nonenergy attributes, including any and all credits, benefits, emissions reductions, offsets, and allowances, howsoever entitled, directly attributable to a specific amount of electric energy generated from a renewable energy resource. One REC results from one MWh of electric energy generated from a renewable energy resource. To qualify for compliance purposes, RECs must meet the following conditions: (1) they were generated from a Renewable Energy Resource in MISO, the Electric Reliability Council of Texas, or elsewhere that are deliverable into the MISO region; (2) they are Green-e certified at the time of their creation and are subsequently tracked with M-RETS or an equivalent; and (3) they are retired against the compliance requirements in the compliance year in which they were utilized for compliance.

"Renewable Energy Resource" means a facility that generates electricity using solar thermal, photovoltaic, wind, geothermal, fuel cell using renewable fuels, hydroelectric generation, ocean wave, ocean thermal, or tidal current, and any additions or enhancements to the facility using that technology.

"Retail Compliance Load" means the total jurisdictional retail sales, measured in kWh, for an electric utility during an annual period, as adjusted in Section 4(a) of this RCPS.

"Tier 1 Resource"-means any resource or Qualified Measure that reduces carbon emissions from existing sources within Orleans Parish, including, but not limited to, new/additional CCUS on existing fossil-fired generation resources inside Orleans Parish and Beneficial Electrification of sources of emissions inside Orleans Parish. A measure qualifies as a Tier 1 Resource by producing a net reduction in existing carbon emissions in Orleans Parish of no less than the Beneficial Electrification Tier 1 Minimum Threshold. In order to receive compliance credits as a Tier 1 Resource, irrespective of whether the default tier multiplier is use, the Utility must submit to the Council either (1) a certified engineering calculation demonstrating the net reduction in emissions, or (2) data demonstrating the measured emissions of the resource prior to the implementation of the measure and after the implementation of the measure. Electric Vehicle charging stations located in Orleans Parish shall qualify as a Tier 1 Resource regardless of the level of emissions reductions a achieved, but the utility must still provide the Council with either the certified engineering calculation demonstrating the net reduction of the data demonstrating measured emissions. To the extent that a proposed measure that would otherwise qualify for a different Tier can be demonstrated to have reduced net emissions from an existing source of emissions in Orleans Parish by note less than the Beneficial Electrification Tier 1 Minimum Threshold means any Renewable Energy Resource, Zero Carbon Emissions Resource of DER, directly connected to the Utility's transmission or distribution system. Tier 1 resources include the cumulative MWh savings of DSM programs installed after January 1, 2021.

"Tier 32 Resource" means any Renewable Energy Resource or Zero Carbon Emissions Resource not eligible for Tier 1 of Tier 2, <u>1</u>, but that is in MISO or that is deliverable into the MISO region. This includes non-Incremental DSM installed after January 2021.

"Tier 3 Resource" means any Qualified Measure, including but not limited to Beneficial Electrification, and/or or electric vehicle charging infrastructure-directly connected to the Utility's transmission or distribution system. For Tier 3 Resources the Utility must provide the Council with either a certified engineering calculation demonstrating the net reduction in carbon emissions or data demonstrating measured emissions reductions. The Utility must also propose the annual amount of CECs in MWh associated with each proposed Tier 3 Resource for Council consideration. The determination of whether 1) a proposed project satisfies the criteria as a Qualified Measure and 2) the annual amount of CECs in MWh shall be determined by a designated qualified, third party (which third party would be agreed upon by the Council and the Utility) within forty-five days of the submission of the certified engineering calculation or data demonstrating measured emissions reductions. Where the report of a certified engineer is submitted the CECs in MWh shall be determined for the life of the proposed project.

"Utility" refers to any utility providing electric service to customers in the City of New Orleans and regulated by the Council.

"Zero Carbon Emissions Resource" means any resource that generates electricity without producing carbon emissions and that does not qualify as a Renewable Energy Resource under this RCPS, including, but not limited to, nuclear, and fossil fueled generators where 100% of carbon dioxide emissions are captured through resources. The deployment of CCUS on a generating resource that produces energy from fossil fueled is excluded from eligibility as a Zero Carbon Emissions are captured through and fossil-fueled generators where 100% of carbon emissions are captured through deployment of CCUS.

SECTION 3: RENEWABLE AND CLEAN PORTFOLIO STANDARD

a) The Utility must meet the specified percentages of Retail Compliance Load with a combination of Tier 1, 2 and 3 resources as follows:

1. 2022: 64% of Retail Compliance Load, with not more than 25% compliance through RECs purchased without the associated energy.

2. 2023: 66% of Retail Compliance Load, with not more than 25% compliance through RECs purchased without the associated energy.

3. 2024: 68% of Retail Compliance Load, with not more than 25% compliance through RECs purchased without the associated energy.

4. 2025: 70% of Retail Compliance Load, with not more than 25% compliance through RECs purchased without the associated energy.

5. 2026: 72% of Retail Compliance Load, with not more than 24% compliance through RECs purchased without the associated energy.

6. 2027: 74% of Retail Compliance Load, with not more than 23% compliance through RECs purchased without the associated energy.

7. 2028: 76% of Retail Compliance Load, with not more than 22% compliance through RECs purchased without the associated energy.

8. 2029: 78% of Retail Compliance Load, with not more than 21 % compliance through RECs purchased without the associated energy.

9. 2030: 80% of Retail Compliance Load, with not more than 20% compliance through RECs purchased without the associated energy.

10. 2031 : 82% of Retail Compliance Load , with not more than 19% compliance through RECs purchased the associated energy.

11. 2032: 84% of Retail Compliance Load, with not more than 18% compliance through RECs purchased without the associated energy.

12. 2033: 86% of Retail Compliance Load, with not more than 17% compliance through RECs purchased without the associated energy.

13. 2034: 88% of Retail Compliance Load, with not more than 16% compliance through RECs purchased without the associated energy.

14. 2035: 90% of Retail Compliance Load, with not more than 15% compliance through RECs purchased without the associated energy.

15. 2036: 92% of Retail Compliance Load, with not more than 14% compliance through RECs purchased without the associated energy.

16. 2037: 94% of Retail Compliance Load, with not more than 13% compliance through RECs purchased without the associated energy.

17. 2038: 96% of Retail Compliance Load, with not more than 12% compliance through RECs purchased without the associated energy.

18. 2039: 98% of Retail Compliance Load, with not more than 11 % compliance through RECs purchased without the associated energy.

19. 2040: 100% of Retail Compliance Load, with not more than 10% compliance through RECs purchased without the associated energy.

20. 2041: 100% of Retail Compliance Load, with not more than 9% compliance through RECs purchased without the associated energy.

21. 2042: 100% of Retail Compliance Load, with not more than 8% compliance through RECs purchased without the associated energy.

22. 2043: 100% of Retail Compliance Load, with not more than 7% compliance through RECs purchased without the associated energy.

23. 2044: 100% of Retail Compliance Load, with not more than 6% compliance through RECs purchased without the associated energy.

24. 2045: 100% of Retail Compliance Load, with not more than 5% compliance through RECs purchased without the associated energy.

25. 2046: 100% of Retail Compliance Load, with not more than 4% compliance through RECs purchased without the associated energy.

26. 2047: 100% of Retail Compliance Load, with not more than 3% compliance through RECs purchased without the associated energy.

27. 2048: 100% of Retail Compliance Load, with not more than 2% compliance through RECs purchased without the associated energy.

28. 2049: 100% of Retail Compliance Load, with not more than 1% compliance through RECs purchased without the associated energy.

29. 2050: 100% of Retail Compliance Load, with 0% compliance through RECs purchased without the associated energy.

- b) RCPS Tier Multipliers: For years 2021 through 2040, RECS or CECs from Tier 1 Resources shall be credited at a multiplier of 1.5 1.25; Tier 2 Resources at a multiplier of 1.25 1.0; and Tier 3 Resources at a multiplier of 1.0 for compliance purposes. After 2040, the tier multiplier for all tiers shall be 1.0. These tier multipliers shall be applied as default multipliers for determining compliance RECS or CECs unless the Utility can provide workpapers that support a different multiplier for a specific measure that can be evaluated and accepted by the Council. A resource shall only receive RCPS compliance credits in one Tier; to the extent a resource is eligible to be included in more than one Tier, it should receive the highest tier multiplier for which it is eligible. The Council shall specifically evaluate the continued appropriateness of the Tiers and applicable tier multipliers, and the years in which tier multipliers should be applied in each Periodic Review of this RCPS.
- c) Credit Related to Energy Storage Resource: Depending upon the manner in which an Energy Storage Resource is utilized, it may or may not be eligible for RCPS Compliance Credits. Council approval of the RCPS Compliance Crediting mechanism applicable to any specific Energy Storage Resource will be required prior to the inclusion of any Energy Storage Resource in the Utility's RCPS Compliance and will be based upon the proposed application of the Energy Storage Resource. To the extent

that the Utility intends to utilize an Energy Storage Resource for RCPS Compliance, it should propose the project to the Council for the Council's consideration, with an explanation as to how the project specifically serves the goals of the RCPS and what RCPS Compliance Credit the Utility proposes be earned by the project. Nothing in this provision alters any other requirement for Council approval for the Utility to acquire or construct a resource or to include the costs of a resource in rates.

SECTION 4: COMPLIANCE AND REPORTING

a) Calculation of Retail Compliance Load

- Retail Compliance Load is the reported annual MWh sales for each compliance year, increased by the cumulative MWh savings of DSM programs installed after January 1, 2021, and decreased by the additional MWh sales in that year related to a Beneficial electrification measure. 2021 and decreased by the additional MWh sales in that year related to an eligible Beneficial Electrification project or Qualified Measure.
- b) Calculation of RCPS Compliance Credits
 - 1. RCPS Compliance Credits for each compliance year are calculated by adding: (i) the RECs and the CECs associated with the compliance year, multiplied by the applicable tier multiplier; (ii) RECs as allowed through the Banking and Compliance Reserve provision that are applied in that year.
 - 2. CECs associated with Beneficial Electrification <u>Tier 3 Resources</u>, including eligible Beneficial Electrification projects or Qualified Measures, can be applied as RCPS Compliance Credits until 2040.
- c) Calculation of Percentage of Retail Compliance Load
 - 1. RCPS Compliance Credits (MWh) are divided by Retail Compliance Load (MWh), and expressed as a percentage.
- d) Calculation of RCPS Compliance Costs

1. The RCPS Cost of Compliance is calculated as all incremental costs prudently incurred by the Utility in complying with RCPS Section 3, including, but not limited to, the incremental costs of new resources for compliance, the Utility's net fixed costs related to Beneficial Electrification, the Utility's net fixed costs related to Beneficial Electrification projects Qualified Measures, the Incremental DSM costs, and other costs related to RCPS compliance. The cost of RECs as allowed through the Banking and Compliance Reserve provision that are applied in the compliance year shall be included in the RCPS Cost of Compliance for that year. The cost of RECs acquired for the Banking and Compliance Reserve provision but not applied in that year shall be treated as working capital and shall not be included in the RCPS Compliance Cost for the compliance year.

2. Incremental costs are the total electric utility revenue requirements associated with the Utility's operations in compliance with the RCPS, <u>net of costs</u> due to any eligible Beneficial Electrification projects or Qualified Measure, that are directly allocated or assigned to and collected from the customer, less the total electric utility revenue requirements associated with the optimized resource portfolio that may have been in place absent the requirements of the RCPS. The Utility's most recently filed Integrated Resource Plan shall inform the calculation of incremental costs as to the optimized resource portfolio that may have been in place absent the RCPS.

- e) Upon the Utility's submission of its final Integrated Resource Plan ("IRP") Report for each triennial IRP cycle, the utility shall develop a three-year prospective RCPS Compliance Plan, including a three-year Banking and Compliance Reserve provision for RECs, and the Utility's calculation of the ACP. The RCPS Compliance Plan shall be filed at the Council and served upon both the parties to the relevant IRP docket and the parties to Docket No. UD-19-01, with the opportunity for stakeholder comment prior to the Council's review and approval. Within 90 days of the adoption of this RCPS, the Utility shall file at the Council and serve on the parties to Docket No. UD-19-01, with opportunity for stakeholder comment, a proposed Initial RCPS Compliance Plan for the interim prior to the conclusion of the next triennial IRP cycle. Once the Council has approved an RCPS Compliance Plan for a particular time period, if the Utility wishes to add any resources for compliance that are not contemplated in the RCPS Compliance Plan, the Utility should file at the Council and serve upon the parties to the relevant IRP Docket and Docket No. UD-19-01, with opportunity for stakeholder comment, a request to include such resource for RCPS Compliance prior to executing plans to implement such resource.
- f) By May 1 of each calendar year, the Utility shall file a Compliance Demonstration Report with the Council regarding its achievement of the RCPS goal for the prior calendar year and its plan for achieving the goal in the current calendar year as part of the three-year RCPS Compliance Plan. The report shall be served on parties to Docket No. UD-19-01, with an opportunity for comment prior to the Council's issuance of a determination as to whether the Utility has achieved the RCPS targets listed in Section 3 and remained within the Customer Protection Cost Cap of Section 6 for the prior calendar year. The Council's approval of the RCPS Compliance Demonstration Report would not eliminate the need for any other Council review and approval of resource costs otherwise required under the Council's Regulations. The report should include the following clear and concise information that:

1. Either (a) demonstrates that the Utility has complied with Section 3; or (b) explains the reason the Utility was unable to comply, the magnitude of the shortfall expressed in kWh, and the Utility's calculation of the applicable ACP.

2. A calculation of the incremental cost (if any) of compliance with the RCPS over and above costs ENO would have otherwise incurred to serve its load in the preceding calendar year.

3. An energy portfolio report for the preceding compliance year which shall identify the MWh hours produced by each supply and demand-side resource comprising the utility's total resource portfolio. RECS purchased and utilized by the utility and their associated MWh, including RECs that can be associated with net metering, and incremental MWh associated with DSM and other eligible resources should also be included in the energy portfolio report. For each resource in the portfolio, the utility shall identify the resource name, MWh, fuel type, the average per MWh energy-related cost associated with that resource, and the average per MWh energy-related revenue received from MISO for that resource,

4. A carbon emissions report that details the carbon emissions resulting from the production of the electricity used by the Utility to serve its Retail Compliance Load, whether or not each generator is owned by the Utility.

5. A draft bill insert to be included in customer bills with an easy-tounderstand explanation of the Utility's compliance status for Council review and approval.

- g) The Utility shall maintain an easy-to-find web page with a user-friendly interface where it makes available to the public copies of all reports and documents related to the RCPS and the Utility's carbon emissions that it submits to the Council or any other relevant government agency or public body.
- h) Banking and Compliance Reserve Provision

The utility may use RECs produced and Green-e certified in one compliance year for compliance in either of the two subsequent compliance years, subject to a review of the accounting for the banking and compliance reserve, and provided that the utility was in compliance for the compliance year in which the RECs were created. In addition, the utility shall demonstrate to the satisfaction of the Council that such Compliance Credits:

- 1) were in excess of the Compliance Credits needed for compliance in the compliance year in which they were generated;
- 2) do not exceed the REC limitation specified in Section 3 for compliance with the RCPS in the year they were used for compliance and retired; and
- 3) have not otherwise been, nor will be, sold, retired, claimed or represented as part of clean energy output or sales, or used to satisfy obligations in other jurisdictions.

SECTION 5: ENFORCEMENT

a) In the event that the Utility is unable to comply with the RCPS standard using reasonable measures for the applicable calendar year, the Utility shall make an Alternative Compliance Payment ("ACP") into a CleanNOLA Fund established by the Council for the purposes of fostering efforts to reduce carbon emissions within Orleans Parish. The ACP shall be structured as \$/MWh of shortfall.

- 1. The ACP (\$ per MWh) will be determined by the Council in the Council's Resolution approving the Utility's RCPS Compliance Plan, and the ACP will be applicable for the prospective three calendar years.
- 2. The ACP shall be based on the highest market value of RECs in MISO over the prior three years, multiplied by a 1.15 multiplier.
- 3. The ACP, when combined with the RCPS compliance cost that is incurred in any calendar year, shall not exceed the Customer Protection Cost Cap set forth in Section 6.
- b) Nothing in this section limits the Council's authority to impose penalties for the violation of the Council's regulations.

SECTION 6: COST RECOVERY AND CUSTOMER PROTECTION COST CAP

- a) The Utility shall be allowed cost recovery for RCPS compliance as follows:
 - 1. The Utility shall be allowed the opportunity to recover prudently incurred costs in . complying with a mandated renewable and clean portfolio standard.
 - 2. The Utility shall be allowed to recover the ACP unless it is demonstrated to the Council and the Council finds that the Utility's failure to comply with the RCPS was unreasonable, in which case, ENO shall not recover the cost of the ACP from Customers.
- b) As a mechanism to provide customer protection from unreasonable rate increases, the Council hereby establishes an RCPS Customer Protection Cost Cap that the Utility shall not exceed to acquire RCPS Compliance Credits. The Customer Protection Cost Cap in any RCPS plan year is one percent (1%) of plan year total utility retail sales revenues, beginning in 2022.

1. If the Utility can support its finding that, in any given year, the cost of RCPS compliance through all reasonable measures is projected to be greater than the Customer Protection Cost Cap as established by the Council's RCPS, the Utility shall not be required to incur costs in excess of the Customer Protection Cost Cap, and will be deemed to have complied with that year's target as set forth in Section 3, once it has expended up to the Customer Protection Cost Cap (including any ACP).

2. The existence of this condition excusing performance in any given year shall not operate to delay the annual increases in the RCPS in subsequent years. When the utility can generate or procure RCPS Compliance Credits at or below the Customer Protection Cost Cap in order to comply with the RCPS, it shall be required to add such resources.

3. For rate classes with fewer than 3 customers, the Council will review and adjust rates through the Utility's decoupling mechanism, or by other means, such that the increase in the allocated total cost of service related solely to RCPS Cost of Compliance for those rate classes is no greater than 1%.

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SECTION 7: CLEANNOLA FUND

The Council shall establish a CleanNOLA Fund ("Fund") for the purposes of fostering the reduction of carbon emissions in Orleans Parish. The Fund shall prioritize projects designed to reduce carbon emissions from existing sources of such emissions in Orleans Parish. Grants made from any portion of CleanNOLA Fund funding received from ratepayers must go to projects that would meet the definition of one of the resources eligible for inclusion in the RCPS and all environmental attributes (RECS or CECs) generated by such projects must be transferred to ENO and used by ENO for RCPS Compliance. The Fund shall not at any time be transferred to, or lapse into, or be comingled with the General Fund of the City of New Orleans and it shall be administered in accordance with the Council's directives.

Exhibit B CNO UD-19-01 April 26, 2021 Page 1 of 5

Power by Association*

VIA E-MAIL



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

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.

EEI'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), <u>https://www.eia.gov/todayinenergy/detail.php?id=46416</u>. 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), <u>Electric Power Monthly</u> (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>U.S. Electricity Generation from Renewables Surpassed Coal in April</u> (June 26, 2019), <u>https://www.eia.gov/todayinenergy/detail.php?id=39992</u>. 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, <u>https://www.eia.gov/outlooks/aeo/pdf/AEO2020%20Full%20Report.pdf</u>. 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, <u>https://gispub.epa.gov/air/trendsreport/2019/#naaqs</u>.

¹² See, e.g., EPA's NOX 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, <u>https://www.epa.gov/sites/production/files/2016-05/documents/eeremanual_0.pdf</u>.

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, <u>https://www.atlasevhub.com/data_story/25-percent-of-approved-utility-investment-going-to-underserved-communities/</u>

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

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 is 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,

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CERTIFICATE OF SERVICE Docket No. UD-19-01

I hereby certify that I have served the required number of copies of the foregoing report upon all other known parties of this proceeding, by the following: electronic mail, facsimile, overnight mail, hand delivery, and/or United States Postal Service, postage prepaid.

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New Orleans, Lo	ouisiana, this	26 th day	of April,	2021.
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