Entergy Services, LLC
639 Loyola Avenue
P. O. Box 61000
New Orleans, LA 70161-1000
Tel 504 576 2984
Fax 504 576 5579
hbarton@entergy.com

Harry M. Barton
Senior Counsel
Legal Department -- Regulatory

October 15, 2019

Via Hand Delivery
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 an original and three copies of Entergy New Orleans, LLC's ("ENO") Comments in Response to The Advisors' Report and Proposed Alternative Frameworks Concerning Renewable Portfolio Standards, together with Appendices and an Exhibit attached thereto, in the above referenced docket. Please file an original and two copies into the record in the above referenced matter and return a date-stamped copy to our courier.

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/bkd

Enclosures

cc: Official Service List (*via electronic mail*)

RECEIVED
OCT 15 2019
BY:

4 43

BEFORE THE
COUNCIL OF THE CITY OF NEW ORLEANS

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 COMMENTS IN RESPONSE TO THE ADVISORS' REPORT AND PROPOSED ALTERNATIVE FRAMEWORKS CONCERNING RENEWABLE PORTFOLIO STANDARDS

NOW BEFORE THE COUNCIL OF THE CITY OF NEW ORLEANS (the "Council"), comes Entergy New Orleans, LLC ("ENO" or the "Company"), which respectfully submits its Comments in response to the Advisors' Report on Renewable Portfolio Standards, filed on September 3, 2019, per Council Resolution R-19-109 ("Resolution R-19-109"). The Advisors' Report provides a summary of the comments filed to date in this proceeding, contains policy recommendations from the Advisors, and sets forth for consideration three alternative frameworks ("Alternatives"), from which any rules developed in this proceeding could be derived. ENO's Comments evaluate the potential rate impacts and other implications of these Alternatives.

ENO's Comments also continue the discussion of the important policy choice facing the Council in this proceeding – whether to adopt a policy that seeks to combat climate change by reducing carbon emissions using all means available, while keeping rates low and preserving electric grid reliability, or instead to adopt a policy that primarily serves the purpose of providing economic subsidies to a small sub-sector of the regional economy at the expense of the broader policy goals of addressing climate change as effectively and efficiently as possible. When making this choice, it will be important to remember that ENO is obligated to provide, and the Council is obligated to ensure, reliable electric service to New Orleans and its residents at the lowest reasonable cost. These responsibilities must be the guiding principles for every business decision ENO makes and every policy the Council adopts in its capacity as ENO's regulator.

The Council, the Advisors, stakeholders, and ENO agree that continued action on climate change is needed. Policy and environmental experts tell us that worldwide deep decarbonization will be necessary by mid-century to effectively combat climate change. These same experts, along with other progressive regulators, agree that this deep decarbonization must be widespread in all sectors of the global economy and cannot be achieved by relying only on utilization of renewable technologies. Experts also agree, and evidence in this proceeding confirms, that in comparing a restrictive renewable-only alternative and a technology-neutral, clean energy standard, the objectives of (i) achieving deep decarbonization, (ii) providing reliable electric service, and (iii) keeping costs reasonably low can only be simultaneously met with the latter. Given these facts, the Council's policy choice should be clear: it must decline the invitation to subsidize certain technologies and instead continue to pursue policies that will actually help to address climate change in a comprehensive and responsible manner by establishing a clean energy standard for, and tailored to, the unique parameters that define New Orleans.

ENO has proposed such a policy for the Council's consideration. ENO's proposal for a Clean Energy Standard ("CES") of 70% by 2030 represents an achievable near-term target, one which is tailored to New Orleans and would achieve 40% reductions in carbon emissions from today's already-low levels, with only a 1% increase to total system average rates. These results are possible due to the Council's and ENO's past foresight in focusing on reducing emissions in a cost-conscious, responsible manner. This past progress can enable greater future success so long as the Council remains steadfast in prioritizing reliability, low costs, and environmental sustainability above the competing policy objectives advocated for by some parties to this Docket.

Once the Council renders a decision on the broader policy goal it wishes to pursue with the rules developed from this proceeding, more work will be necessary to iron out the details of the precise rules the Council intends to adopt. Due to the divergent policy objectives that the three Alternatives filed with the Advisors' Report attempt to convey, none of the Alternatives are yet developed enough to provide the kind of comprehensive, detailed regulatory framework that will be necessary to administer or enforce a goal that affects ENO's entire portfolio of supply- and demand-side resources, as well as electrification efforts and even third-party resources. In other words, ENO recognizes that the administrative elements of the Alternatives outlined in the Advisors' Report are, by design, works in progress intended for further evaluation and development. To that end, ENO's Comments identify the administrative- and enforcement-related components of each Alternative that could be workable as part of a comprehensive framework, those components that range from unworkable to unlawful, and those that would require additional work or clarification before they are ready for the Council to adopt.

I. Position Summary

ENO believes that the Council should (i) make reducing emissions and addressing climate change the primary focus of this proceeding and, as such, (ii) adopt a technology-neutral CES. ENO's proposed 70% by 2030 CES is optimized to New Orleans' specific energy needs, supported by analyses, would yield minimal (1%) rate increases, and should be the near-term target adopted in this proceeding. If the Council wishes to make this near-term target mandatory, the Company would support that choice since its proposal can be achieved in a workable manner at minimal impact to its customers. But more would need to be done to create a regulatory compliance framework that would facilitate accomplishing this goal, rather than hindering it.

As far as a long-term goal, ENO will work with the Council towards net-zero carbon emissions by 2050 should the Council choose to adopt that policy. This goal, however, should not be mandatory or a cause for penalizing ENO. The Advisors' Report admits, and numerous studies show, that currently-viable technologies cannot support 100% carbon-free electricity or net-zero carbon emissions by 2050. Adopting an admittedly impossible objective, and then seeking to penalize ENO for not achieving the impossible goal (while also subjecting ENO a cost cap) is not a valid, viable, or enforceable regulatory framework under Louisiana law. Moreover, it would not contribute to decarbonization; it would only impede what has so far been excellent progress by ENO and the Council on confronting the reality of climate change caused by carbon emissions and the rapid reduction of those emissions, while keeping rates low and maintaining reliable electric service in New Orleans.

Rather than adopting a long-term mandate that is admittedly impossible to fulfill, ENO recommends that the Council use its Integrated Resource Planning ("IRP") process to periodically evaluate long-term goals and the means for achieving them. The IRP is, by its nature, designed to (i) obtain line of sight on the technologies that may make carbon-free electricity by 2050 possible and (ii) outline a plan for deploying these technologies in an optimal way for New Orleans. Once evidence and analyses demonstrate that net-zero carbon emissions by 2050 is possible, the Council may choose to convert this aspirational commitment into some type of mandatory goal.

ENO believes that the record established in this proceeding to date provides adequate support for the Council to: (i) clarify that its desired policy objective is to combat climate change, (ii) reject the call of those who would use the climate crisis as a pretext for subsidizing the local rooftop solar installation sector at a significant, unacceptably high cost to ENO's customers, (iii) establish a near-term, potentially mandatory CES target that is specifically tailored to New Orleans' energy needs, and (iv) establish an aspirational long-term objective for further decarbonizing ENO's resource portfolio. More work will be necessary to devise the compliance and enforcement mechanisms for the near-term goal. Indeed, work on establishing compliance mechanisms for the Council's Community Solar Program is still underway.[1] Compliance mechanisms for a goal affecting ENO's entire portfolio deserve at least as much time and attention as the rules adopted for a community solar program.

This is not to say, however, that the compliance mechanisms for a policy adopted in this Docket should be lengthy or complicated. The Southern Renewable Energy Association's ("SREA") July 15, 2019, comments rightly noted that "The more complicated New Orleans' [renewable portfolio standard] RPS is to develop, the more difficult it will be to implement and track, and that difficulty will likely result in higher costs to New Orleans residents."[2] ENO proposes that the Council consider a simpler compliance mechanism, similar to what is currently used for Energy Smart, and a simpler enforcement mechanism, similar to what the Council used in Resolution No. R-18-221. ENO expands on this aspect of its proposal in a subsequent section of these comments and would welcome the opportunity to further develop ideas around compliance and enforcement in a subsequent phase of this proceeding.

ENO has been, and will continue to be, committed to cutting emissions and doing its best to protect the customers and communities it serves from climate change. ENO hopes that this Council will continue the work of past Councils and remain a collaborative, productive partner in the effort to curb carbon emissions and combat climate change.

---

[1] The Council's Community Solar Rules (adopted, in part, via Council Resolution No. R-19-111) affect, by rule, no more than 5% of ENO's peak load (roughly 50-60 MW of total community solar capacity). The Community Solar Rules are 24 pages long. They were first published in draft form in June 2018 and since then have been the subject of multiple rounds of comments and a technical conference. As of the date of this filing, work on establishing the details of ENO's compliance plan in that docket is still underway.

[2] *See,* SREA Reply Comments, filed July 15, 2019, at pg. 4. The Advisors' Report assumed that the comments of the SREA and any other members of the Energy Future New Orleans ("EFNO") coalition were intended to be superseded by the EFNO filing. However, the EFNO filing states otherwise, noting that "many individual members will submit reply comments that represent the individual party's response to other specific intervenors." *See* EFNO Reply Comments at pg. 2. The Advisors should not dismiss input from the SREA, itself an EFNO member, that expresses well-founded skepticism about certain components of the EFNO proposal.

II. The Council Should Prioritize Decarbonization, While Fulfilling its Duty to Ensure Reliable, Low-Cost Electric Service.

The Advisors' Report identifies the competing policy goals at issue in this proceeding and notes that the Council is presented with a clear choice: Adopt a technology-neutral CES and help to curb climate change while avoiding dramatic rate increases and preserving reliability; or, adopt an RPS which will not decarbonize at the rate needed to help combat climate change and will only benefit a few solar businesses at the expense of all customers. The Resilient-Renewable Portfolio Standard ("R-RPS") submitted by EFNO **does not even mention** decarbonization or climate change in the draft rule's "Purpose" section. Instead, that proposal seeks to stimulate the local renewable energy industry, whose representatives appear to comprise EFNO. The Advisors' Report correctly states that standards aimed at these differing objectives will vary, and that the Council must choose which objective it seeks to achieve before adopting a standard.[3] However, ENO disagrees with the statement that "both goals are legitimate public policy purposes" for a utility regulator.[4] Subsidizing a small segment of the local economy at the expense of combatting climate change, keeping rates low, and preserving reliability is not a legitimate public policy goal.

As ENO's regulator, the Council has a "duty to ensure that reliable and affordable energy is provided to the citizens of New Orleans," a duty which it has stated it is "committed to fulfilling."[5] This is the Council's primary duty as a utility regulator. The Council has also repeatedly noted the serious, even existential, threat that climate change poses to New Orleans and has committed to continuing to lower carbon emissions to combat this threat.[6] The Advisors' Report also notes "the unique vulnerability of New Orleans to the devastating consequences of climate change and the urgent need for decarbonization to prevent dangerous levels of global warming…"[7] Given the Council's duty to ensure reliable, low-cost electric service for consumers, and the acknowledged need to pursue policies that will continue to reduce carbon emissions, ENO believes that the **only** legitimate public policy purpose the Council can pursue in this proceeding is deep decarbonization in a manner that keeps electric rates low and preserves reliability.

Providing economic development incentives or subsidies should **never** be the primary goal of a utility regulator. It is true that the Council has acknowledged that local economic benefits are a factor to be considered when determining whether a resource acquisition or other course of action is in the public interest.[8] However, those benefits are only appropriate to consider when they are occasioned by actions that independently fulfill ENO's and the Council's primary duties of ensuring reliable, low-cost electric service. In other words, if a resource acquisition or policy proposal furthers the objective of least-cost resource planning, then the Council should also consider the resulting economic impacts, and other factors, in making its public interest

---

3 *See*, Advisors' Report at 31. ("One of the critical points for the Council to decide, which will have the greatest influence on the rule ultimately adopted is which public policy purpose the Council wishes the RPS to serve.").

4 *See*, Advisors' Report at pg. 32.

5 *See*, Council Resolution No. R-18-428 at pg. 1.

6 *See, e.g.*, Council Resolution No. R-18-428.

7 *Id*. at pg. 1.

8 *See, e.g*. Council Resolution No. R-18-222.

determination. When a resource acquisition or policy would not contribute to the reliability of electric service in New Orleans at a reasonable cost, then the Council must find that such resource or policy is not in the public interest and the potential economic benefits should not change that determination. A policy, like the R-RPS or a derivation thereof, that would jeopardize reliability and drastically increase electric rates that customers pay is not a legitimate course of action simply because of unsubstantiated claims of potential economic benefits.

Additionally, a broad range of climate activists have urged regulators to resist the call of those who would politicize or seek to further their own economic prospects through climate policy. Even the 16-year-old climate activist Greta Thunberg acknowledged, in recent remarks to the U.S. Congress, that "This is not primarily an opportunity to create new green jobs, new businesses or green economic growth. This is above all an emergency, and not just any emergency. This is the biggest crisis humanity has ever faced."[9] Choosing to provide financial aid to the local solar installation industry at the expense of effectively combatting climate change by cutting emissions, preserving reliability, and keeping rates low is not a choice the Council should make, it is not a choice that New Orleans and its residents can afford, and it is not a choice that responsible climate advocates would pressure the Council to make.

III. Any Targets the Council Adopts Should Pursue Decarbonization in a Responsible, Realistically-Achievable Manner.

Once the Council confirms that its intended policy objective for this proceeding is pursuing deep decarbonization in a manner that preserves reliability and keeps rates low, its next task is setting targets that can achieve these ends and are also tailored specifically to New Orleans. Ample evidence submitted in this proceeding, summarized in greater detail below, shows that a technology-neutral CES is the only kind of emission standard policy that can achieve these objectives.[10] But a technology-neutral standard alone is not enough to maintain low rates and preserve reliability; the specific targets for such a standard must be tailored to New Orleans' unique circumstances and ENO's existing (and approved) least-cost resource portfolio.

The Council has acknowledged the fact that "the geography of New Orleans and surrounding … region is such that the reliability risks to ENO's system are exacerbated."[11] The Council also knows that "New Orleans has a very low median household income."[12] These and many other factors mean that any targets the Council sets in this proceeding must be especially sensitive to reliability and maintaining low rates, much more so than in other jurisdictions that do not face the same reliability constraints and income issues. Similarly, New Orleans does not have

---

9 https://www.forbes.com/sites/jeffmcmahon/2019/09/22/no-one-seemed-to-notice-greta-thunbergs-critique-of-the-green-new-deal/?fbclid=IwAR1_PNSuUnIte9E3R5nYotBwR-UuehDyqPsva-JjwkKDpzAbEH3rA03sXvg#3f726e9a38da

10 To be clear, ENO distinguishes emission standard policies, like an RPS or CES, from market-based solutions like a carbon tax or price, which could also be effective.

11 *See*, Council Resolution No. R-18-65, at pg. 70.

12 *See*, Council Resolution No. R-19-109.

the same access to wind resources as jurisdictions in other states with better wind profiles,[13] and solar resources in Louisiana do not have the same output as resources located in other parts of the country that experience higher irradiance.[14] As a mostly urbanized area, New Orleans also does not have many large tracts of inexpensive land available to use for ground-mounted solar projects. As such, simply reviewing the policies enacted by other regulators and attempting to meet or beat those same targets would result in a poorly-designed decarbonization strategy and would not protect New Orleanians from related, unintended consequences. The Council must analyze the unique circumstances facing New Orleans thoroughly, and continually, when setting and enforcing targets for a policy to address carbon emissions and mitigate climate change impacts.

ENO believes, and its analyses demonstrate, that its proposed near-term CES target appropriately balances these considerations. The proposed CES would place New Orleans ahead of pace for surpassing the goals articulated in the Paris Climate Accord, while yielding only a projected 1% increase in total system average rates.[15] ENO's proposal also maximizes the amount of clean energy that will serve load in New Orleans and minimizes the amount that would be exported in the markets operated by the Midcontinent Independent System Operator, Inc. ("MISO"). ENO recognizes that the Advisors' Report characterizes ENO's proposal as too conservative and recommends evaluation of certain "stretch goals" contained in the Alternative proposals. Some elements of the Alternatives could be incorporated into ENO's CES proposal and still strike the right balance between carbon emissions reductions, maintaining low rates, and preserving reliability; however, other components of the Alternatives would unnecessarily complicate, rather than directly facilitate, decarbonization for ENO and New Orleans.

a. The Right Standard is a Well-Analyzed, Technology-Neutral One.

Evidence submitted in this proceeding and innumerable industry, environmental, and academic studies show that economy-wide, deep decarbonization of the electric sector can **only** be achieved by mid-century by utilizing all available zero-emitting technologies, including electrification, demand-side management ("DSM"), renewables, and nuclear generation.[16] ENO's Initial Comments and its Reply Comments document this fact thoroughly and extensively.[17] The

---

[13] https://www.nrel.gov/gis/wind.html

[14] https://www.nrel.gov/gis/solar.html

[15] The measure of cost impact used in the analyses presented throughout these Comments is the Total System Average Rate, or "TSAR." While ultimate rate impacts to specific customers or classes of customers depend on a variety of factors and moving pieces that can be difficult to forecast – including how costs would be allocated between rate classes – the TSAR calculation encompasses all ENO revenue requirements and all retail sales. Calculated as the change to total revenue requirements divided by total retail sales, the TSAR indicates the level of cost increase to ENO customers on average.

[16] Certain intervenors persist in rejecting the consensus from the scientific community that indicates nuclear and other zero-emitting technologies must be a part of any feasible solution to address climate change. ENO addresses these parties' denial of these scientific conclusions, and why it is crucial that the Council not be led astray by intervenors engaged in science-denial, in a subsequent section of these Comments.

[17] Among others, ENO's filings point to reports from Clean Air Task Force, Third Way, the Energy Futures Initiative, the Massachusetts Institute of Technology ("MIT"), the National Academy of Sciences, Woods Mackenzie, the United Nations' Intergovernmental Panel on Climate Change ("ICCP"), the Obama Administration's Mid-Century Strategy, The Nature Conservancy, the World Resources Institute, that bolster this conclusion.

Advisors' Report summarizes the evidence ENO presented and the Advisors' additional research, which also confirms these findings.

The Advisors' Report focuses on the Energy Futures Initiative's *Green Real Deal*, an extensive work from some of the energy sector's best minds, including Dr. Ernest Moniz, Secretary of Energy under President Obama.[18] The *Green Real Deal* report results from a thorough analysis of the current state of the electric sector and what measures and policies will be necessary to significantly decarbonize the electric grid without dramatically increasing costs and endangering reliability. Specifically, the report focuses on what is needed to achieve the goals articulated in the Green New Deal resolution, an aspirational piece of legislation that calls for greater reliance on "clean, renewable, **and zero-emission energy sources** [emphasis added]."[19] As the Advisors note, the findings of the *Green Real Deal* are too extensive to fully recount, but some points bear repeating:

- "Policymakers, states, cities, and communities need to be able to choose from a range of pathways for deep decarbonization by midcentury. They must also avoid prescriptive policies that could lock in suboptimal technologies and lock out opportunities. **Economywide low-carbon goals are simply too challenging to permit a narrowing of options** [emphasis added]."[20]
- "Today's available technologies are insufficient to reach deep decarbonization across all sectors in the long term. Decarbonization policy must support dual tracks: incremental improvement in existing technologies to meet 2030 targets, and technology innovations with breakthrough potential needed to meet midcentury goals."[21]
- "Meeting California's long-term decarbonization targets, including … **carbon free electricity by 2045 is impossible without breakthrough innovations** [emphasis added]. Also, managing and operating a deeply decarbonized energy system over a long duration has never been done and is technically very difficult."[22]

The last point is underscored by statements from utilities that have aspirational goals of achieving net-zero-emission resource portfolios by 2050, which are not constrained by renewables-only mandates. These utilities freely admit that they do not know how they will achieve these long-term goals with currently-viable technologies and that further research and development, along with relying on existing dispatchable generation, will be necessary.[23]

---

[18] *See*, Energy Futures Initiative, "*The Green Real Deal, a Framework for Achieving a Deeply Decarbonized Economy*," ("*Green Real Deal*"), *available at:* https://static1.squarespace.com/static/58ec123cb3db2bd94e057628/t/5d41c61878b170000194e2af/1564591645307/EFI+Green+Real+Deal.pdf

[19] *See*, 5 U.S. Congress, House, Recognizing the duty of the Federal Government to create a Green New Deal, H. Res. 109, 116th Congress, 1st Session, https://www.congress.gov/116/bills/hres109/BILLS-116hres109ih.pdf

[20] Green Real Deal at pg. 11.

[21] *Id*. at pg. 14.

[22] *Id*. at pg. 13.

[23] *See, e.g.*, Duke Energy's announcement of its net-zero by 2050 goal, *available at* https://news.duke-energy.com/releases/duke-energy-aims-to-achieve-net-zero-carbon-emissions-by-2050 ("A diverse mix of

In addition to the *Green Real Deal*, the Advisors also point to a publication from the National Renewable Energy Laboratory ("NREL") concerning best practices for RPS implementation. The paper notes that "ideally, analysis is done before the RPS is established…"[24] The kinds of analyses recommended include resource potential (taking into account physical constraints and physical potential), technical potential (accounting for land-use constraints and system performance considerations), economic potential (technology costs, assessment of required infrastructure improvements), and market potential.[25]

The Advisors' research, along with the evidence submitted by ENO, establishes that electric-sector decarbonization at a reasonable cost requires (i) utilization of all zero-emitting and emission-reducing technologies, (ii) near-term goals that take technological limitations into account, and (iii) long-term goals that are flexible and have been carefully analyzed considering a utility's specific circumstances. ENO's CES is the only proposal made in this proceeding that would actually fulfill these criteria.

b. ENO's Proposed CES Target Sets an Appropriate Near-Term Goal for New Orleans by Maximizing Clean Energy Serving New Orleans, Minimizing Rate Impacts, and Surpassing Paris Climate Accord Targets for 2030.

As has been previously noted, ENO proposes that the Council (i) adopt a near-term 70% CES for 2030, requiring that ENO plan to serve 70% of its customer load with zero-emitting resources by 2030, and (ii) use its existing IRP process to monitor technology, costs, resource diversity, and system reliability as ENO and the Council chart the course to net-zero emissions by 2050. ENO's proposal is supported by analyses that demonstrate its minimal rate impacts and significant potential for emissions reductions. As is detailed below, adoption of a 70% by 2030 CES would **reduce emissions by 40%** from current, already low levels,[26] placing New Orleans ahead of pace to meet Paris Accord targets with only a **1% increase** for total system average rates. These results are consistent with the Council's goal of "achieving its commitment to reduce greenhouse gas emissions dramatically by 2030 in a manner consistent with the Council's duty to ensure the reliable provision of energy to the citizens of New Orleans at just and reasonable

---

renewables, nuclear, natural gas, hydro and energy efficiency are all part of this vision, and we'll take advantage of economical solutions to continue that progress. In the longer-term, innovation and new technologies will be critical to a net-zero carbon future."); Xcel Energy's announcement of its carbon free by 2050 target, *available at:* https://www.xcelenergy.com/company/media_room/news_releases/xcel_energy_aims_for_zero-carbon_electricity_by_2050 ("Achieving the long-term vision of zero-carbon electricity requires technologies that are not cost effective or commercially available today."); DTE's announcement of its net-zero by 2050 goal, *available at:* https://empoweringmichigan.com/net-zero-carbon/ ("The energy company is also committing to playing a leading role in the development of technologies that can reduce emissions, including but not limited to: Carbon sequestration; Large-scale storage; and Modular nuclear facilities…Technology advances will play a critical role in ensuring we can achieve our net zero aspiration in a way that protects reliability and affordability for our customers").

[24] *See*, https://www.nrel.gov/docs/fy19osti/72798.pdf at pg. 4.

[25] *Id.*

[26] A description of the assumptions and methodologies used for ENO's analysis in this regard is attached here to as "Appendix A." *See*, Appendix A, at pg. 3.

rates."[27] ENO's proposal to evaluate longer-term targets in the Council's IRP process also comports with the best practices identified in the NREL study cited by the Advisors because it would mean that the targets were actually analyzed through transparent modeling, specific to ENO, before their adoption.

If the Council adopts ENO's proposal for a 70% CES by 2030, ENO's CO_2 emission rate as of 2030 would be approximately 270 pounds of CO_2 per megawatt hour ("lbs. CO_2/MWh").[28] This rate is significantly lower than the electric generation emission rates that the Sustainable Development Scenario from the International Energy Agency[29] ("IEA") predicts to be necessary to meet the goals of the Paris Climate Accord. Using the IEA's World Energy Outlook[30] for 2018, the emission rate target modeled for the United States for 2030 is approximately 340 lbs CO_2/MWh. The ENO projected rate of 270 lbs CO_2/MWh is well below this target. Further, the scenario's 2030 projected rate for the world as a whole to meet the Paris goals is 487 lbs CO_2/MWh (allowing a higher rate for the less developed economies), which is significantly higher than the ENO 2030 projected rate. Thus, ENO's analyses show that, by building on the progress enabled by past Council actions, the Council's adoption of a 70% CES for 2030 would make New Orleans a global leader in reducing emissions and doing more than its fair share to combat climate change.

The Advisors' Report does not dispute ENO's analyses; it states that the Advisors "accept that 70% clean energy by 2030 is what ENO[] believes upon informed analysis that it can do within its business plan with an acceptable bill impact to customers."[31] Instead, the Report dismisses the goal underpinned by ENO's analyses as "not ambitious enough" and states, without providing any supporting analyses, that the Council should consider a "more ambitious" target for ENO.

This line of argument ignores a key component of the analysis supporting ENO's proposed target – the fact that ENO's target was optimized to make sure that incremental clean energy added to ENO's portfolio is mainly serving ENO's customers, rather than being exported to MISO's markets as surplus. ENO's July 2019 Reply Comments included a version of the following figure:

---

[27] *See*, Council Resolution No. R-17-428, pgs. 2-3.

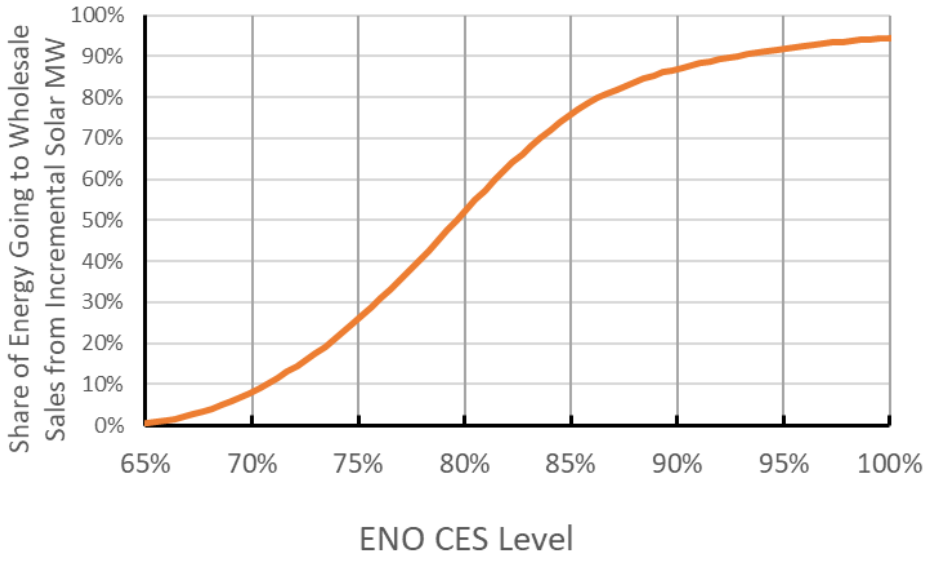
[28] *See*, Appendix A, at pgs. 3-4.

[29] https://sustainabledevelopment.un.org/?menu=1300

[30] https://www.iea.org/weo/

[31] Advisors' Report at pg. 15. To the extent it was intended, ENO disputes the characterization that it could meet a 70% CES by relying on resources currently in ENO's business plan. As ENO's proposal details, meeting a 70% CES would involve adding 145 megawatts ("MW") of new solar generation, in addition to intensified DSM and beneficial electrification efforts.

Figure 1: Diminishing Returns of Solar Added to Meet a CES Above 70% by 2030



The figure depicts the results of ENO's analyses showing how much energy would be exported to the MISO market for use by others and how much energy would serve ENO load from incremental solar resources added to meet a standard higher than 70% clean energy by 2030.[32] As more solar resources are added to ENO's portfolio, more generation will occur during hours in which ENO is already serving all of its customer demand with clean resources and the extra output will instead be sold into the market. As depicted in the chart above, for the incremental capacity (MWs) of solar added to attain ENO's 70% CES goal, no more than 10% of the energy generated would be exported to the MISO market, with at least 90% of that energy serving ENO's load. Above the 70% by 2030 target, these numbers change drastically. At a 75% clean target, 25% of incremental energy (MWh) that is generated would be exported. At the 80% clean energy by 2030 target set forth in Alternative 2, **over 50%** of incremental solar energy that is generated would be exported, with less than half serving ENO's actual electric load.

Going beyond what ENO's analysis supports would not actually result in more clean energy serving New Orleans customers; instead, it would result in ENO "going long" on renewable generation to meet an arbitrarily-imposed standard where that long position would result in ENO being a significant seller in the market. In this situation, ENO's customers would bear increased exposure to the risk inherent in being a significant net-exporter to the MISO market. ENO's customers would bear this risk for no good reason other than tallying Renewable Energy Credits ("RECs") associated with exported energy to satisfy the arbitrarily high target. ENO would be relying on other load serving entities ("LSEs"), perhaps those without clean energy goals, to receive excess ENO's excess generation in many hours; should these LSEs adopt clean energy goals themselves, their willingness to purchase energy in peak daylight hours could diminish if

[32] A description of the assumptions and methodologies used for ENO's analysis in this regard is attached here to as Appendix B.

they otherwise expand the renewable generation in their resource portfolios to achieve their own goals or meet targets.

ENO's 70% CES by 2030 target would place New Orleans' electric grid ahead of pace to meet the targets of the Paris Climate Accord. This is possible, in large part, because "as a result of the Council's efforts, working with ENO regarding its resource portfolio over the last decade, **ENO's carbon emissions are already 50% below the national average**."[33] The Council and ENO have achieved these results, while keeping rates low, by adhering to the principles of least-cost resource planning, *i.e.*, only adding resources when there is a legitimate need to do so. Past prudent planning decisions mean that ENO can be on pace to significantly outpace the Paris Climate Accord targets, without drastically increasing rates, by meeting a 70% CES by 2030. Setting a more aggressive target, which is unsupported by any analyses, is not consistent with least-cost planning principles, is not necessary to surpass the Paris Accord Targets, and does not provide a valid reason for exposing ENO's customers to the increased risk and cost associated with the Alternative 2 proposal.

c. A Viable Framework for Addressing Climate Change Should Not Start with Admittedly Impossible Targets, Coupled with Mandates, Cost Caps and Penalties.

As noted above, the Advisors' Report acknowledges that achieving California's aspirational "target of carbon free electricity by 2045 is impossible without breakthrough innovations." Yet, each of the Alternatives not only proposes targets more aggressive than California's (each Alternative requires 100% clean energy by 2040), the Alternatives also purport to impose penalties on ENO, under an inverted prudence standard (discussed more fully below), for its inability to achieve goals that are admittedly impossible without technological breakthroughs. A policy that seeks to penalize ENO in this way for failing to meet a target that the administrative record in this proceeding establishes is impossible with today's available technologies will not put ENO and the Council on a path toward effectively addressing climate change; it will put them on a path toward prolonged and costly litigation. The same issue applies to the EFNO proposal, albeit with greater severity.

ENO proposes that the Council use the IRP to evaluate the path to long-term decarbonization goals. Exploring long-range policy paths like this one is the purpose of the IRP, according to the Council's own rules, as highlighted in the Advisors Report.[34] ENO is willing to work with the Council towards aspirational net-zero carbon emissions goals by mid-century. ENO is also willing to work with the Council, Advisors, and stakeholders on crafting a reasonable, legally-valid compliance and enforcement mechanism (discussed in greater detail below) for the short-term goal of achieving a 70% CES by 2030. But the law does not allow ENO to be subjected to an inverted prudence standard coupled with financial or other penalties levied for failure to meet an arbitrarily-imposed, admittedly-impossible task.

[33] *See*, Resolution 19-109 at pg. 1 (emphasis added).

[34] *See*, Advisors' Report at pgs. 28-29.

IV. Many Components of the Advisors' Alternatives Could be Workable Elements of a Viable CES for New Orleans.

ENO's proposed CES (i) would surpass Paris Climate Accord targets, (ii) keeps rates low, (iii) preserves reliability, (iv) is tailored to New Orleans' specific energy needs, and (v) is supported by thorough analyses that are, by far, the most thorough submitted in this proceeding. But ENO recognizes that the Council values collaboration and incorporation of a variety of ideas, when those ideas are vetted by the regulatory process. Indeed, it appears that ENO and the Advisors are aligned on many of the substantive issues under consideration in this proceeding. As such, ENO has identified elements of the Advisors' Alternatives, specifically those related to targets and eligible resources, that could be part of a viable CES for New Orleans. ENO addresses issues with the administrative- and enforcement-related components of the Alternatives in a later section of these Comments.

ENO believes that the definitions of DSM, Energy Efficiency Programs, Beneficial Electrification and Net Energy Metering ("NEM"), as proposed in Alternative 1 should be adopted for any standard the Council sets.[35] ENO also agrees with the inclusion of those resources as compliant resources and with their classifications as "Tier 1 Resources" that would receive some type of multiplier credit to appropriately account for benefits associated with those resources being sited in New Orleans, assuming the Council adopts a multiplier system. ENO will be pleased to submit a proposed calculation methodology for the crediting of DSM resources for the Council's review and approval, as the Advisors' proposal suggests. ENO discusses some elements of this framework generally below. ENO agrees that any new Community Solar facilities located in New Orleans should be a Tier 1 Resource as well, but the definition should be expanded to include generating facilities not in conformance with the Council's program, but which have otherwise been approved by the Council, as the Council's Community Solar Rules contemplate.[36]

ENO agrees with the proposal in Alternative 2 to include nuclear and other zero-emission resources as compliant technologies, as these technologies will be necessary to achieve decarbonization by mid-century. The treatment of "zero emission resources" in Alternative 1 remains unclear as the term is not defined in Alternative 1. ENO believes that the term, as defined in Alternative 2, should also be applied to the zero-emissions requirement set forth in Section 3(a)(iv) of Alternative 1, if it is adopted.

In all, ENO agrees that these specific elements of Alternative 1 and Alternative 2 can be a part of a workable outcome, provided that the overall short-term targets are consistent with ENO's energy needs, as demonstrated in ENO's analyses.

---

[35] As discussed below, the definitions of compliant Beneficial Electrification in Alternatives 2 and 3 are more limited in scope and time than that proposed in Alternative 1. ENO recognizes that the Advisors' Alternatives contain variation, in part, to contribute to the diversity of ideas being evaluated in this process. Nevertheless, ENO believes that the more limited views of the ways in which Beneficial Electrification can be compliant should be discarded.

[36] *See*, Council Resolution No. R-19-111 at pg. 30.

V. The EFNO Proposal is an Unsupported, Unworkable Concoction that Would Raise Rates, Jeopardize Reliability, and Fail to Address Climate Change in the Way Experts Agree is Necessary.

Several parties to this matter[37] have sought to seize control of the Council's proceeding and pursue their own agendas by developing a plan outside of the Council's process, to the exclusion of several parties to this proceeding.[38] The proposal of a so-called "Resilient and Renewable Portfolio Standard" exhibits seemingly willful ignorance of even the most basic principles of prudent, least-cost resource planning. As a result, adopting the R-RPS would trigger massive rate increases for customers. More alarmingly, the proponents of this plan are engaging in outright denial of what the scientific community, as well as academic and industry thought leaders, tell us about the kinds of technologies we will need to employ to stand a chance at combatting climate change in a meaningful way.

As a result, the R-RPS proposed by EFNO loses sight of what must be the primary goals for this proceeding – reducing carbon emissions and combating climate change; neither goal is **even mentioned** in the "Purpose" section of the R-RPS. Instead, the plan focuses on punishing ENO and subsidizing a handful of regional solar installation companies by establishing requirements ENO cannot meet and attempting to force ENO to pay money into a fund designed to benefit these companies. If adopted, the R-RPS would walk back the Council's progress on lowering emissions, increase rates, and jeopardize reliability. The R-RPS would also make combatting climate change harder because, instead of continuing down a path of meaningfully reducing emissions, adoption of the R-RPS (or anything like it) would embroil the parties in years of litigation at multiple jurisdictions and impede the excellent progress that has been made thus far on reducing ENO's emissions profile.

ENO addresses several of the specific fatal flaws and unsubstantiated assumptions that render the R-RPS unworkable below, but first ENO briefly re-addresses the vast gulf between the positions taken by the EFNO Coalition and the recommendations of the world's leading climate scientists and industry experts.

a. EFNO's Insistence on a 100% Renewables-Only Mandate Departs from Scientific Consensus on Actions Necessary to Combat Climate Change.

ENO's June Comments, its July Reply Comments, several letters and other filings submitted to the Council in this proceeding, the Advisors' Report and underlying research, and many academic, scientific, and industry publications document the widely-acknowledged consensus that the deep decarbonization required by mid-century to combat climate change is only possible through the utilization of **all** zero-emitting technologies available, including nuclear

[37] 350 New Orleans, Alliance for Affordable Energy ("AAE"), Audubon Society, Deep South Center for Environmental Justice (an entity that never intervened in the Docket), PosiGen Solar, LLC, Sierra Club, SREA, and Vote Solar (another entity that never intervened).

[38] In an irony apparently lost on the EFNO Coalition, many of their members are presently engaged in litigation with the Council over allegations that the Council did not follow proper procedure in another matter. Despite a willingness to sue the Council over alleged procedural violations, the EFNO members have no qualms about circumventing the Council's established processes when it suits their interests.

generation. It is not possible with only renewables. In fact, it is not possible with today's currently-viable technologies. The path forward will require all forms of zero-emitting generation in addition to technological innovation. **Continuing to insist on a 100% renewable-powered electric grid as a feasible solution to address climate change, when volumes of scientific and industry studies demonstrate otherwise, is the intellectual equivalent to denying that climate change exists.** The 100% renewable position maintained by EFNO constitutes willful disbelief of an inconvenient truth – that decarbonization of the electric grid by mid-century is only possible through reliance on nuclear and other zero-emitting technologies, in addition to renewables and technologies that have yet to be developed.[39]

Some members of the EFNO Coalition have been very vocal in articulating the urgency of the climate change crisis in Council proceedings for years. ENO does not disagree with them, nor does the Council. ENO and the scientific community disagree with the solution they are proposing. Climate change is not caused by technologies; it is caused by emissions. Focusing on technologies to limit the kinds of zero-emissions technologies that can be used to combat climate change only makes an already the road net-zero emissions more difficult to traverse. Insisting on an unworkable, needlessly-restrictive, renewables-only approach, while seeking to subsidize regional solar installation companies at the expense of customers will not curb emissions or combat climate change, but it will undermine reliability and lead to drastic rate increases.

b. The R-RPS is Unworkable from a Resource Planning or Regulatory Perspective.

Apparently ignoring the findings of the Energy Futures Initiative's *Green Real Deal* report, and a host of other publications, which caution against a narrowing of options in efforts to combat climate change, the R-RPS proposes to limit ENO's options for generating electricity to **five compliant technologies**, some of which are not remotely economically viable in Louisiana.[40] The proposal defines these five technologies as "Renewable Energy Resources" and would require that 55% of electricity generated for New Orleans come from them by 2033 and 100% by 2040. Additionally, the proposal would involve: (i) requiring 30% of ENO sales to be met with energy be generated in New Orleans, (ii) requiring that 10% of energy come from in-City resources that meet an added, and unsubstantiated, "resilience" criteria, *i.e.*, incorporating battery storage or micro-grid configurations, (iii) early divestment of zero-emitting nuclear assets, (iv) revisiting Council decisions in several rulemakings and resource certifications, (v) several new, duplicative and unnecessary administrative proceedings (paid for by ENO's customers); and (vi) unlawful penalty mechanisms designed to subsidize members of the EFNO Coalition. The SREA, a member of the EFNO Coalition, ironically offers an apt critique of the EFNO proposal, stating "The more complicated New Orleans' RPS is to develop, the more difficult it will be to implement and track,

[39] The AAE's reply comments attempt to sidestep this issue (which cuts to the core of climate policy) by stating that "nothing in the Council's [initiating] resolution contemplated a Clean Energy Standard." Yet, the AAE and EFNO proposals attempt to introduce micro-grids, "resilience," early resource deactivations, and changes to the community solar, IRP, and NEM rules into the scope of this proceeding, when Resolution R-19-100 mentions none of those topics.

[40] *See*, R-RPS Proposed Rule at pg. 7, defining solar, wind, geothermal, run-of-river hydro, and tidal generation facilities as the exclusive kinds of renewable energy resources compliant under the proposal.

and that difficulty will likely result in higher costs to New Orleans residents. Complicated carve-outs, local build requirements, technology limitations and other types of restrictions reduce operational flexibility."[41]

Collectively, implementing these proposed mandates would involve, among other things, locating at least 1,000 MW of solar generation in Orleans Parish (a physical impossibility), years of litigation at the Federal Energy Regulatory Commission ("FERC"), higher rates and higher energy burdens for all customers, and destabilization of the reliability of the electric grid in New Orleans. The EFNO Coalition invites the Council down this path while submitting absolutely no analysis of the technical or economic feasibility of their proposal. As was noted in ENO's July Reply Comments, the National Academy of Sciences stated that:

> In our view, to show that a proposed energy system is technically and economically feasible, a study must, at a minimum, show, through transparent inputs, outputs, analysis, and validated modeling, that the required technologies have been commercially proven at scale at a cost comparable with alternatives; that the technologies can, at scale, provide adequate and reliable energy; that the deployment rate required of such technologies and their associated infrastructure is plausible and commensurate with other historical examples in the energy sector; and that the deployment and operation of the technologies do not violate environmental regulations.[42]

The EFNO proposal does not begin to approach the minimum threshold for a viable proposal. Yet, they ask the Council to lock ENO into a course of action which would abandon prudent resource planning principles and ignore the findings of climate and industry experts for the next 20 years.

The Advisors are right to be skeptical of the EFNO proposal.[43] The Advisors' Report documents many of the elements of the EFNO proposal that would be unworkable from a reliability and system planning perspective, as well as unenforceable and unlawful from a regulatory perspective. ENO will not exhaustively dissect each of the problems with the EFNO proposal but will cover some major issues. ENO hopes that, in the future, the members of EFNO will refrain from circumventing the Council's processes to advance their ideas. A collaborative process where a diverse set of stakeholders (including utility personnel with relevant expertise and necessary experience) are present, like the Council's IRP process, can often identify elements of a proposal that are unworkable; circumventing such processes eliminates the benefits of collaboration, reduces the diversity of ideas, and removes transparency. The R-RPS demonstrates this fact clearly.

i. The R-RPS Abandons Basic Principles of Resource Planning in Favor of an Unsubstantiated "Resilience" Concept.

The Council knows that a crucial component of system reliability is the diversity of resource types. The EFNO proposal would force ENO to rely on only five kinds of intermittent

---

[41] *See*, SREA Reply Comments, filed July 15, 2019, at pg. 4.

[42] *Id*.

[43] *See*, *e.g.*, Advisors' Report at 16-17, 26, 28-31.

resources, which would make ENO's generation portfolio inherently less reliable.[44] The emphasis on localized requirements for siting a large portion of this renewable generation would also undermine reliability. As SREA points out "Geographic and technological diversity of renewable energy resources helps balance power production."[45]

The EFNO proposal also introduces an unsubstantiated notion that intermittent renewable resources tied to small residential battery storage systems somehow provide added "resilience" to the distribution grid during storms or other events that can cause outages. No analyses support these claims. They also ignore the fact that existing residential storage systems only provide a limited level of backup power to the owner of the system.[46] The SREA's comments point to several reasons why the notion that the idea that residential solar + battery systems provide added grid "resilience" is a fiction. SREA states:

- "Localized DG renewable energy resources alone do not inherently guarantee a more resilient local grid system against things like severe weather and flooding."
- "[A]ny hurricane of sufficient strength would also pose wind risks to rooftops, and flooding risks to garages or other low-lying residential areas that may house battery backup systems."
- "[A]ll grid-tied residential solar power systems without battery backups are designed to immediately shut off in the case of a blackout to prevent energizing a power line that may need to be serviced by linemen. If a large transmission line fails, it's highly likely local grid-tied rooftop solar systems will power down as well."

The EFNO's own membership acknowledges that the "resilience" notion advanced in its filing does not stand up to even the slightest level of scrutiny. The Council should not abandon basic resource planning principles in favor of the "resilience" myth being pushed by EFNO to make their members' product offerings seem more economically viable or valuable than they are.

ii. The EFNO Proposal Would Upend the Council's Regulatory Process and Decisions, Resulting in Years of Litigation.

The Advisors' Report correctly points out "the EFNO coalition's proposal is a blatant attempt to re-open several other Council rulemakings (NEM, IRP, and community solar, in particular) and revise those rules outside of the normal rulemaking process and without notice to potentially affected parties."[47] ENO believes this to be an accurate assessment and agrees that the

---

[44] One of the Planning Principles articulated in the ENO 2018 IRP is Supply Diversity, which helps mitigate exposure to risks that may occur through concentration of portfolio attributes such as technology or location. Compelling all future resources to be selected from the limited list proposed by EFNO would clearly run counter to this resource planning principle.

[45] *See,* SREA Reply Comments at pg. 5.

[46] The EFNO proposal also makes no mention of the costs or long-term environmental impacts of battery storage systems.

[47] *See*, Advisors' Report at pg. 30.

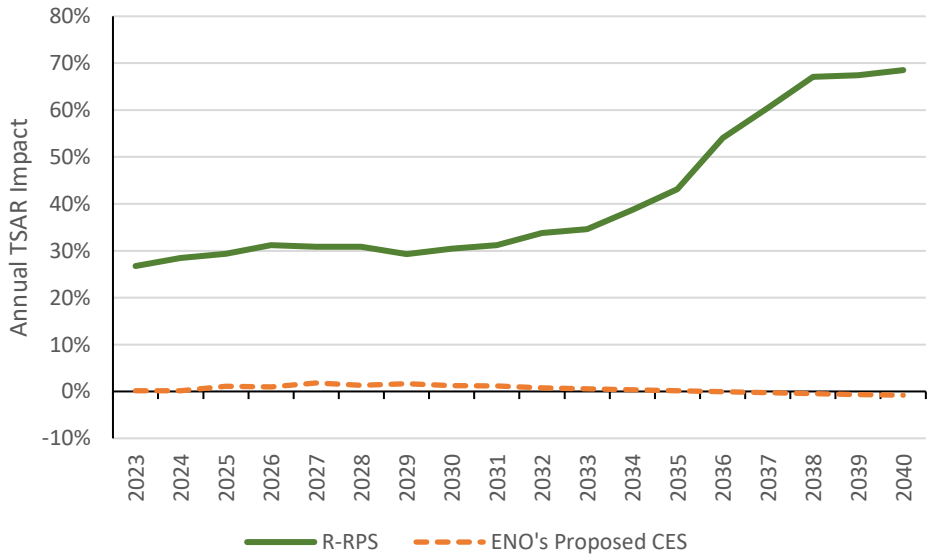
NEM, IRP, community solar, and other rules implicated by the EFNO proposal cannot be overturned or relitigated in this rulemaking Docket.

This same logic applies to the EFNO proposal's implications for Council and FERC-approved resources or transactions that would also need to be overturned for the EFNO proposal to be enacted by the Council. In its July Reply Comments, ENO detailed the reasons, as articulated by the United States Supreme Court,[48] why ENO's interest in the Grand Gulf Nuclear Station ("GGNS") and other nuclear resources is a matter within FERC's jurisdiction and not the Council's. Adoption of any standard that would require ENO to, either divest or otherwise transfer its interest in resources governed by FERC or incur penalties for operating those resources as approved by FERC, would necessitate litigation (albeit of a pre-ordained outcome, per *Mississippi Power & Light Co.*) at the FERC. Similarly, any standard adopted in this proceeding that would require ENO to retire Council-approved resources before the end of their useful lives, or that would penalize ENO for operating those resources in a manner consistent with prior Council approvals, would be unenforceable and lead to litigation.

c. The Costs of the R-RPS Would Increase Rates Drastically.

ENO's calculations show that the R-RPS proposal would yield total system average **rate increases** of, at minimum, **30% by 2033** and **65% by 2040.** Figure 2 below illustrates this rate increase as compared to ENO's proposed CES.

Figure 2: Total System Average Rate Impact of R-RPS Proposal vs. ENO CES Proposal



Needless rate increases of this magnitude would have many disastrous effects, particularly for New Orleans' most vulnerable residents. The **entire regional economy would suffer** as attracting new businesses (and retaining existing ones) would be difficult with rate increases of 60% or higher and a technological exclusionary policy. Fewer economic opportunities means any

[48] *See, Mississippi Power & Light Co. v. Mississippi ex rel. Moore*, 487 U.S. 354, 375; 108 S.Ct. 2428, 2441; 101 L.Ed.2d 322 (1988).

"energy burden" (*i.e.*, high bills combined with low-income) problem would be exacerbated not to mention the loss of local jobs, the associated loss of income, and foregone tax revenues that would further strain the City of New Orleans' budget. ENO's average bills are consistently below the regional average, thus solutions to high energy burdens must focus on growing the entire New Orleans economy. Increasing rates and decreasing economic opportunities for New Orleans residents would exacerbate energy burden issues from both sides of the equation. Exempting low-income customers from paying any incremental costs of the R-RPS, as the EFNO proposal suggests, would simply shift the significant costs of compliance to other customer groups, including other residential customers and larger commercial and industrial customers who could decide to close or move.[49]

Perhaps recognizing the enormous cost impacts their proposal would needlessly foist upon New Orleanians, the EFNO membership also proposes a cost deferral measure (inaccurately styled as a "cost cap"). The Advisors correctly note that the costs affected by the control mechanism proposed by EFNO are simply deferred and amortized over a 20-year period. Thus, the exorbitant cost of the R-RPS would not be limited, only carried for a longer period of time (while incurring interest charges). The Advisors also correctly note that the EFNO proposal "would result in significant rate increases with no mechanism in place by which the Council can oversee the level of expenditure."[50] Even if the R-RPS were legally enforceable (which it is not) and would not jeopardize reliability (which it would), residents of New Orleans cannot afford to fund the subsidies being sought by the EFNO Coalition's membership through their proposal.

VI. The Three Alternatives Set Forth in the Advisors' Report Would, as Proposed, Result in Higher Customer Rates than ENO's Proposed CES Target.

The Advisors' Report suggests that the parties submit any and all analyses available to support their proposals or to demonstrate the potential harmful effects of other proposals. ENO has supported its proposal for a 70% CES by 2030 with analyses from the outset of this proceeding and the results of those analyses have been included in ENO's filings to date.[51] ENO has also contributed analyses that measured the cost impacts of the proposals alluded to in the Parties' first

---

[49] ENO agrees with the importance of taking the circumstances of low-income customers into account in all policy decisions, and with providing needed assistance to those customers. The circumstances of these customers make adhering to least-cost resource planning principles vitally important; they also necessitate other proactive measures. ENO's Low-Income Customer Service Initiatives were created in 1999 with a focus on breaking the bonds of generational poverty through a holistic approach that includes, but is not limited to, the energy needs of low-income customers. Through a variety of programs and initiatives, ENO directly impacts the lives of low-income customers through philanthropy, volunteerism, and advocacy initiatives that deliver more than $13 million in annual benefits and services in Orleans parish. ENO is also offering its Renewable Orleans rooftop solar pilot program that is designed to offer qualified low-income customers a monthly payment in return for allowing the Company to install and maintain solar photovoltaic ("solar PV") panels on their rooftops. The attached Exhibit 1, which is formatted as a "trifold" brochure, provides more information on these programs.

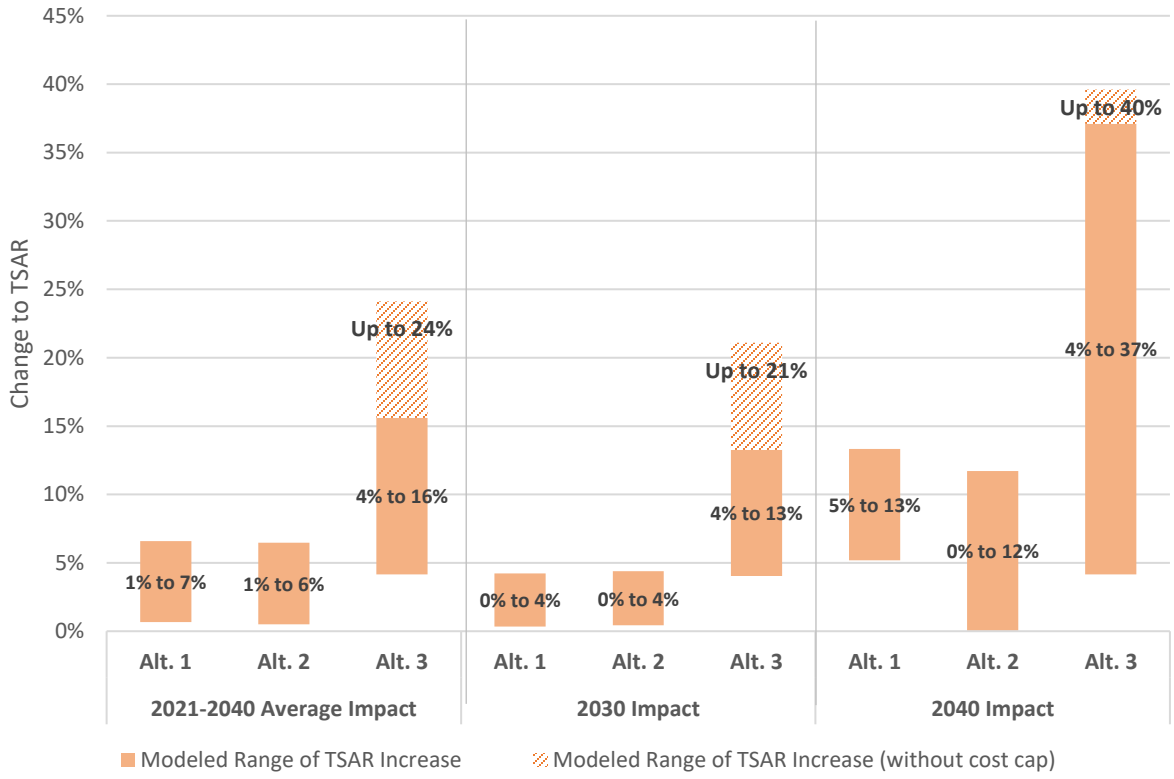
[50] *See*, Advisors' Report at pg. 26.

[51] Comments from intervenors, who have not submitted any analyses of their own, criticized ENO's prior filings for "a lack of supporting data." *See*, Reply Comments of 350 New Orleans at pg. 4. This statement is factually inaccurate and intentionally misleading. Further, although it is unusual for discovery requests to be issued in rulemaking proceedings, ENO has fully responded to the only set of discovery served in this proceeding, in accordance with applicable Council rules.

set of Comments from June 1. ENO continues its practice of substantiating its filings in this Docket with thorough analyses by providing TSAR analyses for each of the Alternatives advanced for consideration in the Advisors' Report, in addition to the EFNO proposal, in Appendix C, which is attached to this filing.

The figure below shows the range of modeled TSAR impacts from the three illustrative scenarios chosen for each Alternative in three ways: as a 20-year average from 2021-2040, in 2030 alone, and in 2040 alone.

Figure 3: Total System Average Rate (TSAR) Impacts from Illustrative Scenarios



Since these are results from illustrative scenarios, the actual cost impacts may be higher or lower than the values shown. Nonetheless, ENO's analyses show that Alternative 3 should be expected to impose significantly higher costs than either Alternative 1 or 2 without reducing emissions any further than Alternatives 1 and 2 (and perhaps even achieving fewer emissions reductions). Further discussion of these analyses, including underlying assumptions and data, can be found in Appendix C.

VII. Structural Issues with the Alternatives

The Alternatives proposed for consideration incorporate numerous, varying kinds of administrative and compliance requirements that would need to be addressed in order to develop a workable structure. As noted above, ENO recognizes that the Advisors have proposed several different kinds of enforcement and compliance mechanisms in the Alternatives in order to allow for a broad consideration of issues presented by the policy the Council may ultimately adopt in

this matter. ENO believes that this approach will lead to productive discussions, but also believes further work beyond what is contemplated in the current procedural schedule will be required to establish the details of compliance and other mechanics of tracking progress towards whatever goals the Council sets in this Docket. ENO offers suggestions as to what issues will likely need to be addressed as the to-be-determined future process unfolds.

Prior to discussing the specific issues that would need to be addressed in order to make the proposed compliance and enforcement mechanisms from the various Alternatives more efficient, as well as less costly and time-consuming, ENO offers another alternative framework for consideration and further development. ENO suggests that the Council consider utilizing a compliance filing process similar to what is currently used in, and has been successful for, Energy Smart. This concept is discussed more fully in the next section of these Comments. ENO believes this approach would be more viable, simpler, and cause customers to incur fewer new regulatory costs than using any one of the approaches put forth for consideration in the various Alternatives. ENO would welcome the opportunity to work with the parties and the Advisors on refining this idea during the next phase of these proceedings.

a. The Compliance Filing Structure Proposed Can Be Improved.

All three proposed Alternatives contemplate an annual compliance filing process. This process, as presently conceived, would include a report of the prior year's activities and achievement of compliance with targets as well as a prospective procurement plan supported by testimony, exhibits, and analyses. While the obligation to file a retrospective annual report is a part of many dockets, ENO believes the annual procurement plan requirement is too onerous and presents several difficulties. The scope of the filing requirements and expectations around content are simply too large for an annual compliance obligation. Not only do large-scale resource acquisitions take longer to plan than the proposed timeline allows, but it is likely that the annual procurement plans would not be resolved before the deadline comes around to file the next one. This "pancaking" of filings would lead to confusion and waste as regulatory processes drag out.

It would be more manageable to incorporate the compliance filing process into the IRP structure and align the prospective plan filings with the triennial cadence. The IRP already involves many of the factors (reliability, resource diversity, etc.) proposed to be in the annual filing. Similar to Energy Smart, the compliance plan for the next three years of targets could be formulated and approved as an output of the IRP process, and, as with Energy Smart, retrospective compliance filings could be made annually. Structuring the administrative process in this way would provide greater transparency and room for stakeholder involvement than the proposed 90-day process and would provide greater efficiency by leveraging the existing IRP process. The Advisors' Report seems to acknowledge as much when discussing the EFNO proposal:

> The Advisors do not believe it is necessary or appropriate to modify the Council's IRP Rules through this RPS rulemaking docket. First, it is not necessary because the IRP rules currently require ENO to develop at least one Planning Strategy that reflects known regulatory policy goals of the Council, which would include whatever RPS is adopted by the Council. This would allow the Council to produce the least cost portfolios that attain the RPS targets across several potential future Scenarios. The Council will then be able

> to see how the portfolios including the RPS differ from portfolios that are produced without the constraint of an RPS.[52]

ENO agrees with the Advisors' above statement and believes that the Council's IRP process is better suited to achieving many of the necessary steps toward realizing the targets established in this proceeding than the annual filing embodied in the Alternatives. The above analysis from the Advisors' Report also illustrates how the IRP could eliminate the "counterfactual scenario" exercise, which may prove confusing and burdensome, as discussed in greater detail below.

To be clear, ENO is not suggesting that the IRP compliance plan filings would supplant the need for individual resource certification proceedings. ENO would still need to seek Council approval for the specific resources acquired to achieve compliance with the triennial compliance plan. The Council could use those resource certification proceedings to ensure, among other things, that the costs of resources needed for compliance are acceptable.

In addition, to the extent the Council desires a mechanism through which to enforce near-term targets, ENO suggests that the Council consider an enforcement mechanism like what was used in Council Resolution No. R-18-97. In that Resolution, the Council ordered ENO to submit an application for 90 MW of renewable resources by a specific date, or submit a detailed report demonstrating why the application could not be submitted by such time. Ultimately, ENO submitted its application and the Council approved the acquisition and construction of 90 MW of new solar resources for ENO, at a cost it determined (in that proceeding) to be acceptable. In the context of future resource acquisitions designed to comply with any standard adopted in this proceeding, the Council could use a similar approach. Such an approach would use existing regulatory mechanisms and processes that have proven to be effective, rather than the new framework proposed for consideration in the Alternatives, which would likely prove to be more time consuming and costly than needed to achieve the Council's policy goals.

b. The Cost Cap Mechanisms Require Clarification and May Be Unenforceable.

In an effort to protect ENO's customers from the significant rate increases that could result from the imposition of an RPS as discussed above, the Advisors' Report recommends a spending cap on ENO's "incremental expenditures" incurred to comply with an RPS.[53] This cost cap is included in all three of the proposed Alternatives. Specifically, the Report explains that the proposed expenditure cap would apply to "the difference between what ENO would have otherwise spent to meet the requirements of its load and what it spent to meet the requirements of its load in a manner that complies with the RPS."[54] Under this spending cap structure, if ENO can show that, in a given year, the cost of compliance is projected to be greater than the proposed cost cap, ENO would not be required to incur costs in excess of that cost cap; however, the annual

---

[52] *See*, Advisors' Report at pgs. 28-29.

[53] *See*, Advisors' Report, at 27.

[54] *Id.* The Advisors' Report clarifies that that none of ENO's currently-existing or already approved resources would count toward this limit since they are not true "incremental" costs; however, under their proposal, such resources may be counted toward compliance. *Id.*

increases imposed in the RPS standard in subsequent years would remain unchanged, requiring ENO to "catch up" to meet the RPS percentage requirement the following year.[55]

With respect to the amount of the cost cap, the Advisors' Report proposes a "cost cap in any RPS plan year [that] is one percent (1%) of plan year total utility retail sales revenues, beginning in 2021."[56] As the example below shows, however, there are several ways to interpret this language and further description or explanation of this mechanism would be needed, if the Council were to implement a complex and unnecessary cost cap, rather than simply continuing the practice of assessing the costs of resources when reviewing ENO's resource applications.

The table below considers hypothetical costs of a set of resources that could be procured in 2021 and another set of resources to be procured in 2022. When establishing the plan for the 2021 resources, ENO would make a projection of their costs for 2021, 2022, 2023, and so on; likewise, there would be a projection made one year later for the costs of the 2022 resources for 2022, 2023, and so on.

Table 1: Illustration of Multiple Interpretations of Advisors' Proposed Cost Cap Measure

All amounts $MM	**[A]**	**[B]**	**[C]** (=[A]+[B])	**[D]** (=change to [C])
	Projected Annual Net Cost of 2021 Resources	Projected Annual Net Cost of 2022 Resources	Projected Annual Net Cost of Total Compliance Plan	Increase/ (Decrease) to Projected Annual Net Cost
2021	$4		$4	+$4
2022	$3	$5	$8	+$4
2023	$3	$5	$8	--
2024	$3	$4	$7	($1)

In the above example, it is unclear which figure in the table would be the appropriate point of comparison for identifying the 1% cost cap in 2022. There are several possibilities:

Option 1: Column B; $5 million. This figure represents the expected first year cost of the planned new resources in 2022.

Option 2: Column C; $8 million. This figure represents the projected annual cost of the entire compliance portfolio.

Option 3: Column D; $4 million. This figure represents the change in expected costs to the entire compliance portfolio, including the addition of the planned new resources and the year-to-year change to the projected costs of the existing resources.

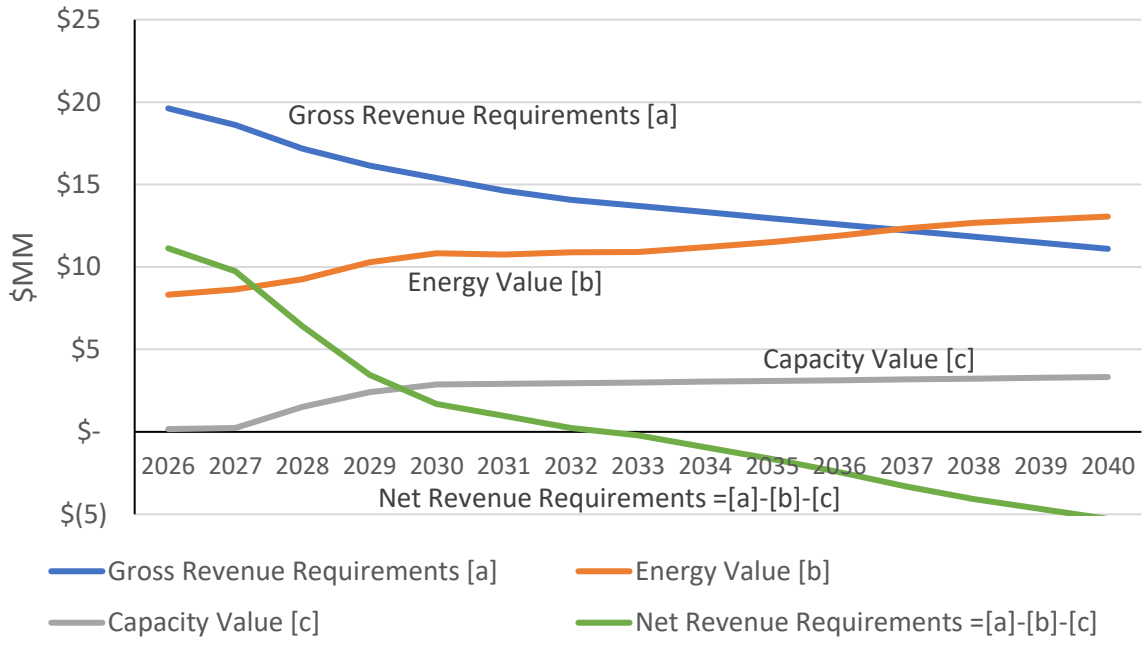
[55] *See, e.g., id.* at Appendix A (Alternative 1), at 7.

[56] *Id.*

Apart from ambiguity as to the meaning of the language in the draft Alternatives, there are further questions associated with some of the Alternatives. First, if Option 2 or Option 3 above were the preferred interpretation, would the annual net cost projections be updated every year, or would the original forecast prevail? If projections for market energy were to change dramatically over a year and increase the expected costs of the existing compliance portfolio, would that forecasted cost increase count against the cost cap?

Second, if Option 1 above were the preferred interpretation, the time horizon used to compare projected costs against the cap is worth further consideration. For example, suppose ENO were contemplating adding a 100 MW grid-scale solar resource in 2026. In examining the costs related to this resource, ENO would calculate the revenue requirements of the installed construction costs and on-going operations and maintenance obligations (collectively, the "gross revenue requirements"), then would deduct the avoided energy costs and the capacity value attributable to the resource. These "net revenue requirements" and their components are shown in Figure 4 below.

Figure 4: Hypothetical Annual Costs and Benefits of a 100 MW Grid-Scale Solar Resource



Note that each component of the net revenue requirements has a different projected annual profile. Gross revenue requirements decline over time, the energy value is projected to increase along with wholesale market energy prices, and the capacity benefit can change over time when ENO goes from having an excess of capacity to a need for capacity.

In exercising its business judgment, ENO would make a planning decision based on the "net revenue requirements," but there are many methods that could lead to different outcomes under an ambiguous rule. For example:

- Consider Year 1 only – In the first year, this resource would be expected to have net revenue requirements of $11 million; that is, the cost to customers would be $11 million in the first year. ENO could have to scale down the size of this project in order to keep its costs below the cost cap.
- Consider Years 1-5 – The net revenue requirements imposed on ENO customers by this resource decline in each year. Averaged across five years, this resource might fit under the cost cap but might preclude any or many other measures from being considered by ENO.
- Consider the Resource's Lifetime – On a projected basis, the resource would be expected to create negative net revenue requirements (*i.e.*, net customer savings) in 2033 and after. The net present value of the projected net revenue requirements could very well produce an overall net savings for customers over the lifetime of the resource.

In addition to the uncertainties with how the proposed cost cap mechanisms would function, it remains the case that cost caps do not provide sufficient flexibility for meeting Council mandates. Indeed, this structure would place unrealistic expectations on ENO to achieve such mandates if the suggested cost cap proves to be too low in practice. As discussed in Appendix C, the reality is that compliance with the proposed mandates may require spending in excess of the suggested cost cap of 1% of total retail revenues.

The proposed imposition of a cost cap in this manner is contrary to the prudent investment rule that governs utility ratemaking in Louisiana. As a matter of law, ENO would be entitled to recover from customers the reasonable and prudent costs of complying with any mandate imposed by the Council: "[U]nder the prudent investment rule, a utility is compensated for all prudent investments at their cost when made, irrespective of whether they are deemed necessary or beneficial in hindsight."[57] The Louisiana Supreme Court has been equally clear that "a utility's investments are presumed to be prudent and allowable."[58] The presumption of prudence is overcome only when the regulator "raises serious doubt about the prudence of a particular investment."[59] At that point, the burden shifts to the utility to demonstrate "that it went through a reasonable decision making process to arrive at a course of action and, given the facts as they were or should have been known at the time, responded in a reasonable manner."[60]

The Louisiana Supreme Court has characterized the prudent investment rule as a "constitutional touchstone" and held in no uncertain terms that "a regulatory commission that does not take into account all prudently incurred investment has acted arbitrarily."[61] The Louisiana Supreme Court also has confirmed that the "United States and Louisiana Constitutions protect utilities from being limited to a charge for their property serving the public which is so unjust as

---

[57] *See, Gulf States Utils. Co. v. La. Pub. Serv. Comm'n*, 578 So. 2d 71, 85 (La. 1991).

[58] *Id.*

[59] *Id.*

[60] *Id.* (internal quotation omitted).

[61] *See, So. Cent. Bell Tel. Co. v. La. Pub. Serv. Comm'n*, 594 So. 2d 357, 366 (La. 1992) (concluding that the regulatory commission acted "arbitrarily, capriciously and unreasonably in its refusal to accord the utility its due under the prudent investment rule"). *See also Central Louisiana Electric Co. v. LPSC*, 508 So. 2d 1361 (La. 1987) (affirming district court judgment setting aside as arbitrary a Commission order that denied a utility's request to increase rates when a new generating facility was placed in service).

to be confiscatory."[62] Furthermore, "the misuse or inconsistent use of a crucial rate making method, such as the prudent investment rule, even without a showing of confiscatoriness by the utility, may amount to a denial of due process."[63]

Pursuant to these principles, the New Hampshire Public Utilities Commission refused to impose a cost cap on the total cost of a utility's construction of a nuclear power plant for rate-making purposes in connection with the utility's request for approval of construction pre-financing, recognizing that the state and federal constitutions require that a utility receives just compensation for prudently-incurred investments: "We cannot prejudge the reasonableness of rates or make a definitive finding that rates resulting from the [utility's] capital investment . . . are unduly burdensome without first finding the prudent investment to which they relate. We are not legally empowered to impose a cost cap on the [utility's] investment as a condition of this proposed financing . . . . We are bound by the New Hampshire and federal Constitutions to assure that ultimately [the utility] will receive just compensation through rates on prudent investment."[64]

Likewise, the Louisiana Public Service Commission ("LPSC"), in considering amendments to its Market-Based Mechanisms Order,[65] determined that it was inappropriate to require a cost cap on utility self-build generation projects as part of a generic LPSC rule.[66] For all of these reasons, imposition of an arbitrary cost cap in the manner laid out in the Alternatives not only is inconsistent with the prudent investment rule and the constitutional protections that it serves, but it also would improperly diminish ENO's power to determine how best to satisfy its obligation to serve customers and meet the requirements of the Council's policy.

Rather than adopt an unclear, and possibly unenforceable, cost cap, the Council should consider enacting the standard adopted out of this proceeding in a way that is consistent with prudent, least-cost resource planning principles. By doing so, the Council would have the

---

[62] *See, Gulf States Utilities*, 578 So. 2d at 107 ("If the rate does not afford sufficient compensation, the state has taken the use of utility property without paying just compensation and so violated the Fifth and Fourteenth Amendments as well as Article I, § 4 of the 1974 Louisiana Constitution.") (internal citations omitted).

[63] *See, S. Cent. Bell Tel. Co*., 594 So. 2d at 364-365.

[64] *See, Re Pub. Serv. Co. of New Hampshire*, 70 N.H.P.U.C. 164 (Apr. 18, 1985) ("The essential reconciliation of prudent investment and reasonable, not unduly burdensome rates may be accomplished in a rate proceeding when [the utility] seeks rate support for the [investment] to its rate base. A prudency investigation should be initiated by the commission on a timely basis to assure an in-depth analysis of prudent investment and the reasonable rate level for a fair return to investors without unduly burdening ratepayers.").

[65] *See,* LPSC Market-Based Mechanisms General Order ("MBM Order"), Docket No. R-26172 Subdocket A, *In re: Development of Market-Based Mechanisms to Evaluate Proposals to Construct or Acquire Generating Capacity to Meeting Native Load*, Supplements the September 20, 1983 General Order, dated February 16, 2004 (as amended by General Order, Docket No. R-26172 Subdocket B, dated November 3, 2006, and further amended by the April 26, 2007 General Order, and the amendments approved by the Commission at its October 15, 2008 Business and Executive Meeting and now in General Order, Docket No. R-26172, Subdocket C dated October 29, 2008). The LPSC's MBM Order developed a market-based mechanism to evaluate proposals to construct or acquire generating capacity.

[66] *Id.* at Attachment A, at 14. *See also* LPSC Order dated April 10, 2002, *In Re Dev. of Mkt.-Based Mechanisms*, LPSC Docket No. R-26172 ("Similarly, the imposition of a cost cap for retail rate recovery might discourage utility projects, which should go forward."). ENO also is not aware of any LPSC orders imposing cost caps on utility investments outside of orders that were the result of negotiated settlements.

opportunity to consider the costs of each resource ENO proposes to construct to achieve compliance with the standard, and only approve resources with an acceptable cost-benefit ratio.

c. The Proposed Large Customer Cap Would Harm the Vast Majority of ENO's Customers for the Exclusive Benefit of Two Customers.

Alternative 1 contains a cap/exemption for large customers that would limit their exposure to compliance costs associated with that Alternative. Capping costs for the two existing industrial customers that would qualify for the exemption as currently described would shift the portion of costs above the cap to all other customers.[67] This issue would apply with greater force if the customers in question chose to avail themselves of the option (under Alternative 1, Section 3(a)(3)) to construct their own renewable generation systems and be totally exempt from any costs of renewable generation procured by ENO. Not only would these customers shift all compliance costs to other customers, their consumption of energy generated by ENO would decline, meaning that other customer classes would increasingly be allocated a greater share of costs incurred to serve those customers in subsequent rate actions. Moreover, this component appears to violate basic tenets of cost allocation principles, as these large customers would still receive benefits from cost-effective renewable generation procured by ENO but would be paying none of the costs. This second component of the large customer cost cap is extremely ill-conceived and appears designed solely to benefit two industrial customers at the expense of all others.

Assuming the Council's policy goal in adopting a compliance requirement through this Docket is to pursue decarbonization of the electric sector in New Orleans, the Company suggests that it is reasonable for these large customers to pay their share of compliance costs as they benefit from reduced carbon emissions just like any other customer. If the Council adopts targets tailored to ENO's specific needs, adheres to least-cost planning principles, and only approves resources with an acceptable cost impact, these two customers should be able to afford their fair share of the cost of new resources.

d. Proposed Limitations on Beneficial Electrification as a Means of Compliance are Arbitrary and not Warranted.

Beneficial electrification results in a net reduction in carbon emissions, even when the resulting increase in utility generation is taken into account. As the Advisors' Report documents, beneficial electrification can be one of the most cost-effective forms of decarbonization, measured on a dollars-per-ton-avoided basis. It also has the benefit of reducing pollution that is generated in the City (unlike other compliance measures.) At a minimum, beneficial electrification should be treated on a level playing field with other decarbonization measures. One way to do this, as proposed by ENO, is to (a) measure the net tons reduced by a beneficial electrification measure; (b) calculate how much energy (MWh) of new renewable energy would have been required to produce that same net reduction in tons emitted in MISO; (c) credit ENO with that many RECs; and (d) decrement the additional energy (MWh) of retail electric sales attributable to the

[67] It should also be noted that the description of the large customer cap states that, "[t]he kilowatt-hours of renewable energy procured for these customers shall be limited." To be clear, the Company does not procure energy for specific customers, but rather to serve its customers' load in aggregate.

electrification from ENO's compliance load. As ENO explained in its Comments and Reply Comments, it is appropriate and necessary for increased sales attributable to electrification to be deducted from the load figure used to calculate compliance obligations. Without doing this, pursuing an electrification effort will create an obligation to procure additional RECs, which, all else equal, would discourage electrification. It is even possible for the incremental credit obligation on account of increased load to exceed the credits that would be given to a beneficial electrification project, which would mean that pursuing a project that creates net cross-sector carbon emission reductions would incur a net REC deficit rather than credit, which would be a counter-productive and undesirable outcome.

Some of the Alternatives seem to place unwarranted restrictions on beneficial electrification as a means of compliance. Specifically, Alternatives 2 and 3 appear to include unnecessarily restrictive language from the EFNO proposal, *i.e.*, "The Utility may count the known and measurable increase in retail electric kWh sales that is directly attributable to beneficial electrification of conversion of the use of Sewerage & Water Board fossil-fuel generators to electric service provided by the Utility or from electric vehicle charging stations as a decrement to minimum compliance load in the years 2021 through 2033."[68] This proposed language not only fails to put electrification on a level playing field with other emissions-reducing resources, it also imposes arbitrary limits on its eligibility. ENO can see no justification for changing the treatment of electrification at any time, let alone after 2033. ENO can see no reason to limit eligibility to Sewerage & Water Board ("S&WB") and electric vehicle charging, particularly when the City's Climate Action Plan and the *Green Real Deal*, among many other reports, identify much broader potential for beneficial electrification. All beneficial electrification measures should be eligible as a compliance mechanism, with equivalent treatment as renewable energy, with no arbitrary limits on types of beneficial electrification, and with no implicit diminution in value after 2033. As stated above, the most appropriate methodology would provide credits to electrification in proportion to the net emissions reductions achieved and create no additional compliance obligations.

e. Retail Sales Amount Used to Calculate Compliance Requirement.

ENO strongly believes that energy efficiency and distributed generation resources should be compliant resources in any policy that the Council adopts because they help to reduce overall carbon emissions, but the Council's standard needs to calculate their contributions to compliance in an appropriate manner.

It is essential to the integrity of an RPS or CES to add back the reductions in sales attributable to eligible energy efficiency or customer-owned distributed generation (*e.g.*, rooftop solar taking advantage of NEM) measures when calculating the compliance load. Otherwise, these measures will not only create RECs in their own right, but will also lower the compliance obligation due to their effect on retail sales. This is the mirror image of the issue discussed above with respect to beneficial electrification, which increases retail electric sales and thus can increase the compliance obligation if it is not properly accounted for.

[68] Advisors' Report, Appendix A pgs. 13, 19.

For example, suppose for illustration purposes that ENO expected to have 100 MWh of retail sales in every year and a 100% RPS was in place. Implementing 50 MWh of energy efficiency measures would create 50 RECs in every year. Retail sales would also be lowered to 50 MWh, and under a 100% RPS ENO would need to procure 50 RECs – the exact amount the energy efficiency creates. Thus, a 100% RPS requirement for a utility with 100 MWh of annual sales could be satisfied by implementing only 50 MWh of clean energy. If the energy efficiency resources were eligible for a REC multiplier, even less clean energy would be needed. And even when the RPS or CES is lower than 100%, this distortion will still take place to a lesser extent. Adding energy efficiency and distribution generation megawatt-hours back into the retail sales total avoids this demand-side double count. The Advisors' Report and proposed Alternatives seem to indicate that the parties will have more opportunities to discuss the compliance calculation methodologies for energy efficiency and distributed generation, but ENO felt it was important to bring this issue to the forefront.

f. The Counterfactual Scenario is a Complex Exercise that Needlessly Duplicates the IRP and Serves No Purpose Outside of a Cost Cap.

Section 5.b of Alternative 1 proposes that a "counterfactual scenario" be used to estimate RPS compliance costs relative to the cost cap.[69] This prospective estimate would seemingly be developed as part of the annual, "pancaking" compliance filings described in Section 4 of this Alternative. There are several significant concerns with trying to use a counterfactual scenario in this way. First, it would likely be very difficult or impossible to estimate the "gross RPS compliance costs" a year or more in advance given the uncertainty of REC prices, the effort and time involved in issuing RFPs for resources, the amount of available resources in the market, etc. Second, it is not clear how projected avoided capacity and energy costs can be compared to dollars associated with retail energy sales (kWh), on which the proposed cost cap would be based. Third, it is not clear how these estimates and proxy numbers would be used to adjust an annual compliance requirement or calculate a carryover obligation with which the Company would have to comply. Fourth, the time and resources required to achieve consensus on what the counterfactual scenario would look like each year would likely exceed any conceivable value from the exercise.

To illustrate this last point, it is worth noting that, following the issuance of Council Resolution No. R-17-627, which approved ENO's continued membership in MISO and ordered ENO and the Advisors to work to reach consensus on an appropriate "counterfactual scenario" for use in the ongoing calculation of the benefits of ENO's membership in MISO, ENO and the Advisors worked over the course of more than a year to arrive at the "counterfactual scenario" that was used in ENO's 2019 MISO benefits filing. Completing this kind of exercise every year for annual RPS compliance filings would not contribute meaningfully to combating climate change, if it is even possible to complete such an exercise annually in a litigated proceeding involving multiple stakeholders; it would only increase regulatory costs borne by ENO's customers and

[69] If the Council declines to adopt a cost cap, and instead continues its historical practice of assessing resource costs within approval filings, the annual "counterfactual scenario" exercise is not needed.

occupy time that could otherwise be spent engaged in productive activity like evaluating, procuring, and implementing clean energy solutions.

This outcome could be avoided entirely by using the established, more efficient process from the Council's IRP Rules for assessing the costs and reliability effects of Council policies. As noted above, and detailed in the Advisors' Report, the IRP obligates ENO to model the effects of any Council policies against a "least cost" scenario. As such, the entire concept of a counterfactual scenario can be eliminated if the Council uses its IRP process as designed, rather than adopting a requirement to create, analyze, model, and litigate the merits of a hypothetical counterfactual scenario every year from now until 2050, or beyond. ENO believes the Advisors' Report's discussion of using the IRP to evaluate the ongoing costs of, and options for compliance with, a Council CES policy provides a much more viable and efficient framework than the annual counterfactual scenario exercise contained in Alternative 1. If coupled with the Council using resource certification proceedings to evaluate costs of resources procured for compliance, using the IRP in the way the Advisors' Report discusses could greatly streamline the implementation process for any standard adopted in this proceeding.

g. Use and Expiration of Multipliers

Alternative 2 proposes to end the effects of multipliers for Tiered resources in 2040. A sudden expiration of REC multipliers creates a jump-step in compliance requirements and in turn a jump-step in compliance costs that are counter to the objectives of minimizing year-to-year cost increases. The total energy (MWh) and the capacity (MW) of grid-scale solar resources that would be needed to provide that energy is summarized below:

Alternatives	**Alternative 1**			**Alternative 2**			**Alternative 3**		
Modeling Scenario:	**1-A**	**1-B**	**1-C**	**2-A**	**2-B**	**2-C**	**3-A**	**3-B**	**3-C**
Incremental MWh Needed (1,000s)	155	310	465	195	270	350	145	365	500
Equivalent MW of Grid-Scale Solar Needed	75	145	220	90	130	165	70	175	240

h. Enforcement Mechanism Issues

In addition to the practical considerations for the three Alternative frameworks discussed above, there are numerous legal issues that call into question the propriety, and feasibility, of the some of the ideas submitted for consideration in the Advisors' Report. As has been repeatedly noted, ENO understands that the Alternatives were intended to cover, and offer for consideration, a wide variety of alternative enforcement structures, some of which may have originated in different jurisdictions with different legal standards and regulatory structures in place. This section of ENO's comments identifies which of those components would not be enforceable or otherwise viable under the well-established legal framework that applies to ENO and the Council.

First, the Alternatives contain various provisions about cost recovery that are fundamentally at odds with the well-settled case law from the Louisiana Supreme Court discussed

above concerning the prudent investment rule. Despite these clear dictates from the Louisiana Supreme Court, each of the Alternatives would incorrectly invert the burden of proof under the prudent investment rule by requiring ENO to affirmatively prove the reasonableness and/or prudence of the decisions it makes (and the costs it incurs) to comply with the Council's mandate absent any demonstration of imprudence by the Council (or by anyone else):

- Alternative 1 (traditional RPS) suggests that if the Council finds that ENO lacked "reasonable cause" for any failure to comply with the RPS target, the Council would have the option of finding that ENO "should not recover the cost of meeting the shortfall in the following year from ratepayers."[70]

- Alternative 2 (Renewable and Clean Portfolio Standard) and Alternative 3 (Modified R-RPS) propose that if ENO fails to meet the required target in any year and spends less than the cost cap, the Council should impose payment of an Alternative Compliance Payment ("ACP"), with ENO only able to recover payment of the ACP from customers under certain circumstances, *e.g.*, "if ENO can demonstrate that making the ACP is the least-cost method of complying with the RPS target."[71] With respect to any failure by ENO to meet the RPS/CES target in any year, ENO would be required to "demonstrate why such failure was prudent, just and reasonable."[72]

- Should the Council opt for a penalty mechanism as opposed to the payment of an ACP, the Advisors' Report suggests that the Council could establish a mechanism whereby if ENO fails to meet a target for a given year, it must "demonstrate why its failure was the product of prudent, just and reasonable decision-making," and "[t]o the extent the Council finds ENO's failure to meet the target to not be prudent, just and reasonable, the Council would then be able to impose a reasonable penalty."[73]

Requiring ENO's compliance with the Council's mandate (in whatever form it ends up assuming) while at the same time prohibiting ENO from recovering the associated costs of complying with such a mandate in the manner summarized above, would be arbitrary, unreasonable, and improper under the prudent investment rule.[74] In addition, the proposed

---

[70] *See,* Advisors' Report, at 35.

[71] *Id.* at 23-24 ("Cost recovery of the Alternative Compliance Payment should only be denied to ENO where it has been demonstrated that ENO's failure to meet the RPS goal was imprudent – such as where compliance was possible at a lower cost than the alternative compliance payment.").

[72] *Id.* at 23. If ENO so demonstrates, ENO would be excused from meeting the target in that compliance year; however, subsequent targets would not be changed. *Id.*

[73] *Id.* at 24.

[74] *See, e.g., In the Matter of Southwestern Public Service Company's Application for Revision of its Retail Rates under Advice Notice No. 245, Southwestern Public Service Company, Applicant,* Case No. 12-350-UT, Supplemental Recommended Decision of the Hearing Examiner, 2014 WL 2670535 (Feb. 12, 2014) (providing an example of recovery of renewable energy costs that is in line with the prudent investment rule). In that proceeding, the utility submitted a proposal to recover its renewable energy costs (incurred in response to the mandates of New Mexico's Renewable Energy Act ("REA")) through a new rate rider, including costs associated with long-term resources previously approved by the New Mexico Public Regulation Commission ("Commission"). In recommending approval of the utility's cost recovery mechanism, the hearing examiner noted that (1) in the light of the Commission approvals of the utility's RPS resource procurements and RPS Plans, and

(inverted) burden of proof with respect to recovery of the ACP in Alternatives 2 and 3[75] is also unduly burdensome on ENO to prove. Considering that any costs of compliance incurred by the Company would not only be presumed prudent under the prudent investment rule, but also would be incurred directly in response to any eventual Council mandate (and in the exercise of ENO's business judgment), the Council's disallowance of those costs (as described and contemplated in the above Alternatives) would be improper.

Second, to the extent that the suggested penalty mechanisms set forth standards that are inconsistent with prior Council decisions, those mechanisms are unlawful. The Council has, over the years, approved the acquisition and/or construction of ENO's resource portfolio, which includes Union Power Block 1 and other fossil resources. Setting RPS targets that are inconsistent with such prior approvals (*e.g.*, 100% of retail compliance sales (kWh) with 0% compliance through RECs by 2050),[76] while at the same time limiting the amount that ENO can spend to do this and penalizing ENO for failure to comply, would be unenforceable as a matter of law and cannot be allowed. ENO is entitled to rely on the Council's past decisions and operate its approved resources until the end of their useful lives. Therefore, any RPS standard adopted by the Council must not be structured to undermine those prior approvals or penalize ENO for relying on them.

Third, Alternative 2 includes the establishment of a CleanNOLA Fund ("Fund") established by (and administered under the direction of) the Council for the purpose of "fostering the reduction of carbon emissions in Orleans Parish."[77] This Alternative suggests that if ENO is unable to comply with the target for any given year, ENO should be required to deposit the ACP into the Fund, which Fund "shall prioritize projects designed to reduce carbon emissions from existing sources of such emissions in Orleans Parish."[78] The use of subjective terms like "fostering" and "prioritize," suggests flexibility in the use of the Fund. The Council's adoption of the concept of a CleanNOLA Fund as proposed therefore could be considered the imposition of a tax intended to raise revenue for the subsidization of such unspecified projects, as opposed to fees designed to implement a specific utility-regulatory program:

---

since the costs at issue were incurred consistent with such approvals, the REA provides assurances for recovery of such costs; and (2) an RPS Rider is a "reasonable mechanism to recover renewable energy costs because it benefits customers and shareholders by providing timely cost recovery of prudently incurred expenses and is consistent with the findings and purposes of the REA." *Id.* at *8 (citing Section 62-16-6(A) of the REA: "A public utility that procures or generates renewable energy shall recover, through the ratemaking process, the reasonable costs of complying with the renewable portfolio standard. Costs that are consistent with commission approval of procurement plans or transitional procurement plans shall be deemed to be reasonable."). In adopting the hearing examiner's recommendation, the Commission expressly found that the establishment of the RPS Rider provided "an appropriate mechanism to capture all of [the utility's] incremental RPS costs through one recovery mechanism and will benefit customers. *In Re Sw. Pub. Serv. Co.*, No. 12-00350-UT, 2014 WL 2573900 (Mar. 26, 2014).

[75] As ENO discussed in its Initial Comments and Reply Comments in this docket, ACPs are not designed to be penalties but recoverable compliance costs that utilities or competitive suppliers may pay in lieu of excessive REC costs. By limiting recovery of the ACP in the manner suggested by the Advisors, the Council would be presuming that ENO has been imprudent in not incurring costs to comply with an RPS.

[76] *See,* Advisors' Report, at Appendix A (Alternative 2), at 13.

[77] *Id.* at Appendix A (Alternative 2), at 15. Alternative 3 includes the establishment of a Public Purpose Fund. *Id.* at Appendix A (Alternative 3), at 21.

[78] *Id.* at Appendix A (Alternative 2), at 15.

> [I]f revenue is the primary purpose for an assessment and regulation is merely incidental, or if the imposition clearly and materially exceeds the cost of regulation or conferring special benefits upon those assessed, the imposition is a tax.

Audubon Ins. Co. v. Bernard, 434 So. 2d 1072, 1074 (La. 1983) (finding that a legislative act requiring insurance companies to contribute amounts to the Firefighters' Retirement System was a tax as opposed to a regulatory fee).[79] Moreover, it is not clear that such a tax would be permissible under the City's Home Rule Charter.[80] In addition, to the extent that the City, through the Fund, would be loaning, pledging, or donating public funds for use by a company undertaking any such "projects designed to reduce carbon emissions from existing sources of such emissions in Orleans Parish," such outlays could be prohibited by Article VII, § 14(A) of the Louisiana Constitution.[81]

Finally, as noted above, there are several inconsistencies and items requiring clarification in each of the three Alternatives. Because any mandate ultimately adopted by the Council would impact ENO's entire resource portfolio and operation, any such rules that are adopted must be reasonably clear, and compliance therewith must actually be possible, for the rules to be valid and enforceable. Otherwise, ENO will be in the unfavorable position, from now until the year 2040 (or 2050), of being required to meet unrealistic (if not impossible) and uneconomic targets, with little room for variation, within spending limits that are too low, and unable to recover dollar-for-dollar costs incurred and/or alternative compliance payments made. This combination of circumstances would result in a utility that is hamstrung in its ability to combat the long-term effects of climate change in a meaningful way, all of which is directly contrary to the stated goals of the Council in initiating this Docket. The Council should create a simple, realistic, and flexible regulatory framework that will facilitate continued emissions reductions, while keeping rates low and preserving reliability, not one that will impede further progress on these important goals.

VIII. Conclusion

ENO greatly desires to continue to work with the Council, the Advisors, and stakeholders in a productive manner on reducing emissions, keeping rates low, and preserving reliability. Adoption of a technology-neutral clean energy standard policy such as the 70% CES proposed by ENO will be critical to achieving these goals, as will the setting of a simple and flexible regulatory mechanism. ENO believes that many of the ideas submitted for consideration in the Advisors' Report can support the policy goals of lowering emissions, keeping rates low, and preserving

---

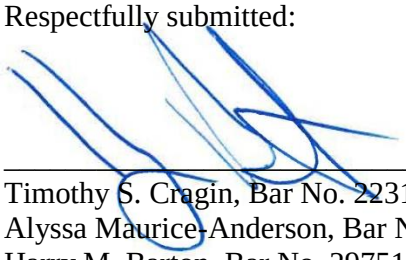
[79] *See also, Safety Net for Abused Persons v. Segura*, 96-1978 (La. 4/8/97), 692 So. 2d 1038 (holding that a statutorily-mandated fee was a tax).

[80] *See,* Home Rule Charter of the City of New Orleans, at Section 3-101(2) (setting forth the power of the Council to levy taxes "necessary for the proper operation and maintenance of the municipality for the payment of debt, and for capital improvements that are not expressly prohibited by the Constitution . . .").

[81] *See, e.g.*, La. Const. art. VII, § 14(A) ("Prohibited Uses. Except as otherwise provided by this constitution, the funds, credit, property, or things of value of the state or of any political subdivision shall not be loaned, pledged, or donated to or for any person, association, or corporation, public or private."). *See also Board of Directors of the Industrial Development Board of the City of Gonzales, Louisiana, Inc. v. All Taxpayers, Property Owners, Citizens of the City of Gonzales, et al.*, 2005-2298 (La. 9/6/06), 938 So. 2d 11 (setting forth a three-part test to determine whether an expenditure of public funds is a prohibited donation that violates La. Const., art. VII, § 14(A)).

reliability, while others would detract from those objectives. ENO hopes that, following this initial phase of the proceeding, the Council will confirm that these are in fact its desired policy objectives, provide a long-term path to reduce harmful carbon emissions as supported by the analyses submitted by ENO to date, and then set out the additional procedural steps that will be necessary to come to ground on a simple, viable, and workable regulatory framework for achieving them.

Respectfully submitted:

BY: 

Timothy S. Cragin, Bar No. 22313
Alyssa Maurice-Anderson, Bar No. 28388
Harry M. Barton, Bar No. 29751
639 Loyola Avenue, Mail Unit L-ENT-26 E
New Orleans, Louisiana 70113
Telephone: (504) 576-2984
Facsimile: (504) 576-5579

ATTORNEYS FOR
ENTERGY NEW ORLEANS, LLC

Appendix A - Emission Rate Reduction Projection for ENO's 70% by 2030 CES Proposal

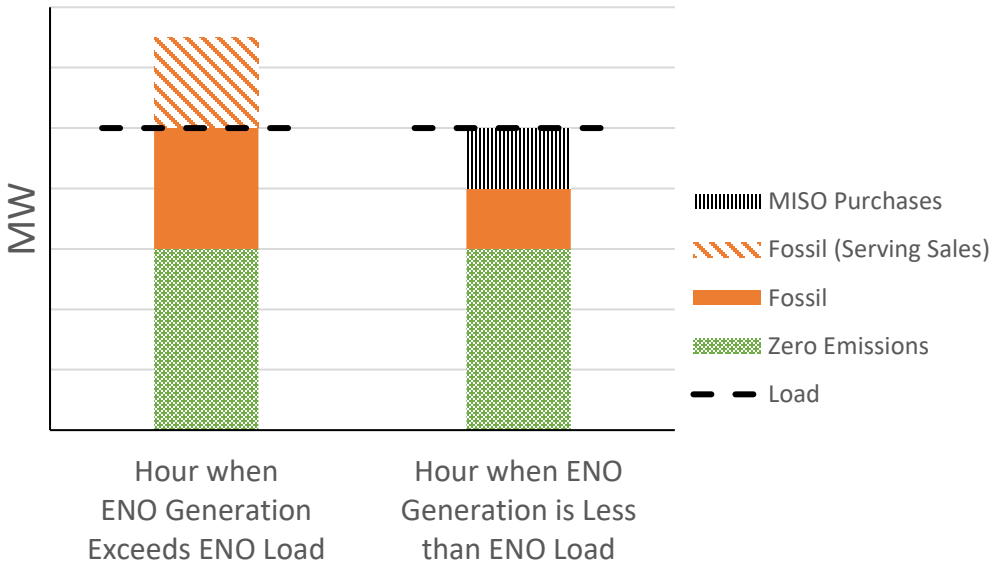
ENO's Comments discuss the carbon emissions reductions projected to be achieved under its proposal for a Clean Energy Standard of 70% by 2030. This Appendix discusses the methodologies used to project these anticipated carbon emissions reductions.

Methodology

In order to create an estimate of the emissions and emissions rate associated with serving customers, Entergy New Orleans ("ENO") found it necessary to distinguish between the megawatt-hours (and associated emissions) generated from ENO's portfolio in order to meet ENO customer demand and the megawatt-hours generated to source sales into markets operated by the Midcontinent Independent System Operator, Inc. ("MISO").

ENO has historically been "net long" with its energy generation such that over an entire year ENO's owned resources produce an amount of generation in excess of the total demand of ENO's customers. This is because ENO's resources are committed and dispatched by MISO in order to meet load across the MISO footprint with the resources that have the lowest variable costs. At times, ENO fossil resources may be dispatched by MISO even though they are not needed to meet ENO load; in these hours, the resource will earn a margin between its operating costs and the wholesale energy price to the benefit of customers. Other times, some ENO fossil resources may not be dispatched even if generation from ENO's portfolio is below its load; in these hours, MISO has determined that it is more cost-effective for ENO to meet load with a purchase from the MISO energy market.

Illustrative Diagram of Sources Serving ENO Load



Assigning zero-emission resources will serve ENO load ahead of fossil resources is reasonable because it is consistent with the MISO dispatch order. In practice, zero-emission

resources are either intermittent (like solar) or their output is self-scheduled (like nuclear, which operates at or close to maximum capacity when not in an outage), meaning MISO accounts for the output of these resources before dispatching other generators like fossil-fueled resources. The *variable* operating costs of nuclear, hydro, and solar resources are lower than those for fossil-fueled resources and would be dispatched first by MISO even if they were not intermittent or self-scheduled.

ENO uses these principles to estimate the emissions and emissions rate associated with serving ENO customer load. Using the most recent twelve months of available data (covering July 2018 to June 2019) from Entergy's System Planning & Operations department ("SPO"), ENO accounted for three categories of resources as follows:

- Zero-emissions resources: As the first resources assigned to ENO customer demand, nearly all energy generated from zero emissions resources including nuclear, hydro, and solar is used to serve ENO load.
- MISO purchases: Since purchases are made from MISO only in hours when ENO generation is less than ENO load, all megawatt-hours from MISO purchases are used to serve ENO load. The emission rate assigned to these purchases is an estimate of the MISO marginal emissions rate; that is, the emission rate from the last resource dispatched by MISO to meet demand, *i.e.*, the resource on the margin. The marginal emissions rate is estimated by multiplying the CO_2 content of natural gas fuel by the average annual implied marginal market heat rate (*i.e.*, dividing the annual average Locational Marginal Price by the average Henry Hub spot gas price). This reflects the average fuel use rate of a natural gas unit setting the market energy price.
- Fossil resources: All load not served by zero-emissions resources or MISO purchases is met by ENO fossil resources. Although each fossil resource might serve sales and load in different proportions depending on the hours in which it is operated, ENO assumed that the fossil generation serving load had the same emission rate on average as the fossil generation serving sales. This avoided the need to create a complex resource stacking hierarchy in every hour in the year to determine precisely which fossil resources served load or sales. Because the majority of ENO's fossil generation (88%) comes from two resources (Union and Ninemile 6) with similar emission rates, the impact of this simplifying assumption is minor.

Results

The table below shows the emissions associated with serving ENO load over the July 2018 to June 2019 period at an average rate of 465 lbs CO_2/MWh.

Derivation of ENO Customer Emissions and Average Emission Rate, July 2018-June 2019

	Total Thousand MWh	**Thousand MWh Assigned to Serve ENO Customer Demand**	**Average Emission Rate (lbs CO_2/MWh)**	**Thousand Tons CO_2 to Serve ENO Load**
Zero Emissions	3,038	3,037	0	0
Fossil Resources	3,918	2,387	861	1,027
MISO Purchases	607	607	1,235	374
Total	**7,563**	**6,031**	**465**	**1,402**

ENO repeated this calculation for 2030 under its proposed 70% Clean Energy Standard based on projected generation from SPO's AURORA modeling.

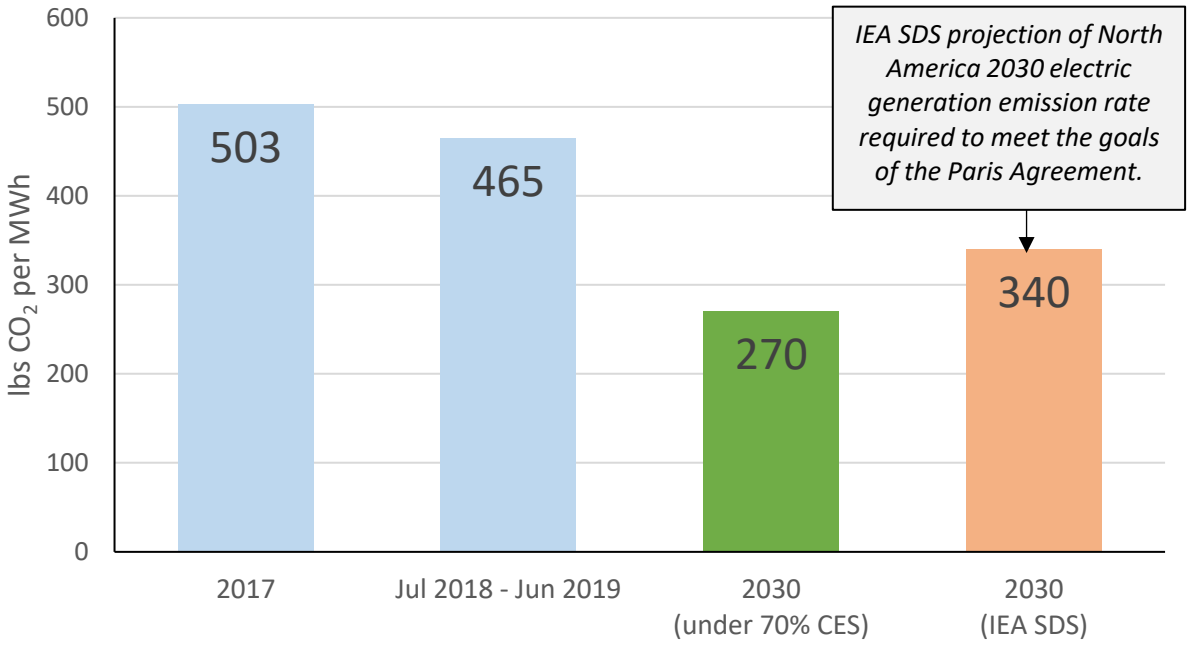
Projection of ENO Customer Emissions and Average Emission Rate, 2030 under 70% CES

	Total Thousand MWh	**Thousand MWh Assigned to Serve ENO Load**	**Average Emission Rate (lbs CO_2/MWh)**	**Thousand Tons CO_2 to Serve ENO Load**
Zero Emissions	4,009	4,002	0	0
Fossil Resources	4,643	2,109	799	843
MISO Purchases	121	121	1,182	71
Electrification[1]				(74)
Total	**8,772**	**6,232**	**270**	**840**
% Reduction			**-42%**	**-40%**

ENO projects that if its Clean Energy Standard proposal is adopted and implemented, ENO's CO_2 emission rate as of 2030 would be approximately 270 lbs. CO_2/MWh, a 40% reduction from today's levels. This compares favorably to electric generation emission rates predicted by the International Energy Agency ("IEA") to be necessary to meet the goals of the Paris Climate Accord. At 270, ENO's emissions will be below those required by the IEA Sustainable Development Scenario ("IEA SDS") for electric generation in North America in 2030 as shown in the chart below.

[1] The projected net emissions reduction from Sewerage & Water Board electrification is deducted from the tons associated with serving ENO load.

ENO Emission Rate Projection under CES Compared to IEA SDS



Appendix B: Diminishing Returns of Incremental Grid-Scale Solar Above 70% CES

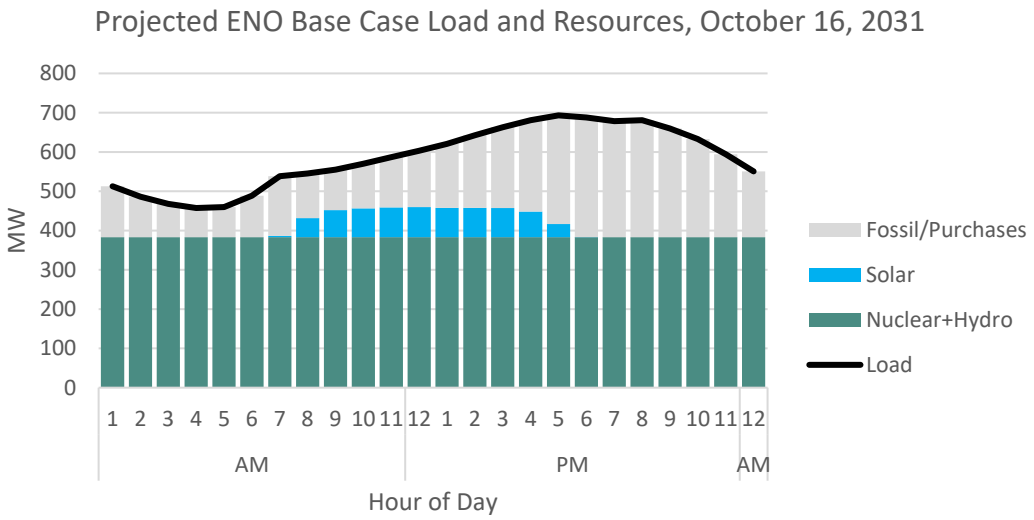
Figure 1 on page 10 of ENO's Comments illustrates that as ENO pursues higher levels of solar adoption, it will begin using more and more of the solar output to serve sales into the Midcontinent Independent System Operator, Inc. "(MISO") market rather than to serve ENO customer load. This Appendix describes the methodology behind the calculation of this figure and the conclusions to be drawn from its results.

Source of Data: Entergy's System Planning and Operations ("SPO") department uses the AURORA dispatch model, a tool commonly used across the electric industry to project wholesale energy prices, project hourly power plant operations, and inform resource planning decisions. SPO provided ENO with hourly outputs from a run of their AURORA model that was adapted to include higher levels of grid-scale solar resources. These outputs include hourly loads from 2030-2035 and hourly generation from zero-emissions resources in ENO's portfolio (including nuclear, contracted hydro, and owned solar). ENO's planned solar resources approved in Dockets UD-17-05 and UD-18-06 are all included in this portfolio.

Base Case: On an hour-by-hour basis for all hours between 2030 and 2035, ENO compared its projected load to the projected generation of its ownership share of zero-emissions resources in its supply plan. For these calculations ENO assumes that all clean generation is considered to serve load before any fossil generation is assigned to serve customer load.

In nearly all hours, ENO load is greater than the amount of zero-emission generation. In these hours, the rest of ENO customer demand is served by ENO's fossil resources and, if needed, from MISO market purchases. In approximately ten hours per year, ENO is projected to have clean energy in excess of its load, in which case some clean generation would be sold into the MISO market. Less than one tenth of one percent clean energy from ENO's base case portfolio is projected to be sold to MISO.

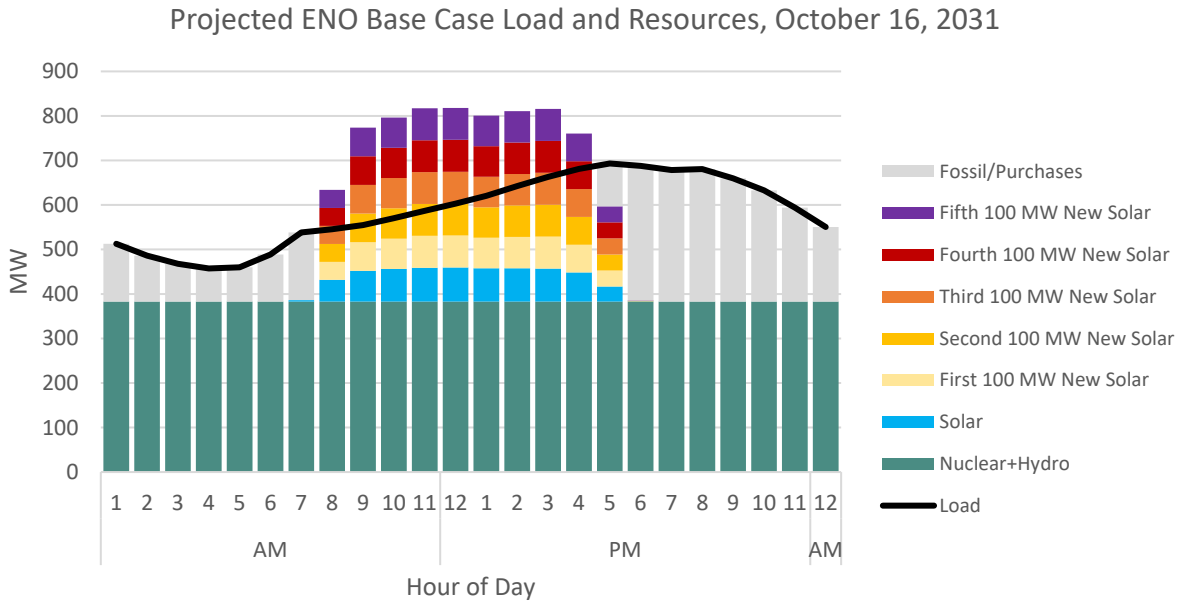
As an example, the graph below illustrates the mix of resources projected to serve ENO customer load during a sample day in October 2031:



Output from nuclear (and a small amount of hydro) provides a baseload level of clean generation during all hours. Solar generation is received beginning at 8am, when ENO load begins to increase from overnight levels, and continues through the 5pm hour, when ENO load approaches its peak in this day. In every hour of this day, ENO's clean generation is less than ENO load, so no clean energy is sold to MISO.

Additional Solar Case: ENO's analysis also utilized the hourly output profile of a generic new solar resource. To examine how much clean energy would be sold to MISO were ENO to add increasing levels of grid-scale solar to its portfolio, this new solar generation profile was scaled up or down to reflect any megawatt quantity of new solar acquired by ENO.

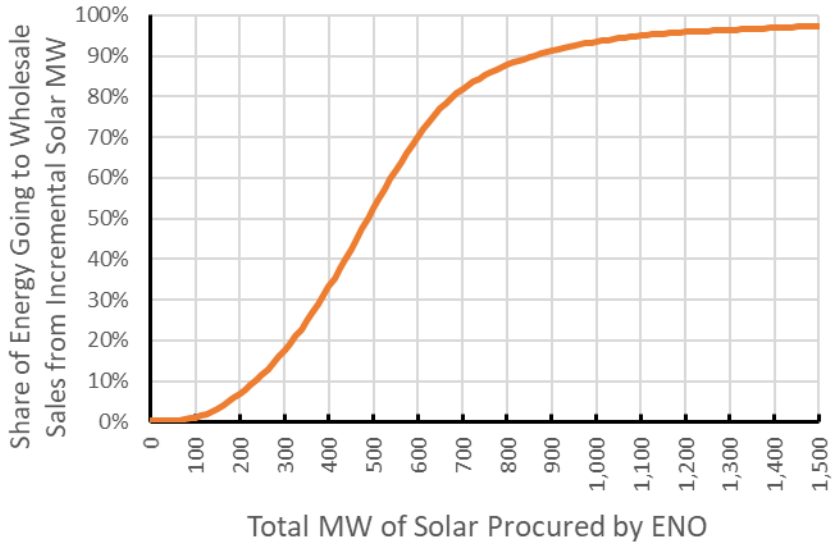
The figure below shows the solar output for the first, second, third, fourth, and fifth 100 MW blocks of solar added to ENO's portfolio for the sample day examined above.



In this day, the output from an additional 100 MW of solar (depicted in light yellow) could be added to ENO's portfolio and would be used to meet ENO customer demand. The second 100 MW of solar (depicted in gold) would largely serve ENO customers, but in 9am, 10am, and 11am some portion of the generation would exceed ENO customer load and would be sold into MISO. Output from a third 100 MW of solar (in orange) would be sold into the MISO market in its entirety in the 9am, 10am, and 11am hours and would be sold in part in the 12pm, 1pm and 2pm; about half of the energy produced by this block of solar capacity would not be needed to meet ENO load in this hour. By the time that fifth 100 MW of capacity is added, there is only one hour in this day (5pm) in which the solar output is used to meet ENO load rather than being sold into MISO. And, despite the additional megawatts and megawatt-hours in ENO's portfolio, ENO must still rely on other resources or purchases to meet load during the evening hours when ENO's load is highest.

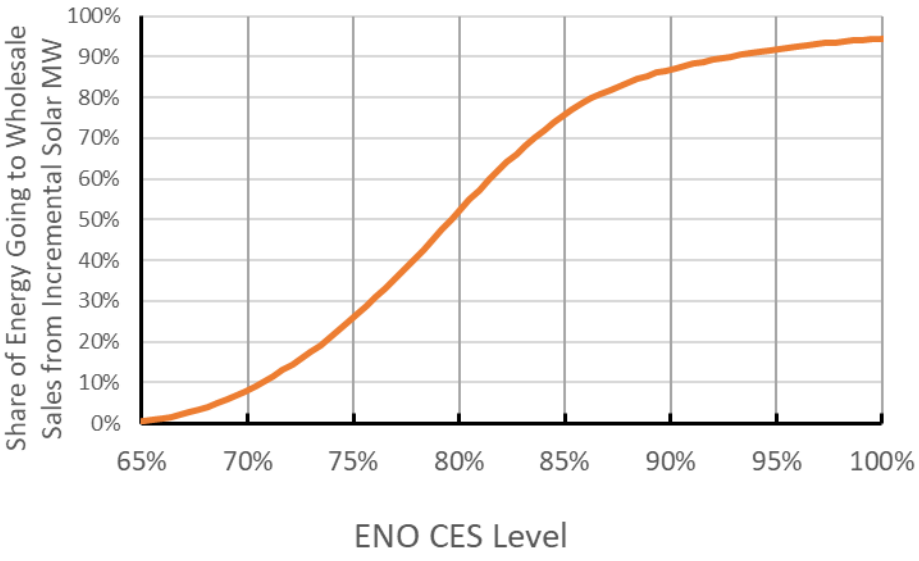
Across an entire year, there will be a wide variety of days – days with high load, days with low load, days with little solar output, days with high solar output – and not every day will be just like this sample day. Nonetheless, some portion of the output of additional solar will be used to serve MISO sales rather than ENO load in some days, and the output from each additional megawatt of solar capacity is less likely to be used to meet ENO customer demand than the previous megawatt.

Results: To understand the extent of these diminishing returns, ENO repeated the analysis illustrated above across every hour for six years of AURORA output (2030-2035) for amounts of additional solar ranging from 1 MW to 1,500 MW. The graph below shows the percent of the generation from each incremental MW of grid-scale solar that is projected to serve MISO sales rather than ENO load. That is, the point on the graph corresponding to 300 MW (18%) indicates that the 300th megawatt of solar added would see 18% of its generation sold into the MISO market while 82% of its generation would be used to serve ENO load.



Once 200 or 300 MW of solar have been added to the ENO portfolio, there is a sharp increase in the amount of generation serving sales from each additional megawatt. By the time 500 MW are added, more than half of the energy from each additional MW would serve MISO sales instead of ENO load. While ENO would receive Renewable Energy Credits ("RECs") from all the generation, only a portion would actually be used to meet ENO demand.

The figure below considers these results in terms of the Clean Energy Standard ("CES") level ENO would achieve rather than in megawatts of solar capacity. At ENO's recommended 70% CES level, over 90% of solar output is used to meet ENO load. At an 80% CES level, over half of the energy from the last megawatt acquired is being used to serve MISO sales.



This calculation was performed using a compliance portfolio made entirely of grid-scale resources because grid-scale solar is expected to be among the most cost-effective compliance options. Though the actual compliance portfolio may include a mix of resources, these conclusions will

still largely hold true. Customer-sited solar generation will be produced in the same hours as grid-scale solar, although at different levels of output. The profile of energy efficiency reductions will depend on the measures adopted but could very well produce reductions concentrated in the daylight hours when solar generation is received by ENO.

Appendix C – Total System Average Rate Impacts of Advisors' Proposed Alternatives

For each of the Alternatives submitted with the Advisors' Report, Entergy New Orleans, LLC ("ENO" or the "Company") evaluated compliance under a variety of approaches. All scenarios assume organic growth in the level of customer-owned solar, implementation of the energy efficiency reductions projected in ENO's 2019 Business Plan, and some level of beneficial electrification – specifically, that ENO endeavors to electrify the energy needs at the Sewerage & Water Board ("S&WB") that are currently met with self-generation. For Alternatives 1 and 2, ENO considered meeting its remaining compliance obligation by A) primarily utilizing grid-scale solar;[1] B) incenting the construction of as much customer-sited solar as is expected to be technically feasible, with grid-scale solar meeting the remaining requirements; or C) pursuing additional energy efficiency combined with some level of customer-sited and grid-scale solar. Under Alternative 3, ENO considered A) primarily utilizing grid-scale solar; B) pursuing additional energy efficiency, incenting as much customer-sited solar as is expected to be feasible, and using grid-scale solar; and C) resource development akin to the balance proposed by the Energy Future New Orleans ("EFNO") Coalition, even if not technically feasible (10% of new clean megawatt-hours from customer-sited solar with storage, 20% from other customer-sited solar, and the remaining megawatt-hours from grid-scale solar and electrification). The compliance scenarios are summarized in the tables below:

	Alternative 1			**Alternative 2**			**Alternative 3**		
Compliance Requirements	10% RPS in 2025 15% RPS in 2030 23% RPS in 2035 35% RPS in 2040 100% clean in 2040			62% RCPS in 2021 80% RCPS in 2030 100% RCPS in 2040			20% RPS in 2023 25% RPS in 2025 40% RPS in 2029 55% RPS in 2033 100% RPS in 2040		
Measures Already Planned	100 MW of renewables, EE in 2019 Business Plan, organic growth in customer-sited net energy metered (NEM) solar								
Scenario Abbreviation	**1-A**	**1-B**	**1-C**	**2-A**	**2-B**	**2-C**	**3-A**	**3-B**	**3-C**
S&WB Electrification	✓	✓	✓	✓	✓	✓	✓	✓	✓
Grid-Scale Solar	✓	✓	✓	✓	✓	✓	✓	✓	✓
NEM Solar		✓	✓		✓	✓		✓	✓
Additional EE			✓			✓		✓	
NEM Solar + Storage									✓
REC Purchases									

In these scenarios, ENO has not assumed any purchase of Renewable Energy Credits ("RECs") from Midcontinent Independent System Operator, Inc. ("MISO") resources from which ENO does not also receive energy and capacity. Although purchasing RECs is an option that ENO could utilize if permitted by the framework ultimately set through this proceeding, ENO intends to target compliance from owned resources, contracted resources, and from RECs created by measures implemented within Orleans Parish unless purchasing RECs is in the best economic interests of customers or doing so is necessary because other resources deliver less clean energy

[1] For grid-scale solar additions, ENO assumed 50% of the additions would be owned resources and 50% would be through Purchase Power Agreements ("PPAs").

than expected. ENO believes this approach is most consistent with the intent underlying the adoption of an emissions standard for New Orleans, *i.e.*, actually reducing carbon emissions associated with ENO's electric load.

These scenarios represent the Alternatives as best understood by ENO including the proposed REC multipliers, cost caps, and determination of annual compliance credit obligations. These scenarios are not meant to serve as plans that ENO would actually implement, but, are rather designed to provide indicative estimates of the relative cost impact to customers and illustrate the costs or challenges created by various approaches to compliance within the structures proposed in the Alternatives. While ENO acknowledges the Advisors' recommendation that portfolios be "diversified as to the type of renewable energy resource, taking into consideration the overall reliability, availability, dispatch flexibility and cost of the various renewable energy resources made available by suppliers and generators,"[2] ENO's ultimate compliance strategy can only be determined after the Council delivers a final rule and that rule has been carefully analyzed by ENO.

While the calculated total system average rate ("TSAR") impacts provide a point estimate of system-wide cost impacts, each compliance pathway will have a different level of risk and uncertainty surrounding that estimate.[3] There are other factors to consider that could greatly impact customer costs under any scenario, including:

- As discussed in Section III.b. and Appendix B of ENO's Comments, acquiring a large quantity of solar resources will require ENO to sell increasing amounts of generation from each incremental megawatt into the MISO wholesale energy market, exposing ENO customers to increasing levels of cost uncertainty. If other entities in the region also pursue high levels of solar development, the value of the energy produced and sold into MISO during middays hours could be depressed (as has happened in places like California).

- The projections of costs and benefits of resources used for compliance can change suddenly in many ways: the expected energy value of a project can fluctuate due to changes to natural gas prices or the regional supply and demand balance; the expected hourly or seasonal profile of energy prices can change, for example if high levels of solar development across the region depress the wholesale price of energy during hours when solar generation occurs; the capacity value attributed to solar for planning purposes (currently 50% of nameplate capacity) can change suddenly should MISO reconfigure its capacity crediting methodology or should the timing of hours of peak demand change; greater transmission and distribution system investment could be required to accommodate high levels of certain compliance resources, etc. The levels of Net Energy Metering ("NEM") solar assumed may not be attainable given the incentive level assumed in the ENO cost impact calculations and it may be much more expensive to spur incremental adoption of rooftop solar beyond a certain point.

---

[2] Advisors' Report, Appendix A, pg. 4. These requirements mirror several objectives of the Council's Integrated Resource Plan ("IRP") Rules, reinforcing the prudence of using the IRP, rather than a new and duplicative annual process, to formulate and assess ENO's compliance strategies.

[3] A description of the TSAR calculation is found in Section e of this Appendix.

- The underlying costs of any technology could change due to technology improvements; changes to tax incentives provided by federal, state, or local entities; macroeconomic factors affecting production (*e.g.*, international tariffs); emergence of competing technologies; or any number of other circumstances.

a. Alternative 1

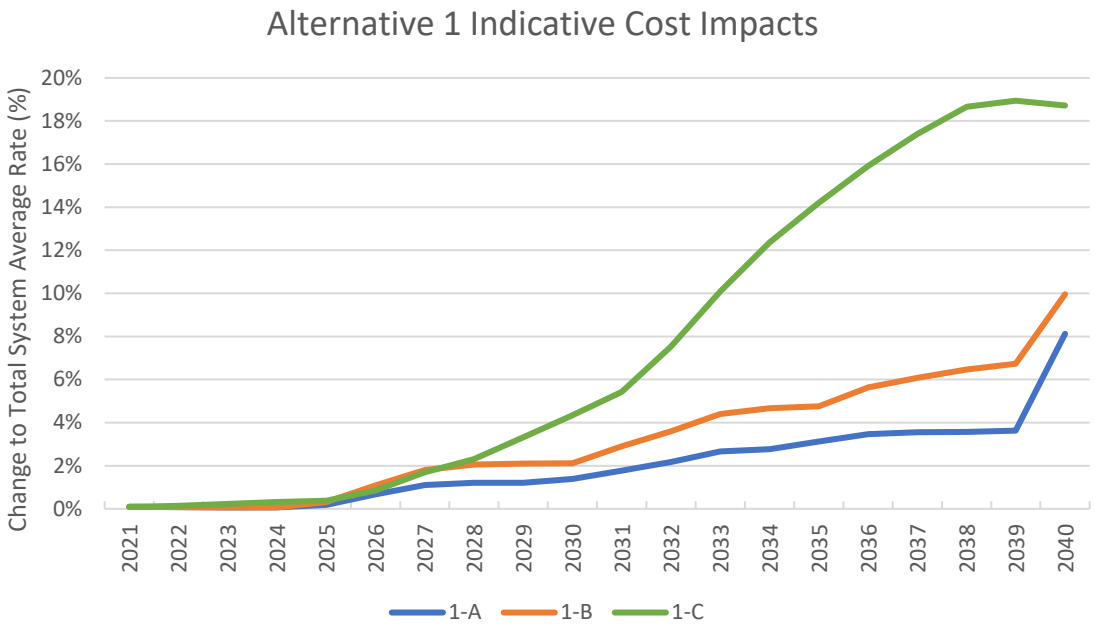
Alternative 1 is a Renewable Portfolio Standard with requirements of 10% in 2025, 15% in 2030, 23% in 2035, and 35% in 2040. The proposal also requires that in 2040 ENO achieve 100% of sales with zero-emission resources and credits. Tier 1 resources – defined as those "sited within the City of New Orleans including renewable energy resources, distributed generation systems no more than 5 MW (e.g. net metering and community solar), demand-side management/energy efficiency, and Beneficial Electrification of commercial/industrial equipment"[4] – would receive a 1.5 credit multiplier through 2040.

A detailed summary of each of the Alternative 1 scenarios and the TSAR impact of these scenarios are shown below.

	Alternative 1		
Compliance Requirements	10% RPS in 2025, 15% RPS in 2030, 23% RPS in 2035, 35% RPS in 2040, 100% clean in 2040		
Measures Already Planned	100 MW of renewables,[5] EE in 2019 Business Plan, organic growth in customer-sited NEM solar		
Scenario Abbreviation	**1-A**	**1-B**	**1-C**
Electrification	S&WB	S&WB	S&WB
Grid-Scale Solar	1,015 MW total 25 MW per year 2025-2030 45 MW per year 2031-2035 70 MW per year 2036-2040 Add'l 280 MW in 2040 to meet 100% clean req.	640 MW total 15 MW per year 2025-2030 30 MW per year 2031-2035 45 MW per year 2036-2040 Add'l 185 MW in 2040 to meet 100% clean req.	255 MW total 25 MW in 2026 45 MW per year 2038-2040 Add'l 95 MW in 2040 to meet 100% clean req.
NEM Solar	--	190 MW total 7 MW per year 2025-2030 13 MW per year 2031-2035 18 MW per year 2036-2040	30 MW total 1.5 MW per year 2022-2040
Additional EE	--		Navigant 2% Scenario
NEM Solar + Storage	--	--	--
REC Purchases	--	--	--

[4] Advisors' Report, Appendix A, p. 5.

[5] The statement in Section 3.a.5 (Advisors' Report, Appendix A, p. 4) that renewables in the Company's supply portfolio on July 1, 2020 shall be counted for compliance purposes implies that resources coming online after that date (such as the three resources totaling 90 MW approved in UD-18-06) would not be counted. The Company suggests that energy generated by these new renewable resources should be counted for compliance purposes and that this language should be edited to make that point clear.



ENO's analysis projects that, based on currently forecasted prices and costs, compliance plans similar to scenarios 1-A and 1-B could produce TSAR impacts on the order of 0% to 2% from 2025-2030, 2% to 5% from 2030-2035, and 4% to 10% by 2040.

Additionally, there is a sharp increase in the TSAR impact between 2039 and 2040 in scenarios 1-A and 1-B due to the assumption that a large amount of grid-scale solar would be installed in 2040 in order to achieve the 100% zero-carbon requirement. Although this would exceed the cost cap, and in reality ENO would stagger the procurement of the resources needed to extend beyond the 35% RPS requirements to achieve the 100% zero-carbon requirement, ENO nonetheless assumed a single-year procurement of these additional measures in order to illustrate the relative difference in costs associated with the 100% zero-carbon component of Alternative 1 and costs associated with the 35% RPS.

The impact to the TSAR in scenario 1-C exceeds the other scenarios in large part due to three effects. First, in later years it becomes increasingly expensive to achieve new energy efficiency reductions. Second, the reductions delivered by a given energy efficiency measure are expected to degrade somewhat in the years after a measure is installed, which requires increasing effort in later years to not only achieve new reductions but to replace declining reductions from previously installed measures. Third, because energy efficiency measures reduce total metered retail sales, ENO's revenue requirements will be left to be collected from a smaller quantity of metered megawatt-hours which increases the total system average rate. This effect occurs to some extent in any measure that reduces total metered sales, including net metered solar deployment.

b. Alternative 2

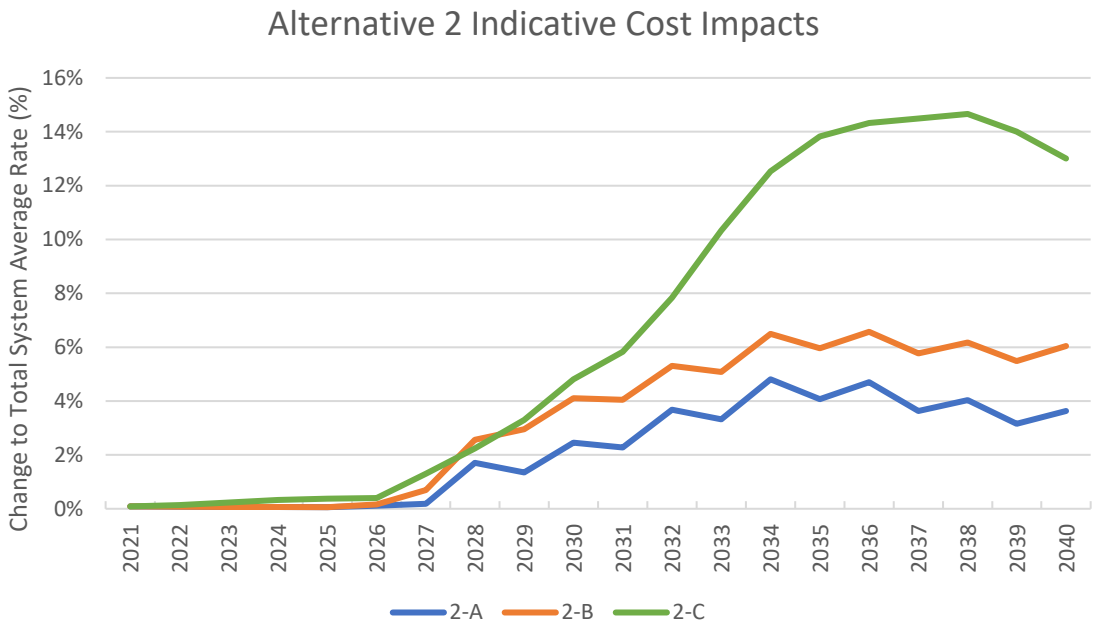
Alternative 2 is a Renewable and Clean Portfolio Standard ("RCPS") with requirements of 62% in 2021, increasing by 2% per year until reaching 100% in 2040. There are limits to the amount of compliance that can be met with REC purchases that become more stringent in 2030 and again after 2040. Tier 1 resources – defined as "any resource or measure that reduces carbon emissions from existing sources within Orleans Parish,"[6] including electrification, would receive a 1.5 credit multiplier through 2040. Tier 2 resources – defined as "any renewable or zero-emissions distributed generation resource in Orleans Parish, as well as any utility [demand-side management] DSM Program or utility Conservation Program including the Energy Smart Program and any successor thereto,"[7] would receive a 1.25 credit multiplier through 2040.

A detailed summary of the Alternative 2 scenarios and the TSAR impact of these scenarios are shown below.

	Alternative 2		
Compliance Requirements	62% RCPS in 2021, 70% RCPS in 2025, 80% RCPS in 2030, 90% RCPS in 2035, 100% RCPS in 2040		
Measures Already Planned	100 MW of renewables, EE in 2019 Business Plan, organic growth in customer-sited NEM solar		
Scenario Abbreviation	**2-A**	**2-B**	**2-C**
Electrification	S&WB	S&WB	S&WB
Grid-Scale Solar	850 MW total 65 MW avg. per year 2028-2040	510 MW total 40 MW avg. per year 2028-2040	160 MW total 12 MW avg. per year 2028-2040
NEM Solar	--	190 MW total 14 MW per year 2027-2040	30 MW total 1.5 MW per year 2022-2040
Additional EE	--	--	Navigant 2% Scenario
NEM Solar + Storage	--	--	--
REC Purchases	--	--	--

[6] Advisors' Report, Appendix A, p. 11.

[7] Advisors' Report, Appendix A, p. 11.



ENO's analysis projects that, based on currently forecasted prices and costs, compliance plans similar to scenarios 2-A and 2-B could produce TSAR impacts on the order of 0% to 4% from 2025-2030, 2% to 7% from 2030-2035, and 3% to 7% from 2035-2040. Because scenario 2-C is similar in structure to scenario 1-C, the TSAR impacts show a similar pattern.

The saw-toothed pattern of years with alternating increases and decreases in the TSAR are a result of nuclear refueling outage schedules. Although ENO receives a share of the output from five different nuclear reactors, its largest share is from Grand Gulf Nuclear Station ("GGNS"), which undergoes refueling outages every two years. Greater levels of incremental compliance are needed in these even-numbered years, which leads to procurement of most (if not all) new resources in even-number years. In many instances in the Alternative 2 scenarios, ENO would procure a quantity of resources in a GGNS refueling year that would ensure a surplus of compliance credits in the following year, even as the credit requirement increased. This expected procurement of surplus credits could be avoided if the Council were to allow compliance to be measured across multiple years in response to this predictable variability in the level of output from ENO's clean resources.

c. Alternative 3

Alternative 3 is an attempt to track the EFNO coalition's Resilient-Renewable Portfolio Standard ("R-RPS"), as modified by the Advisors, through a Renewable Portfolio Standard with requirements of 20% in 2023, 25% in 2025, 40% in 2029, 55% in 2033, and 100% in 2040. Tier 1 resources – defined as "any separately-metered resilient energy resource located within Orleans Parish, (i) either on the retail customer's side of the electric meter and participating in a Council-approved program, (ii) or utility grid-connected, and (iii) operating as part of a dispatchable micro

grid system,"[8] would receive a 1.5 credit multiplier through 2040. Tier 2 resources – defined as "any renewable distributed generation resource located in Orleans Parish that does not qualify as a Tier 1 resource, as well as any utility DSM Program or utility-managed Conservation Program, including the Energy Smart Program and any successor thereto,"[9] would receive a 1.25 credit multiplier through 2040.

Scenario 3-A utilizes S&WB electrification and grid-scale solar to meet the compliance obligation. Scenario 3-B uses S&WB electrification, additional energy efficiency, incentives for net energy metered solar up to the maximum level that is believed to be technically feasible, and grid-scale solar. Scenario 3-C is consistent with the compliance mix that the EFNO Coalition included in their July 2019 proposal: 10% of megawatt-hours from customer-sited solar with storage, 20% from other customer-sited solar, and the remaining megawatt-hours from grid-scale solar and electrification. Though the mix of compliance measures assumed for scenario 3-C is not expected to be technically feasible, it is shown for illustrative purposes.

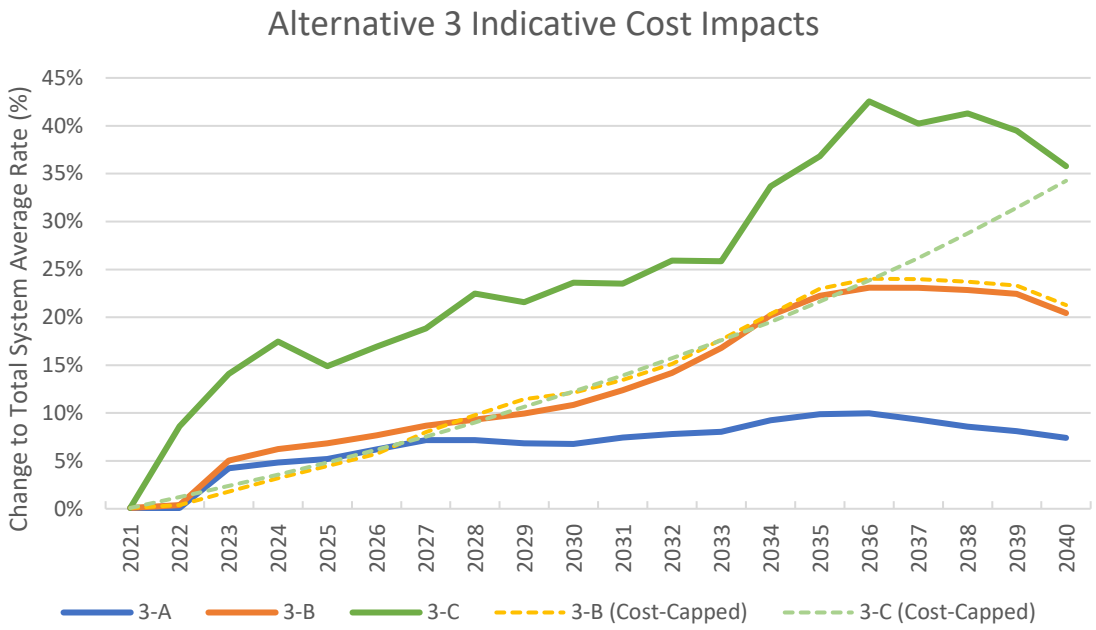
Unlike Alternatives 1 and 2, the cost caps become a frequent constraint in two of the scenarios for Alternative 3. As such, ENO first examined three compliance scenarios in the absence of cost caps to understand what levels of TSAR would be associated with meeting the Alternative 3 targets. Subsequently, ENO also considered cost-capped versions of each scenario.

A detailed summary of the Alternative 3 scenarios and the TSAR impact of these scenarios is shown below.

	Alternative 3		
Compliance Requirements	20% RPS in 2023, 25% RPS in 2025, 40% RPS in 2029, 55% RPS in 2033, 100% RPS in 2040		
Measures Already Planned	100 MW of renewables, EE in 2019 Business Plan, organic growth in customer-sited NEM solar		
Scenario Abbreviation	**3-A**	**3-B (Uncapped)**	**3-C (Uncapped)**
Electrification	S&WB	S&WB	S&WB
Grid-Scale Solar	2,530 MW total 105 MW per year 2023-2033 195 MW per year 2034-2040	1,570 MW total 65 MW per year 2023-2033 125 MW per year 2034-2040	1,310 MW total 55 MW per year 2023-2033 125 MW per year 2034-2040
NEM Solar	--	180 MW total 9 MW per year 2022-2040	450 MW total 15 MW per year 2022-2025 20 MW per year 2026-2033 30 MW per year 2034-2040
Additional EE	--	Navigant 2% Scenario	--
NEM Solar + Storage	--	--	225 MW total 8 MW per year 2022-2025 10 MW per year 2026-2033 15 MW per year 2034-2040
REC Purchases	--	--	--

[8] Advisors' Report, Appendix A, p. 18

[9] *Id.*

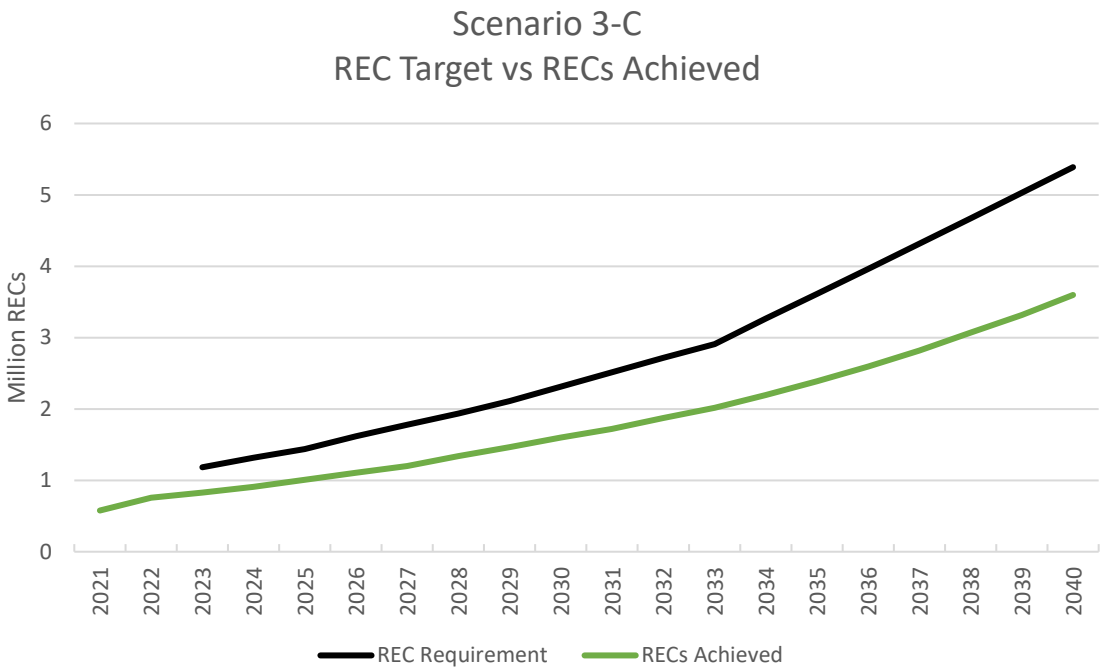


Relative to the other Alternatives in the Advisors' Report, Alternative 3 shows significantly higher cost impacts. All scenarios show TSAR increases of more than 5% in all years, and in the case of scenario 3-C actually achieving the standard would entail total system average rate increases in excess of 40% in some years.[10]

The projected cost impacts alone should be sufficient justification to eliminate Alternative 3 from consideration. Compounding the problems with Alternative 3 is the fact that these costs would be incurred in order to replace existing zero carbon, clean resources like ENO's baseload, around-the-clock nuclear generation with largely non-dispatchable, intermittent resources.

Alternative 3 was structured to resemble the EFNO Coalition's R-RPS concept, but the plan set forth by EFNO would fall considerably short of achieving its own goal, even with the benefit of REC multipliers for its Tier 1 and Tier 2 resources. The figure below shows the difference between the REC targets and the level of RECs achieved under the cost-capped versions of scenario 3-C. Due to its prohibitive costs, scenario 3-C would only achieve 65% to 70% of the REC requirement in each year. Without the effect of multipliers, the actual number of clean megawatt-hours achieved would be even lower.

[10] Scenario 3-C, although similar in design structure to the previous analysis of the EFNO Coalition's R-RPS described in Section III.c. of ENO's Comments, is not identical to the previously shown R-RPS analysis for reasons discussed in section d. of this Appendix.



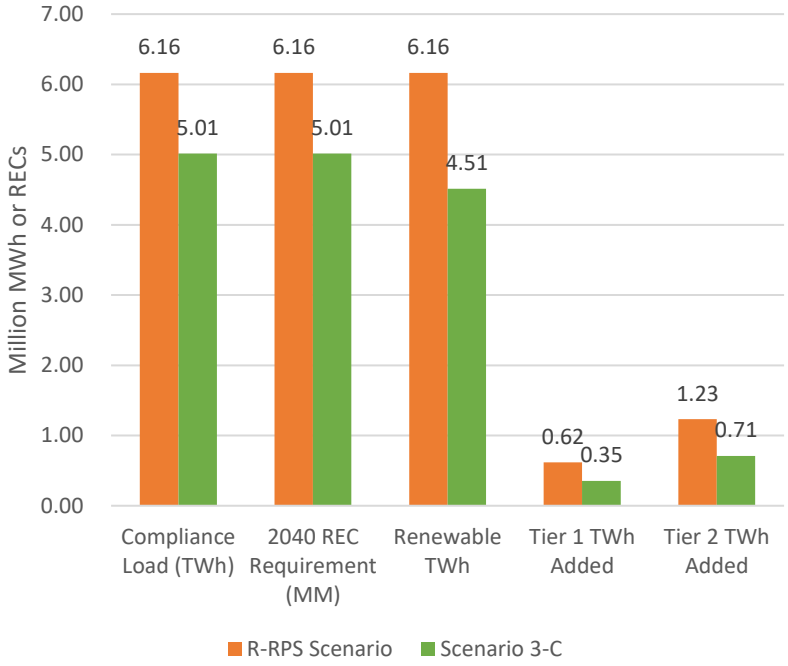
d. Scenario 3-C versus R-RPS

Although Scenario 3-C was designed to use a similar mix of compliance resources as the R-RPS scenario, the TSAR impacts calculated for Alternative 3 are lower than the R-RPS analysis shown in Section V.c. of ENO's Comments due to a) the lack of an "add-back" of demand-side retail sales reductions when calculating the compliance load, which creates a "double counting" effect by allowing the utility to both create RECs and avoid the obligation to buy RECs at the same time, and b) the 1.5 and 1.25 REC multiplier for Tier 1 and Tier 2 resources.[11]

[11] ENO further discusses this issue in Section VII.e of its Comments.

The figure below compares several summary statistics from the various scenarios:

2040 Compliance Load, REC Requirements, and Compliance Resources, Scenario 3-C[12] vs R-RPS Scenario



The two sets of bars demonstrate the impact of the adjustment to compliance load for measures that reduce retail sales. In Scenario 3-C, retail sales go down by over one million megawatt-hours due to behind-the-meter generation. In ENO's evaluation of the R-RPS, such resources would receive RECs for their clean generation but the reduction in retail sales would be added back to the net retail sales figure when calculating the utility's compliance obligation. While the Alternatives are all somewhat ambiguous on this point, ENO's understanding is that under all Alternatives these behind-the-meter clean resources would receive RECs and that the sales figure used to calculate the REC requirement would not be adjusted to add back the customer demand met by self-generation; thus behind-the-meter clean generation would both create RECs and reduce the number of RECs needed, i.e., the "double counting" effect mentioned above that would result from the Advisors' proposed crediting mechanism. As a result, in Alternative 3, the utility would only need to acquire 5.01 million RECs compared to 6.16 million RECs in the R-RPS analyses. Given the compliance plan chosen in Scenario 3-C, 4.51 million megawatt-hours ("MWh") of clean energy would produce these RECs, which understates the amount of clean energy actually needed to achieve intended reductions.

In both Scenario 3-C and the R-RPS scenario, 10% of incremental new clean energy is acquired from Tier 1 resources and 20% of incremental new clean energy is from Tier 2 resources, but 42% less clean energy is acquired from Tier 1 and Tier 2 resources in Scenario 3-C (350,000

[12] The version of Scenario 3-C without a cost cap is examined throughout this section.

MWh vs 620,000 MWh and 710,000 MWh vs 1,230,000 MWh, respectively). Since the costs of these resources (especially Tier 1 resources) largely drive the projected TSAR impacts, the procurement of 42% less energy contributes in large part to the lower TSAR impacts calculated for Scenario 3-C (36% in 2040) compared to the R-RPS (60-75% in 2040).

The fact that compliance under the Alternative 3 can be achieved with much less clean energy than the R-RPS proposal should signify the importance of carefully establishing the compliance sales methodology and the multiplier system, as discussed in Section VII.e of ENO's Comments.

e. Calculation Assumptions

With the assistance and support of SPO, ENO performed calculations designed to analyze the impact of various compliance scenarios on ENO's projected revenue requirements, metered sales, and average costs.

As a starting point, ENO tabulated the projected nuclear, hydro-powered, and solar generation from resources in which ENO has or will have an ownership share or entitlement based on the output of AURORA dispatch model runs associated with the Business Plan 19 ("BP19"). Also considered are projections of reductions from planned energy efficiency measures, generation from existing rooftop solar installations, and generation from new rooftop solar resources assuming future adoption resembles recent history.

As mentioned earlier in this Appendix, the measure of cost impact used is the Total System Average Rate, or "TSAR." While ultimate rate impacts to specific customers or classes of customers depend on a variety of factors and moving pieces that can be difficult to forecast – including how costs would be allocated between rate classes – the TSAR calculation encompasses all ENO revenue requirements and all retail sales. Calculated as total revenue requirements divided by total retail sales, the change to the TSAR indicates the level of cost increase to ENO customers on average.

For each resource comprising the incremental portfolio, the change to ENO's revenue requirements is calculated as the combination of three components: the gross revenue requirements less the energy value and capacity value. For example, acquiring a new grid-scale solar facility would incur gross revenue requirements associated with the construction, operation, and maintenance of the resource. The energy would be valued at the expected MISO wholesale price and the capacity value would be tied to the avoided cost of procuring another resource to help meet ENO's capacity obligations or the expected MISO wholesale price of capacity. The projected annual trajectories of gross revenue requirements, energy values, and capacity values were developed in conjunction with SPO based on the resources considered in the recent ENO Integrated Resource Plan.

The resources most commonly utilized in the calculations summarized in this Appendix include:

- Grid-Scale Solar: ENO considered the revenue requirements, energy value, and capacity value of a grid-scale solar facility. Calculations assumed real improvements to the

resource's installed cost depending on the installation year. As noted above, ENO assumed grid scale solar additions would be composed of 50% owned resources and 50% PPAs.

- NEM Credited Solar: In order to achieve accelerated development of customer-sited NEM solar, ENO assumed that some level of incentive payment would be needed. A $0.50/watt incentive, paid to the customer at installation and recovered by the utility over a three-year amortization period, was assumed. As a behind-the-meter resource, NEM solar can reduce or avoid a level of energy and capacity costs for the utility, but also reduces the total metered sales. Because ENO metered sales decrease after NEM solar is installed, the TSAR can increase due to revenue requirements needing to be collected across fewer kWh of sales.

- Energy Efficiency: EE programs were based on the Navigant DSM Potential study submitted in August 2018 in Council Docket UD-17-03. Two of the cases from that study were considered: the "Base" case and the "2%" case. Because BP19 includes a substantial amount of planned energy efficiency reduction and investment, the calculations only considered demand reductions and costs beyond what is assumed in BP19.

- Sewerage & Water Board Electrification: ENO used data from S&WB fuel consumption and self-generation over the 2008-2017 period to estimate the average annual energy needs of the S&WB pumps and the average emissions rate associated with current operations at S&WB. Including S&WB electrification in the resource portfolio would cause ENO to incur the costs of new transmission and distribution infrastructure and wholesale energy and capacity to serve this new demand. Emission reductions were based on the average S&WB self-generation emissions avoided, net of the expected electric sector emissions increase assessed at the estimated MISO marginal emission rate. S&WB electrification received approximately 3-4 RECs per megawatt-hour of demand electrified (before any multipliers), in line with the net emissions reductions of electrification relative to other clean energy resources.

- NEM Credited Solar with Storage: NEM solar with storage served as a proxy for the "resilient" resource described in the R-RPS proposal and given Tier 1 status in Alternative 3. In order to meet the resiliency description, ENO assumed that NEM solar would need to be paired with energy storage of a minimum of four hours. Small-scale storage costs were tied to NREL's report on a 5 kW / 20 kWh storage system.[13] In order to facilitate large levels of solar plus storage adoption, ENO assumed that the majority of the costs of the storage installation would need to be covered by an incentive payment.

The calculations also factored in some dynamic feedback to the value attributed to resources. First, the capacity value assigned to a resource depends on whether ENO is projected to have an excess or deficit of capacity relative to its MISO planning requirement. For all MW needed to reach ENO's planning requirement, capacity is valued at the cost of a replacement gas-fired resource. When ENO is projected to be long capacity, capacity is valued at a lower projected

[13] https://www.nrel.gov/docs/fy17osti/67474.pdf

MISO market rate. In determining if ENO is projected to be in a capacity excess or deficit, the New Orleans Power Station is included in ENO's supply plan, but no further contemplated fossil capacity is included. Second, the first-year capacity credit that solar resources receive (currently 50% per MISO rules) is subject to change if nameplate solar capacity becomes large relative to peak load (as MISO notes in its Renewable Integration Impact Analysis[14]). The capacity credit curve used is the same used by ENO in its 2018 IRP.[15]

[14] https://cdn.misoenergy.org/20180605%20RIIA%20Workshop%20Presentation213125.pdf

[15] ENO 2018 IRP Technical Meeting #4, May 1, 2019, Docket No. UD-17-03.

Residential Rooftop Solar Program

Entergy New Orleans is rolling out a new program that puts solar panels on the rooftops of low-income customers' homes and gives them a $30 credit on their energy bills every month.

Program participants allow Entergy to install utility-owned and operated panels on their homes with no complicated leases or upfront cash. The program is a simple way for New Orleans customers to participate in the benefits of distributed renewable energy.

J. Wayne Leonard Prosperity Center

Through a $2 million donation from Entergy shareholders and former Entergy CEO J. Wayne Leonard, the J. Wayne Leonard Prosperity Center is a one-stop financial stability center that offers an array of programming to New Orleans residents. Programming includes financial education and coaching, credit repair and counseling, benefits screening and income tax assistance.

Since opening in 2017, the center has served more than 1,300 low-income customers. Of those, 33 individuals have become first-time homeowners and 24 have launched small businesses. Participants have also increased savings, decreased debt and improved their credit scores.

Reinventing LIHEAP

Together with Total Community Action, Entergy is initiating a program that will help customers improve economic security by providing a monthly affordable utility bill and wraparound services using federal LIHEAP dollars. Households will receive a monthly supplement from LIHEAP to lower bills while participating in financial coaching, job training and energy efficiency education.

Entergy exists to grow a world-class energy business that creates sustainable value for our four main stakeholders — customers, employees, communities and owners.

"Entergy has a tremendous legacy in the area of corporate social responsibility and advocating for those who are so often marginalized in today's society. What began 20 years ago as a company initiative to introduce payment plans, billing options and other programs to help our low-income customers pay their bills took root across our region and grew into a successful advocacy effort involving employees, community groups, elected officials and advocates. Working together, we are addressing the serious issues facing the most poverty-stricken area of the country."

LEO DENAULT
Entergy Chairman and CEO

For more information visit:
entergy.com/our_community

Entergy | WE POWER LIFE℠

Entergy

Entergy New Orleans

Low-Income Initiatives

WE POWER LIFE℠

GOAL #1 Improve the flow of customer assistance funds

Advocacy for full and fair funding of LIHEAP

- Entergy New Orleans employees and local partners participate in year-round advocacy for the Low Income Home Energy Assistance Program. In the past two fiscal years, Congress boosted funding for LIHEAP by $250 million, with a greater portion allocated for vulnerable customers in Entergy's service area.
- Entergy places outbound calls to customers and participates in energy assistance fairs to help promote awareness of the availability of assistance funds. In 2018, $4 million in LIHEAP energy assistance payments helped 10,000 Entergy New Orleans customers pay their bills.

The Power to Care program provides emergency utility bill payment assistance for elderly and disabled customers

- Donations from customers and employees are matched by shareholders to provide resources for the program which is administered by the New Orleans Council on Aging.
- Last year, more than 1,200 Entergy New Orleans customers received $275,000 in bill payment assistance from The Power to Care.

GOAL #2 Provide customers with tools to help manage their bills

Resources and other services assist customers in managing their utility bills

- With the deployment of advanced meters, customers have instant access to enhanced information about their energy usage patterns. This helps to lessen their use of electricity and ultimately lower their monthly bills.
- Online energy-saving calculators, energy efficiency tips and information about cost-saving appliances and rebates are available at entergy.com.
- Entergy offers Level Billing, Pick a Date, extensions and Deferred Payment Agreements to help customers with their household budgets and manage any unexpected expenses.

Energy Smart is available to all New Orleans residents

- Energy Smart offers home energy assessments and instant rebates to help customers reduce energy consumption and save money on their bills.

Beat the Heat keeps seniors cool

- Every year, Entergy New Orleans donates hundreds of fans to qualified elderly or disabled customers to keep them cool over the summer.
- Entergy visits each of the city's Senior Centers providing energy efficiency and storm preparation tips to help over 600 seniors stay cool and safe during the hot summer months.

GOAL #3 Help customers achieve economic self-sufficiency

Sponsorship of free tax preparation

- The Earned Income Tax Credit is one of the nation's most effective programs to alleviate poverty. Entergy works alongside community partners to promote the Volunteer Income Tax Assistance program and staff sites with employee volunteers.
- In 2018, Entergy and our community partners helped more than 2,000 people in Orleans Parish file and receive $3.8 million in EITC refunds.

Helping customers achieve home ownership and build wealth

- With support from our community partners, we've helped build and rebuild more than 1,300 single and multi-family homes that were destroyed during Hurricane Katrina. In partnership with the St. Bernard Project, we are helping build Louisiana's first net-zero affordable housing community for veterans and low-income residents.
- Through our investments with United Way of Southeast Louisiana's Individual Development Account initiative, more than 200 low-income families in the New Orleans metro area have achieved the dream of home ownership in the past 10 years.

THE POWER TO CARE

United Way

TOTAL COMMUNITY ACTION, INC.

THE CIVIC 50 4 TIME HONOREE

CR's 100 Best Corporate Citizens 2017 8 TIME HONOREE AND INDUSTRY SECTOR LEADER

Dow Jones Sustainability Indexes 17TH CONSECUTIVE YEAR

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.

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

Erin Spears, Chief of Staff
Bobbie Mason
Council Utilities Regulatory Office
City of New Orleans
City Hall, Room 6E07
1300 Perdido Street
New Orleans, LA 70112

Andrew Tuozzolo
Chief of Staff to CM Moreno
City Hall – 2W40
1300 Perdido St.
New Orleans, LA 7112

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

Sunni LeBeouf
City Attorney Office
City Hall, Room 5th Floor
1300 Perdido Street
New Orleans, LA 70112

Norman White
Department of Finance
City Hall, Room 3E06
1300 Perdido Street
New Orleans, LA 70112

Jonathan M. Rhodes
Director of Utilities,
Mayor's Office
City Hall – Room 2E04
1300 Perdido Street
New Orleans, LA 70112

Hon. Jeffery S. Gulin
3203 Bridle Ridge Lane
Lutherville, MD 21093

Clinton A. Vince, Esq.
Presley R. Reed, Jr., Esq.
Emma F. Hand, Esq.
Dentons US LLP
1900 K Street NW
Washington, DC 20006

Basile J. Uddo, Esq.
J.A. "Jay" Beatmann, Jr.
c/o Dentons US LLP
650 Poydras Street, Suite 2850
New Orleans, LA 70130-6132

Joseph W. Rogers
Victor M. Prep
Byron S. Watson
Cortney Crouch
Legend Consulting Group
6041 South Syracuse Way, Suite 105
Greenwood Village, CO 80111

Errol Smith, CPA
Bruno and Tervalon
4298 Elysian Fields Avenue
New Orleans, LA 70122

Timothy S. Cragin
Harry M. Barton
Alyssa Maurice-Anderson
Entergy Services, LLC
Mail Unit L-ENT-26E
639 Loyola Avenue
New Orleans, LA 70113

Brian L. Guillot
VP, Regulatory Affairs
Entergy New Orleans, LLC
Mail Unit L-MAG-505B
1600 Perdido Street
New Orleans, LA 70112

Joseph J. Romano, III
Suzanne Fontan
Therese Perrault
Entergy Services, LLC
Mail Unit L-ENT-4C
639 Loyola Avenue
New Orleans, LA 70113

Polly S. Rosemond
Derek Mills
Keith Woods
Seth Cureington
Kevin T. Boleware
Entergy New Orleans, LLC
Mail Unit L-MAG-505B
1600 Perdido Street
New Orleans, LA 70112

Renate Heurich
350 New Orleans
1407 Napoleon Avenue, Suite #C
New Orleans, LA 70115

Benjamin Quimby
350 New Orleans
1621 S. Rampart St.
New Orleans, LA 70113

Andy Kowalczyk
350 New Orleans
1115 Congress St.
New Orleans, LA 70117

Marion Freistadt
1539 Adams St.
New Orleans, LA 70118

Logan Atkinson Burke
Sophie Zaken
Alliance for Affordable Energy
4505 S. Claiborne Avenue
New Orleans, LA 70125

Bob Perciasepe
Marty Niland
Center for Climate and Energy Solutions
3100 Clarendon Boulevard, Suite 800
Arlington, VA 22201

Jeff Cantin
Solar Alternatives
2803 St. Philip Street
New Orleans, LA 70119

Stephen Wright
Gulf States Renewable Energy Industries Association
552 Marilyn Drive
Mandeville, LA 70448

Simon Mahan
Southern Renewable Energy Association
5120 Chessie Circle
Haltom City, TX 76137

Karen Profita
Gary Moody
Nation Audubon Society
5615 Corporate Boulevard, Suite 600B
Baton Rouge, LA 70808

Katherine W. King
Randy Young
Kean Miller LLP
400 Convention Street, Suite 700
Baton Rouge, LA 70802

Carrie Tournillon
Kean Miller LLP
900 Poydras Street, Suite 3600
New Orleans, LA 70112

Maurice Brubaker
Brubaker & Associates, Inc.
16690 Swigly Ridge Road, Suite 140
Chesterfield, MO 63017

G. Ben Johnson
New Orleans Chamber
1515 Poydras Street, Suite 1010
New Orleans, La. 70112

Grace Morris
Sierra Club
4422 Bienville Avenue
New Orleans, LA 70119

Dave Stets
2101 Selma Street
New Orleans, LA 70122

Joshua Smith
Lauren Hogrewe
2101 Webster Street, Suite 1300
Oakland, California 94612-3011

Elizabeth Galante
Ben Norwood
Posigen Solar
819 Central Avenue, Suite 201
Jefferson, LA 70121

Thadeus B. Culley
Vote Solar
1911 Ephesus Church Road
Chapel Hill, NC 27517

Monique Harden
Deep South Center for Environmental Justice
3157 Gentilly Boulevard, #145
New Orleans, La. 70122

New Orleans, Louisiana, this 15th day of October, 2019.

Harry M. Barton