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May 25, 2017

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

Re: **In Re: Rulemaking to Establish Integrated Resource Planning Components and Reporting Requirements for Entergy New Orleans, Inc.**
Docket No. UD-17-01

Dear Ms. Johnson:

Entergy New Orleans, Inc. ("ENO") respectfully submits its Comments Concerning the Proposed Electric Utility Integrated Resource Plan Rules Submitted by the Council's Advisors, along with one Exhibit thereto. 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

MAY 25 4 35

HMB/bkd
Enclosures

cc: Official Service List (*via email*)

RECEIVED
MAY 25 2017
BY:

BEFORE THE

COUNCIL OF THE CITY OF NEW ORLEANS

***EX PARTE: IN RE*: RULEMAKING TO ESTABLISH INTEGRATED RESOURCE PLANNING COMPONENTS AND REPORTING REQUIREMENTS FOR ENTERGY NEW ORLEANS, INC.**	)))))))	**DOCKET NO. UD-17-01**

ENTERGY NEW ORLEANS, INC.'S COMMENTS CONCERNING THE PROPOSED ELECTRIC UTILITY INTEGRATED RESOURCE PLAN RULES SUBMITTED BY THE COUNCIL'S ADVISORS

Entergy New Orleans, Inc. ("ENO") respectfully submits its Comments Concerning the Proposed Electric Utility Integrated Resource Plan ("IRP") Rules of the Council of the City of New Orleans' (the "Council") Submitted by the Advisors on April 25, 2017 (the "Advisors' Proposed Rules"). The Council established this Docket with Council Resolution No. R-17-32 to allow Parties to "submit specific language which amends or modifies the Council's IRP Requirements or improves the Council's IRP process" in order to improve the Requirements and process. The Parties submitted initial comments and proposals on February 27, 2017 and submitted reply comments on March 27, 2017. The Council's Advisors issued a Report on April 25, 2017 and also submitted with their Report the Advisors' Proposed Rules. In Resolution No. R-17-229, the Council authorized the Parties to file comments regarding the Advisors' Proposed Rules and Report on or before May 25, 2017. ENO's present filing takes advantage of the opportunity afforded by the Council.

As the Advisors' Report notes, the Parties' comments and proposed rule changes evidenced both areas of agreement and wide disparities among the Parties concerning the best framework to be established for the Council's IRP rules and process. For the most part, the recommendations contained in the Advisors' Report strike an appropriate balance between the Parties' positions and advocate for vastly improved rules for the IRP process. ENO believes that some recommendations in the Advisors' Report may unintentionally serve to exacerbate the problems the Council seeks to solve through this Rulemaking by making the IRP process more complex and contentious than necessary. ENO identifies these issues herein. Also, some inconsistency appears to exist between the

recommendations contained in the Advisors' Report and the new framework set out in the Advisors' Proposed Rules. In these situations, ENO's Comments identify such inconsistencies and also suggest revisions to the Proposed Rules to more closely reflect the substance of the positions advanced in the Advisors' Report. ENO attaches hereto a "redline" of the Advisors' Proposed Rules depicting the suggested modifications, along with a "clean" version, collectively, as Exhibit A. Finally, ENO identifies some concepts and terms in the Advisors' Proposed Rules that require additional clarification or slight modification in order to provide clear direction for the Council's IRP process. Suggestions for addressing some of these required modifications are also set forth in Exhibit A. Where ENO cannot address these issues with modifications, clarification is requested from the Advisors prior to the Council's adoption of the Advisors' Proposed Rules.

I. ENO's Limited Areas of Disagreement with the Advisors' Proposed Rules.

As stated above, ENO believes that most of the modifications contained in the Advisors' Proposed Rules have the potential to improve the IRP process and address the problems that plagued prior IRP Cycles, such as extensive delay, prolonged disagreement between the Parties as to the "correct" results of model runs, and an overall atmosphere of contentiousness. However, a few of the changes contained in the Advisors' Proposed Rules would very likely make these problems worse or unnecessarily create new ones. ENO will briefly discuss its opposition to such proposals and, where possible, offer solutions.

A. Non-Consensus Scenarios or Strategies Should not be Exclusively "Developed by the Utility," but Rather by Intervenors as Aided by the Advisors and CURO.

Consistent with the Parties' comments, and the Council's expressed goals for the Rulemaking, the Advisors' Proposed Rules place great emphasis on achieving consensus on various aspects of the IRP, including (i) the potential supply-side and potential demand-side resources and their associated defining characteristics, (ii) assumptions surrounding each of the Planning Scenarios, and (iii) a reference Planning Strategy. In each of these cases, where consensus is not possible, the Advisors' Proposed Rules require that "the Utility shall develop" a separate stakeholder case for each item "based upon a consensus of the majority of Intervenors." While ENO is more than willing to work with Intervenors in this way, ENO harbors concerns about the perceived integrity of the various Stakeholder points of view if they are developed by the Utility. Stakeholders can be distrustful of the

Utility, and are especially likely to be so in a situation where the Parties tried, but failed, to reach consensus. In that situation, Stakeholders may be skeptical that a Stakeholder case developed by the Utility accurately represents their point of view. Moreover, Stakeholders may be equally distrustful of the process of arriving at the majority position of the Stakeholders if that process is administered by ENO. As the Advisors' Report acknowledges, the consensus-backstop procedural mechanism needs to eliminate "an ongoing dispute that disrupts and prolongs the proceeding."[1] "Utility-developed" Stakeholder cases would likely create, rather than eliminate, such a dispute.

To address these issues, ENO proposes that the Advisors' Proposed Rule be modified to include the Advisors and CURO in the process of developing the Stakeholder Scenarios/Strategies/Cases in order to enhance Stakeholders' confidence in the integrity of the process and mitigate the potential for lengthy disputes. ENO provides a suggestion as to how this could be accomplished with a slight modification to the Advisors Proposed Rules:

> The stakeholder Planning Strategy will be ~~developed by~~ provided to the Utility by the Advisors based on the collection of potential supply-side and demand-side resources and their associated defining characteristics resulting from a consensus of the majority of the Intervenors. The procedure for determining the Intervenors' majority position shall be defined in the Initiating Resolution and administered by the Advisors or CURO. To maintain consistency in the modeling process, the Advisors will work with Intervenors and consult with the Utility to ensure that ~~should be cognizant of the Utility's modeling capabilities and~~ Intervenors provide input only on parameters that can be accommodated within the framework of the existing model and software. The Utility shall have no obligation to incorporate any element(s) of the stakeholder Planning Strategy that cannot be accommodated by the Utility's modeling capabilities.

ENO believes this approach or a similar one will be necessary for gaining the Stakeholders' confidence in the integrity of any Stakeholder-developed IRP inputs and mitigate the potential for disputes arising during such processes. Similar proposed modifications are included in Exhibit A, which also include a clarification that ENO will not be obligated to accommodate any "Stakeholder cases" other than the Intervenors' majority position.

B. The Proposed "ScoreCard" Method Threatens to Undermine the Analytical Value of the IRP and Foster Contentiousness Among the Parties.

All the Parties acknowledge that the 2015 IRP cycle was prolonged by extensive debate after the models were already run over the proper inputs and assumptions to use for modeling. The debate

[1] *See* Advisors' Report at pg. 6.

was of limited use, since ENO could not go back and re-run the entire suite of models to accommodate the concerns Intervenors expressed upon seeing the modeling results. The debate also contributed to a highly contentious, litigation-like atmosphere that lasted for the remainder of the cycle. Eliminating this highly-charged, and non-productive, aspect of the process was a main focus of the Parties' efforts during this Rulemaking.

The Parties' proposals and several components of the Advisors' Proposed Rules create the potential for significant progress on this issue by emphasizing the process for developing inputs and assumptions prior to modeling work and by indicating that the parameters used for portfolio modeling "shall be set, considered finalized, and not subject for alteration during the remainder of the IRP planning cycle."[2] This proposed focus on developing, and then locking down, the inputs and assumptions for modeling should allow the Parties, Advisors, and Council to devote their post-modeling efforts to analyzing and evaluating the objective, mathematically-derived outputs of the modeling scenarios crafted through the Parties' collaborative efforts. This outcome would represent a vast improvement to both the functional purpose and tone of the IRP process. The "Scorecard Template" that the Advisors' Proposed Rules recommend tacking on at the end of the process threatens to destroy this potential improvement before it can be realized.

The Advisors' Proposed Rules set forth the "Scorecard Template" proposal in a single paragraph at the end of several pages devoted to defining the process for developing and conducting the Portfolio Optimization process.[3] Rather than focusing the IRP's analysis on the outcomes of this extensive, timely, and costly Optimization process, the results of that Optimization would be folded in with several subjective, and un-defined, factors as part of the "Scorecard Template." The method would then require ENO to rank the outcomes of the Portfolio Optimization for each yet-to-be-defined, "metric"[4] based on a guess as to "how well they meet each metric." Presumably the Parties would also be afforded the opportunity to comment on ENO's subjective ranking of the Portfolios, and provide their own subjective alternate rankings. Vitriolic debate is then likely to ensue over

[2] *See* Advisors' Proposed Rules at Section 7(E), pg. A-10.
[3] *See* Advisors' Proposed Rules at Section 7(I), pg. A-10.
[4] ENO believes the use of the term "metric" is a misnomer in this instance, as it implies the existence of some type of quantifiable analysis. The Scorecard Template proposal does not rely on any objective analysis.

these subjective rankings, while little to no attention is paid to the objectively-derived, mathematically-supportable, results of the costly and time-consuming Portfolio Optimization model runs. In this way, the "Scorecard Template" rankings will replace the "Preferred Portfolio" selection as the focus of the latter part of the IRP cycle and a catalyst for contention among the parties, while detracting from a thorough review of the objectively-verifiable results of Portfolio modeling.

Additionally, the three sentences of the Advisors' Proposed Rules devoted to defining the "Scorecard Template" do not provide sufficient clarity to ENO on what the "metrics" are, how they should be incorporated into a "template" and on what basis they should be ranked. The "cost metric" purports to require adding on "quantified externalities" to the mathematically-generated costs (demand, energy, and total supply costs) associated with each Optimized Portfolio, but does not define "quantified externalities." Similarly undefined, or inadequately defined, are the terms "risk,"[5] "flexibility of resource options," "response to load swings and quick start," and "macroeconomic impacts in New Orleans." Moreover, the proposal would require ENO to develop metrics based on "published city policies," with which it is not, and is not required to be, familiar, "such as the City's sustainability plan." Due to the lack of clarity around the proposed "metrics," and the unlikelihood that an objective criteria can be developed based thereon, the "Scorecard Template" proposal presents a significant potential for placing an increased burden on ENO, and consequently its customers, for compliance. The cost of such compliance will result in no benefit to ENO's customers, and will only diminish the value of the IRP process as an analytical tool. ENO thus opposes the inclusion of this requirement.

However, recognizing that the Advisors likely proposed the "Scorecard Template" in an effort to accommodate concerns expressed by Intervenors, and possibly shared by the Council, ENO proposes that if the Scorecard Template must be included, the following modifications be made:

> The Utility will and submit a scorecard template or set of quantitative and qualitative metrics to assist the Council in assessing the IRP based on the Resource Portfolios. Such metrics may ~~should~~ include but not necessarily be limited to: cost; revenue impact ~~on rates; risk~~; flexibility of resource options; reasonably quantifiable environmental impacts ~~(such as national average emissions for the technologies chosen, amount of groundwater~~

[5] Given that Section 8 of the Advisors' Proposed Rules requires a separate risk analysis, ENO does not believe "risk" should be an element of the Scorecard Template and recommends it removal.

~~consumed, etc.)~~; consistency with established, published city policies, as identified in the Initiating Resolution ~~such as the City's sustainability plan~~; and any other industry-standard IRP evaluation criteria. ~~macroeconomic impacts in New Orleans.~~ On the scorecard, the Utility shall rank the Resource Portfolios generated through the IRP according to how well they meet each metric, to the extent the Utility is reasonably able to perform such a ranking.

These proposed modifications would address ENO's concerns about the Utility being required to undermine the analytical value of the Optimized Portfolios by being forced to rank the Portfolios in accordance with subjective, undefined, "metrics," some of which are wholly unknown to ENO. This compromise would not, of course, solve the issue ENO raises above concerning the Parties devoting time and customer resources to debating subjective issues, so ENO strongly urges the Advisors to consider the value of including the Scorecard at all.

C. The Proposed Rule-Compliance Matrix is Unnecessary and May Shift the Parties' Focus Away from the Substantive Elements of the IRP.

The Advisors' Proposed Rules include a new requirement that the IRP "shall include a matrix of these rules, the corresponding section of the IRP responsive to that rule, and a brief description of how the Utility complied with the rules." The Advisors' Report contains no discussion of this new requirement and does not describe how the requirement can benefit or enhance the IRP Objectives. Similarly no Party requested this modification and no Party submitted any evidence supporting such a new requirement. ENO does not believe the requirement can serve any purpose, other than facilitating disagreement among the Parties on ENO's self-assessment of whether and how it complied with the IRP rules. More importantly, ENO's customers, who will ultimately pay for the time ENO spends engaging in this activity, will not benefit from this required self-compliance-assessment. Ultimately, assessing ENO's compliance with the IRP rules will be a task performed by the Advisors and a required self-assessment from ENO will not contribute to or influence the Advisors' performance of this task. ENO opposes the modification and does not believe the record supports it as no Party submitted evidence demonstrating the need for the modification.

D. The Penalty Provision is Unnecessary and not Supported by Evidence or Comments.

Similar to the compliance-self-assessment, no Party, including the Advisors, provided any discussion of, or evidence supporting, the new proposed rule that "To the extent there is non-compliance with these rules, after the showing of cause, the Council may impose penalties for non-

compliance with these rules." In addition to the lack of evidence supporting this new and novel provision, no need exists for it. Section 158-512 of the City Code allows the Council to impose certain sanctions or penalties against "any person operating under its jurisdiction … for failure to comply with any applicable statute, order or the rules, rates, regulations, or general order of the Council." Given the existence of this provision, ENO argues there is no need to include a duplicative, less well-defined, penalty provision than Sec. 158-512 – which the Council invoked last year when initiating Docket No. UD-16-01. Finally, given the discussion below of the lack of clarity in several areas of the Advisors' Proposed Rules, any attempt to impose penalties for "non-compliance" would present significant due process concerns.[6] For these reasons, ENO opposes inclusion of the "penalties" provision. Should the Council wish to clarify its existing authority under Sec. 158-512, as constitutionally limited, the following modifications may be appropriate:

> To the extent there is non-compliance with these rules, after the showing of cause consistent with the provisions of Chapter 158 Article II, Division 8, Sec. 158-512 of the Code of the City of New Orleans and all applicable due process requirements, the Council may impose penalties for non-compliance with these rules.

E. Because ENO is Not Able to Comply with Certain Elements of the Advisors' Proposed Rules, Those Requirements Should be Modified or Removed.

Several provisions of the Advisors' Proposed Rules, as currently written, would obligate ENO to perform tasks that it is not capable of fulfilling. Slight modifications to the Advisors' Proposed Rules can solve the majority of these issues, but others cannot be addressed with modifications and should be removed.

The majority of the provisions at issue concern analysis of "behind-the-meter" Distributed Energy Resources ("DERs"). For example, Section 4(E) would require ENO to provide a "list of the co-generation and DERs larger than 300 kW existing on the Utility's system…" The problem with this requirement, as written, is that ENO can only identify DERS that are interconnected to deliver energy to the grid. Customers have no obligation to disclose this information to ENO and some

[6] Indeed, it is a well-established principle of due process that fines and other penalties cannot legitimately be imposed for "violation" of a law, statute, or regulation that is not sufficiently clear to give a party notice of what actions may or may not result in such penalties. *See, e.g., State v. Farris*, 412 So.2d 1039, 1040 (La. 1982) ("The constitutional requirement of definiteness for a regulatory law accompanied by a penal sanction emanates from the due process clause of the United States Constitution and Article 1, Sections 13 and 16 of the Louisiana Constitution.").

customers may not want ENO to know about their behind the meter generation resources. Unless the Council enacts a mandate requiring the disclosure to ENO of all "co-generation and DERs larger than 300 kW," ENO cannot obtain this information through reasonable efforts. However, if such resources are interconnected to deliver energy to the grid, then ENO is aware of the existence of such DERs.[7] To address this issue in a way that preserves the intent of the Advisors' Proposed Rules, but allows ENO to comply through reasonable efforts, ENO proposes the following modification:

> The Utility shall also provide a list of the co-generation and DERs larger than 300 kW ~~existing on~~ that are interconnected to deliver energy to the grid on the Utility's system, including resources maintained by the City of New Orleans for city/parish purposes, (e.g. Sewerage and Water Board, Orleans Levee District, or by independent agencies or entities such as universities, etc.).

ENO suggests similar modifications, as shown in Exhibit A, to clarify other components relating to DERs and co-generation resources existing on ENO's system.

Other similar issues with the Advisors' Proposed Rules are as follows:

- Section 3(B), as written, seems to require the IRP to achieve the listed objectives during the triennial planning cycle. As the IRP itself does not result in approval of any action on ENO's part, and as the triennial cycle is much shorter than the planning period, ENO has proposed a revision that it believes reflects the intent of the statement.
- Sections 4(C)(2) and (3) would require ENO to report on historic load data on a customer class level. However, historic load is not metered or tracked at a customer class level and ENO does not possess this information. ENO proposes removal of these requirements.
- Two suggested provisions related to transmission and distribution would require ENO to undertake tasks it is not capable of performing and ENO urges removal of both such requirements. Section 6(E) is discussed below. Section 6(D) would require ENO to prove a negative condition, *i.e.*, to "demonstrate that there are no economically feasible transmission solutions that can be employed to either reduce the size, delay, or eliminate the need for new [reliability-driven] resource additions." ENO sees no way to comply with this requirement, as written, and requests its removal.
- Section 7(C)(3)(c) would require ENO to forecast capacity market auction clearing prices on an annual basis. While not technically impossible, such forecasting is not capable of capturing the long term value of capacity, as market auction clearing prices vary widely from year to year. MISO's Independent Market Monitor has also recently questioned the value of information provided by the auction results.[8] As such, ENO proposes revising this

[7] Moreover, it is unclear what, if any, relevance non-interconnected resources would have for the IRP as ENO cannot rely on non-interconnected resources to deliver energy when needed.

[8] The MISO Independent Market Monitor recently opined that the capacity auction "continues to reflect a poor representation of the demand for capacity, which undermines its ability to provide efficient economic signals." *See* 2015 State of the Market Report for the MISO Electricity Markets at 16.

requirement to reference "an annual value for capacity," which is more appropriate for long term resource planning.

II. Elements of the Advisors' Proposed Rules that are Inconsistent with the Advisors' Report and/or the Agreed Positions of the Parties.

As noted above, some inconsistencies appear to exist between the positions expressed by the Advisors in their Report and the corresponding provisions in the Advisors' Proposed Rules. Similarly, the Advisors note agreement between the Parties on certain desired modifications, yet these items are not reflected in the Advisors' Proposed Rules. As such, ENO seeks to identify the issues so that the Advisors may consider revising their final Proposed Rules to be consistent with the recommendations contained in their Report, or positions agreed to by the Parties, prior to submission to the Council for a decision.

A. Certain Aspects of the Advisors' Proposed Rules Seem to Ignore the Advisors' Agreement that the IRP is not a Specific Resource Certification Proceeding.

The Advisors' Report recommends against the adoption of various proposals from the Parties that would be too granular or burdensome for consideration in the context of an IRP and which are more appropriate for resource certification dockets. Along these lines, the Advisors confirm that (i) "the purpose of the IRP will not be for the Council to select and approve a single resource portfolio,"[9] (ii) "an environmental impact assessment for each planning scenario … is not achievable and is well beyond the scope of the IRP," and (iii) "it would be unnecessarily burdensome to require ENO to calculate the rate impact by customer class of each scenario."[10] Yet, the Advisors' Proposed Rules contain several provisions that seem to contravene these statements:

- Section 7(H) purports to require ENO to discuss "tipping points that would guide the preference of a Resource Portfolio under alternative conditions." Yet, the Advisors' Proposed Rules no longer require the selection of a preferred portfolio and the Advisors acknowledge that selecting a preferred portfolio is not the purpose of the IRP. This requirement appears to require the Company to speculate, thus ENO recommends its removal.
- While the purpose and requirements of proposed Section 8(A)(1) are largely unclear to ENO based on the language contained in the Advisors' Proposed Rules[11], it appears to require that ENO conduct an environmental risk assessment for each Resource Portfolio.

[9] *See* Advisors' Report at pg. 8.
[10] *See* Advisors' Report at pg. 25.
[11] Among other things, it is unclear how the Advisors propose to delineate between the portion of a cost that relates to the Utility's revenue requirement and the cost of providing service to ENO's customers. In ENO's understanding, these are the same thing, but the Advisors' Proposed Rules appear to draw a distinction between the two.

The above-quoted statement indicates this should not be a component of the IRP. Moreover, other than conducting analysis concerning varying levels of carbon pricing, ENO is not able to quantify the "social and environmental effects of the Resource Portfolios." ENO recommends removal of this aspect of Section 8. ENO discusses this item, and Section 8 as a whole, further below.

- Section 7(I) purports to require an assessment of the "impact on rates" as part of the "Scorecard Template." Yet the Advisors' Report suggests that a ranking according to "revenue impact" would be more appropriate for the IRP. To the extent the Advisors decline to follow ENO's suggestion to remove the "Scorecard Template" entirely, a revision replacing "impact on rates" with "revenue impact" or "revenue requirement" will be necessary to maintain consistency between the revised rules and the Advisors' Report.

Some additional revisions appear to be necessary to keep the Advisors' Proposed Rules consistent with the Advisors' Report and the acknowledged areas of agreement among the Parties. These are reflected in Exhibit A.

B. The Parties Agree that a More Involved Role for CURO is Appropriate, Yet the Advisors' Proposed Rules do not Reflect this Agreement.

The Advisors' Report acknowledges that the Parties agree that "CURO facilitation and administration of the technical conferences and public hearings should be increased."[12] Yet, nothing in the Advisors Proposed Rules takes steps in this direction. In Exhibit A, ENO proposes minor modifications to the Advisors' Proposed Rules that would define CURO's role as the administrator and moderator of IRP technical conferences and public meetings. The modifications ENO suggests also reflect the Parties' agreement that advertisement of public meetings would be better handled by CURO. Finally, ENO suggests modifying the Advisors' Proposed Rules to reflect the agreement of the Parties that CURO, or the Council, be charged with the responsibility of broadcasting public meetings and making them available for future viewing. ENO does not possess the capability to fulfill this function, while Council meetings are already broadcast live and stored for future viewing on-line. ENO does not believe its customers should be required to pay for ENO to hire additional IT staff, develop a web-portal, and purchase the equipment necessary to accommodate such live and archived broadcasts, when the Council and CURO already possess the capability.

C. The Advisors' Report, and the Alliance's Sources, Acknowledge that Transmission and Distribution Optimization is not Possible, Yet the Advisors' Proposed Rules Require it.

The Advisors' Report acknowledges that the MISO Transmission Expansion Planning

[12] *See* Advisors' Report at pg. 6.

("MTEP") process should not be duplicated in the IRP and agrees with ENO that ENO should provide a more in depth explanation of transmission and distribution planning as part of the IRP, without recommending that ENO be required to include potential transmission projects in its modeling runs.[13] Similarly, the Advisors acknowledge that including distribution projects in model runs would "require a significant change to ENO's distribution planning."[14] Along these same lines, the sources the Alliance for Affordable Energy cites[15] in its reply comments as examples of MISO members who "co-optimize" transmission and distribution upgrades as through their IRP modeling acknowledge that further evolution of software is necessary before a utility can "directly incorporate aspects of the transmission and distribution systems into its modeling process."[16] ENO has been consistent in its filings to committing to include a more thorough discussion of its transmission and distribution planning policies and processes, as well as to continue to include any MTEP-approved transmission projects in the baseline assumptions for its modeling in the IRP.[17] The Advisors' Report recommends this method for considering transmission and distribution in the IRP, but the Advisors' Proposed Rules contain language inconsistent with this recommendation.

In Section 3(A)(1), the Advisors' Proposed Rules include transmission and distribution as elements to be optimized as part of the IRP modeling analyses. ENO has repeatedly noted, and the Alliance's own sources agree, that mathematically optimizing transmission and distribution projects with supply- and demand-side resources is not currently possible. As such, ENO has suggested a modification to the Proposed Rules so that they acknowledge the limits of ENO's software capabilities, but still require consideration of transmission and distribution.

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[13] *See* Advisors' Report at 18.

[14] *Id*. at 19. The Advisors indicate "it is time to begin" the process of overhauling ENO's distribution planning systems so that distribution can be incorporated into the IRP. Yet, the Advisors' Proposed Rules assume that ENO has already completed this process. To the extent that the Advisors are recommending significant changes to ENO's distribution planning systems be contemplated as an outcome of this Rulemaking, that suggestion greatly exceeds the scope of the present Docket and R-17-32.

[15] The Alliance's Reply Comments represent to the Council, at page 13, that Ameren and Northern Illinois Public Service Company ("NIPSCO"), both MISO members, engage in a practice of "co-optimizing transmission and generation resources." A review of these IRPs indicates this statement is not accurate, and in fact NIPSCO explicitly acknowledges that software limitations prevent it from engaging in this practice.

[16] *See* NIPSCO November 1, 2016 Integrated Resource Plan at pg. 12. https://www.nipsco.com/docs/default-source/about-nipsco-docs/2016-irp.pdf

[17] The practice to which ENO is committing mirrors that undertaken in the IRPs of Ameren and NIPSCO, the utilities cited in the Alliance's Reply Comments.

Section 6(E) would require ENO to "evaluate the extent to which reliability of the distribution system can be improved through strategic location of DERs or other resources identified as part of the IRP planning process." ENO does not presently possess this capability and has made this fact clear throughout this proceeding, and many others. Because ENO does not believe the IRP requirements should contain provisions with which it cannot reasonably comply, ENO recommends removal of this component of the Advisors' Proposed Rules.

III. Proposed and Requested Clarifications and Modifications to the Advisors' Proposed Rules.

ENO offers proposals for clarifying some items and limiting certain open ended aspects of the Advisors' Proposed Rules that could represent a significant expense to ENO's customers if left undefined.

A. The "Planning Strategies" Concept Requires More Focus and Limitations.

The "Planning Strategies" concept is a new one that could represent an improvement to the IRP process. However, the concept could also significantly increase the time and cost required for the IRP. As the Advisors' Proposed Rules acknowledge, the Planning Strategies create a multiplier effect for the number of optimization modeling runs ENO must conduct. To limit the number of possible modeling runs, ENO proposed to limit the number of Planning Strategies to four. ENO proposes the same limit for the number of Planning Scenarios. While ENO believes that running sixteen optimizations is likely excessive,[18] establishing an upper limit is necessary, and evaluating four strategies across four scenarios would provide the Council with a very wide range of mathematically-supportable analyses from which to evaluate future plans and contingencies.

ENO also proposes to offer more definition to the Planning Strategies. ENO noted that the Advisors' Proposed Rules did not expressly provide for including a Strategy that would allow AURORA to develop Optimized Portfolios to meet customers' needs at the lowest reasonable cost. Without the explicit inclusion of this type of least cost Strategy as a baseline, it will not be possible for a Consensus Strategy to be reached, as ENO's business judgment and responsibilities to its

[18] If ENO is required to perform stochastic risk analyses for each of the 16 optimized portfolios, new staff would need to be hired solely to accommodate the ENO IRP process.

customers require ENO to evaluate a least cost scenario.[19] ENO proposes that this strategy be included in each IRP. Under ENO's proposal, the minimum number of strategies would be two: the Least Cost Planning Strategy and the Consensus Planning Strategy. The maximum number would be four: the Least Cost Planning Strategy, the Utility Reference Planning Strategy, the Stakeholder Planning Strategy, and the Council Policy Planning Strategy. If the Consensus Strategy is able to satisfy both Stakeholders' and the Council's policy concerns, as well as those of ENO and the Advisors, only two strategies would be necessary. If not, up to two more can be developed. ENO believes this creates an appropriate framework for evaluating a range of planning strategies that capture the reasonable set of possible future planning conditions. The revisions set forth in Exhibit A represent an attempt to achieve this result.

B. The "Risk Analysis" Concept Should Allow for Flexibility to Accommodate Technological Advances and Limitations.

ENO agrees with the importance of performing thorough risk analyses for Resource Portfolios on key cost drivers that may be susceptible to volatility, such as fuel prices, CO_2 prices, etc. However, ENO would recommend that rather than specifically defining the parameters of such risk assessments within the IRP Rules, the risk analysis methodologies should be flexible from cycle to cycle to accommodate technological advances and limitations. For instance, given AURORA's present capabilities, SPO[20] estimates that performing the method of stochastic modeling outlined in Section 8(A)(2) of the Advisors' Proposed Rules would require 100+ labor hours to develop distributions of input assumptions and perform post-processing on output results, as well as 60 hours of computer processing time per variable, per resource portfolio.[21] This would impose an extremely onerous burden on ENO, and its customers, at present; however, future technological advances may reduce the effort and expense required to perform this analysis in future cycles. To allow for such changes, ENO recommends setting the requirements for risk assessment analyses during each IRP

[19] This is to say that absent the requirement of a separate least cost Planning Strategy, ENO would be compelled to insist that the "Consensus" strategy be a least cost Strategy. Intervenors are not likely to consent to this condition, so if there is to be any chance of achieving consensus around a Planning Strategy, a separate least cost Strategy must be expressly provided for in the IRP rules.

[20] "SPO" refers to the System Planning & Operations group of Entergy Services, Inc., which performs much of the work required by the IRP process.

[21] Assuming 2 variables, across 16 portfolios (4 Planning Scenarios times 4 Planning Strategies), this could require over 1900 hours of computing time, not including labor.

cycle, rather than deciding upon such requirements as part of this proceeding.[22] ENO has suggested a modification to the Advisors' Proposed Rules that would accomplish such a result.

ENO has also suggested a modification to Section 8 to reflect what it believes was the Advisors' intent concerning what type of variables should be assessed through mathematical analyses. In the Advisors' Report, the Advisors stated that they "believe that it is appropriate to include directly measurable non-energy benefits and environmental attributes in the evaluation of resource portfolios using scorecard metrics, but not in the optimization analysis of supply costs."[23] The Advisors' Report thus acknowledges that such environmental externalities and "social costs" are not appropriate for mathematical assessment in optimization analyses. Yet, the Advisors' Proposed Rules, as currently drafted, seem to require a mathematical assessment of "social and environmental effects of Resource Portfolios" as part of the mathematical Risk Analyses. ENO has proposed language to clarify this issue and remove the apparent inconsistency by modifying Section 8 (A)(1) as follows:

> In quantifying Resource Portfolio costs/risks, the IRP shall assess ~~any social and environmental effects of the Resource Portfolios~~ key cost drivers that are determined to be susceptible to volatility to the extent that: 1) those variables ~~effects~~ can be quantified for a Resource Portfolio, including the applicable Planning Period years ~~and ranges of uncertainty surrounding each externality cost~~, and 2) each quantified cost must be clearly identified by the portion which relates to the Utility's revenue requirements or cost of providing service to the Utility's customers under the Resource Portfolio.

This modification not only maintains consistency between the Advisors' Report and Proposed Rules, it also accurately reflects the purpose of conducting risk analyses for the IRP. The purpose of such analyses is to test the impacts of possible ranges of variations on the inputs used for modeling to create the Optimized Portfolios, such as estimated fuel prices. The Advisors Proposed Rules do not require ENO to include "social and environmental effects" as a quantified input in the optimization modeling. Running a risk analysis on something that was not an input into the optimization process simply serves no purpose. As such, ENO believes its proposed modification is necessary to preserve the analytical benefits associated with conducting risk analyses in the IRP process.

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[22] A portion of a technical conference can be devoted to such an assessment once the Initiating Resolution defines the procedural schedule and Milestones.

[23] *See* Advisors' Report at pg. 21.

C. Coordination Between the "Initiating Resolution" and the Various References to Council Goals or Policies is Necessary.

The Advisors' Proposed Rules refer to Council goals, policies and targets in a number of ways, *e.g.*, "then-effective," "published," "established," etc. Requiring ENO to conduct comprehensive research on and evaluation of all published Council policies for each IRP cycle is excessively burdensome, and ENO does not believe the Advisors intended to create such a requirement. As such, ENO has suggested modifying the Advisors' Proposed Rules to require identification of such Council targets, goals, and policies in the Initiating Resolution. This way, the Council can specifically identify which policies should be considered in the IRP. Given that ENO will need to time to evaluate how to analyze certain Council policies that may involve issues outside of ENO's areas of expertise, and perhaps hire consultants to assist with such analyses, ENO has also proposed a requirement that the Initiating Resolution be approved at least three months prior to the first step in any IRP cycle. Also, the Advisors' Proposed Rules contain frequent references to "incorporating" Council goals and targets. Past resolutions have required ENO to include policies and targets "for evaluation" in the IRP.[24] ENO proposes modifying the Advisors' Proposed Rules to maintain consistency with this directive. ENO believes these proposed modifications should not be controversial, but rather more accurately reflect the intent behind the Advisors' Proposed Rules.

D. Some Terms and Provisions are Insufficiently Defined.

ENO notes that there appear to be several undefined terms in the Advisors' Proposed Rules that may be susceptible to a wide range of interpretations. Similarly, some of the clauses and provisions are less than clear, or appear to blend certain concepts. ENO discusses a few such provisions and its suggested clarifications below. Where ENO is unable to offer clarifications, it has highlighted the undefined terms in yellow in Exhibit A and requests further clarity on these items before the Rules are presented to the Council for a decision.

The definition of the New Orleans Technical Reference Manual (NOTRM) in the Advisors' Proposed Rules appears to confuse certain aspects of the NOTRM, which is currently being developed in Docket No. UD-08-02 through a series of Council-ordered technical conferences, with

[24] *See*, *e.g.*, R-17-32 at pg. 10 ("Future IRPS should **include, for evaluation** by the Advisors, Intervenors, and the Council the goal of increasing the projected savings from the Energy Smart Program by 0.2% per year, until such time as the program generates kWh savings at a rate equal to 2% of annual kWh sales.") (emphasis added).

functions actually fulfilled through a DSM Potential Study. The definition in the Proposed Rules refers to the NOTRM as a tool for "developing ongoing DSM in New Orleans" and containing "metrics used as a principal source for constructing DSM inputs into the IRP process." These statements seem to describe the output of a DSM Potential Study such as was performed early in the 2015 IRP process and do not align with ENO's understanding of the purpose of the NOTRM (or any TRM for that matter).

A TRM is a tool used for Evaluation, Measurement, and Verification ("EM&V") of existing energy efficiency programs. EM&V is intended to provide verified energy savings and guidance for program improvement. TRMs are intended to provide Unit Energy Savings ("UES") values, *e.g.*, the energy savings that occurs when a measure is installed. Many TRMs also include suggested modification parameters for measures delivered through a given program channel (*e.g.*, a CFL that is direct-installed will have a measure retention rate of 98%, while a CFL incented through a retail markdown will have 85-90%). Values reflected from EM&V using the NOTRM will have inherent differences to those contained in any DSM Potential study and the NOTRM should not be confused with the DSM Potential Study. ENO has provided a definition of the NOTRM in Exhibit A that more accurately describes its function.

ENO requests clarification as to whether Section 4(C)(2) refers to "monthly coincident peak" for ENO as to MISO or the Entergy System. To the extent that the provision is intended to reference MISO, it should be noted that MISO Coincident peaks are calculated on an annual basis, not monthly. ENO has not proposed a modification to change the requirement to refer to annual coincident peak, but if the Advisors intended to refer to MISO coincident peaks, ENO requests a modification to require inclusion of annual coincident peaks.

As noted above, the remaining terms for which ENO requests clarification prior to adoption of the IRP rules are highlighted in yellow in Exhibit A.

IV. Conclusion.

ENO believes that the Rulemaking has been productive and can result in many improvements to the IRP process. As stated herein, ENO fears that the "Scorecard Template" threatens to undermine the significant progress that is possible from this Rulemaking and recommends removal

of this subjective, non-analytical ranking method as a requirement from the IRP rules. ENO also urges the Council to consider adopting a process for developing Stakeholder input cases that is administered by the Advisors or CURO, in consult with ENO, but not overseen or "developed" by ENO. ENO believes, and past IRP cycles demonstrate, that this format will provide greater confidence in the final results of the IRP. ENO's other recommended modifications are discussed above and, if adopted, should yield a more productive and thorough IRP process.

Respectfully submitted:

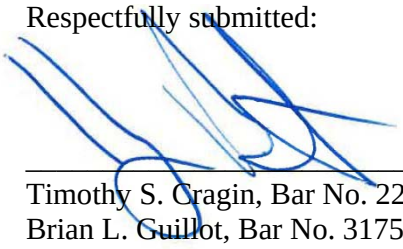
BY: 

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EXHIBIT A

PROPOSED ELECTRIC UTILITY INTEGRATED RESOURCE PLAN RULES of the Council of the City of New Orleans

ELECTRIC UTILITY INTEGRATED RESOURCE PLAN
RULES
of the
Council of the City of New Orleans

Section 1. Overview

A. These rules supersede the "Electric Utility Integrated Resource Plan Requirements of the Council of the City of New Orleans" adopted by Council Resolution R-10-142. The purpose of these rules is to establish an open and transparent process by which all electric utilities, subject to the Council of the City of New Orleans (Council) regulatory jurisdiction, develop and file Integrated Resource Plans (IRP).

B. Each IRP triennial planning cycle shall be commenced with an Initiating Resolution of the Council which outlines the IRP process and timeline, Intervenor and public participation, policy objectives for consideration in the IRP, and other matters as deemed necessary by the Council.

~~C. Each Utility IRP shall include a matrix of these rules, the corresponding section of the IRP responsive to that rule, and a brief description of how the Utility complied with the rules.~~

~~D.~~C. Each Utility IRP is intended to serve as a general resource planning tool to the Utility and the Council, rather than a forum for the approval of the acquisition, implementation, or deactivation of any supply-side or demand-side resource.

~~E.~~D. To the extent there is non-compliance with these rules, after the showing of cause consistent with the provisions of Chapter 158 Article II, Division 8, Sec. 158-512 of the Code of the City of New Orleans and all applicable due process requirements, the Council may impose penalties for non-compliance with these rules.

Section 2. Definitions

A. In these rules, unless otherwise specified, the following terms shall have the meaning defined in this Section:

1. "Advanced Metering Infrastructure" (AMI) - refers to meters and their underlying technology, including communication and data handling systems, that record customer usage for time intervals of one hour or less, and can transmit information to the Utility without the need for a human meter reader. The meter allows for two-way flow of information and can notify the Utility of a power outage, and facilitate Demand Response programs.

2. "Advisors" – refers to the legal and technical consultants retained by the Council to assist it in its regulatory responsibilities.

3. "CURO" – refers to the Council Utilities Regulatory Office.

4. "Demand Side Management" (DSM) – refers to energy efficiency and Demand Response programs administered by the Utility.

5. "Demand Response" (DR) - refers to a program that seeks to modify customer loads to reduce or shift loads from hours with high electricity costs or reliability constraints to other hours. Demand Response programs include, but are not limited to: (a) those Demand Response programs that are dispatchable or controlled by the Utility, such as interruptible loads and direct load control of appliances, and
(b) those Demand Response programs that are not controlled by the Utility, but rather involve a customer response during peak periods, such as critical peak pricing, time-of-use (TOU) rates, and any other rate design that sends market signals to customers to encourage efficient electricity consumption. Demand Response also includes any other programs that shift loads from higher- to lower-energy cost times that may become available through the deployment of AMI or other technologies.

6. "Distributed Energy Resources" (DERs) - refers to generation or energy storage facilities owned or leased by retail customers and located on the customer side of the meter, that are primarily for the use and consumption of energy by the retail customer. Distributed Energy Resources may include renewable/non-renewable generators, combined heat and power, and storage technology including electric vehicles, and any other technology that may similarly serve or dispatch energy from the customer side of the meter.

7. "Initiating Resolution" – refers to a resolution of the Council which initiates the triennial IRP planning cycle and establishes the procedural schedule and such other matters as the Council deems appropriate; and process to be utilized by the Utility, stakeholders and Interested Parties throughout the IRP development process. The Initiating Resolution shall be issued at least three (3) months prior to the first required step in the IRP procedural schedule.

8. "Interested Person" – refers to an individual or entity who desires to receive information and notices of public meetings as part of the IRP process and who is not a party to the proceeding. CURO shall maintain a list of Interested Persons and forward to them copies of all filings, issuances, and notices occurring in the proceeding. This may be accomplished through the Council's electronic docketing system once that docketing system develops the necessary capabilities.

9. "Intervenor" – refers to persons who have intervened in the case pursuant to the New Orleans, Louisiana Code of Ordinances, Chapter 158, Article III.

10. "Load Forecast" – refers to a forecast of electricity demand (MW) and energy (MWh) for the Utility that takes into account currently implemented demand-side resources, and customer-owned DERs that are interconnected to deliver energy to the grid, but does not include any anticipated or incremental demand-side resources.

11. "New Orleans Technical Reference Manual" (NOTRM) – refers to ~~the~~ a single common reference document for~~-~~ estimating energy and peak demand savings

resulting from the installation of energy efficiency measures promoted by utility-administered programs in New Orleans. This document is a compilation of deemed savings values previously approved by the Council and the Advisors for use in estimating savings for energy efficiency measures. The NOTRM is ~~individual DSM measures and programs listing specific descriptions, costs, estimated kWh reductions, and other metrics used as a principal source for constructing the DSM inputs into the IRP process and developing ongoing DSM in New Orleans. The NOTRM shall be~~ updated periodically as required by the Council~~annually~~ through a collaborative process ~~between~~involving the Council, the Advisors, the Utility, the third party Evaluation, Measurement and Verification ("EM&V") contractor, and other parties as-needed. The data and methodologies in this document are to be used by program planners, administrators, implementers and evaluators for forecasting, reporting and evaluating energy and demand savings from energy efficiency measures installed ~~periodically by evaluation, measurement, and verification of ongoing DSM programs~~ in New Orleans.

12. "Planning Period" – refers to the number of projected years over which the existing resources and various potential resource options are evaluated in the IRP process.

13. "Planning Scenario"– refers to a distinct definition of a market outlook for the IRP Planning Period consisting of key ~~uncertainties~~ variables which are not controlled by the Utility or the Council. Several Planning Scenarios are constructed to identify the plausible futures of the IRP Planning Period. Various Planning Strategies are then evaluated relative to each of the defined Planning Scenarios.

14. "Planning Strategy" – refers to the defining of distinct resource constraints, regulatory policies, or business decisions over which the Council, the Utility, or Intervenors have control. For example, a Planning Strategy can be traditional utility planning, Intervenors defining resource inputs, or a Planning Strategy reflecting Council policies. Each distinct Planning Strategy is evaluated relative to each Planning Scenario, resulting in a Resource Portfolio for each Planning Scenario/Planning Strategy combination.

15. "Resource Portfolio" - refers to ~~prescribed~~ combinations of supply-side and demand-side resources, taking into account transmission investment, for comparative evaluation in IRP modeling and reporting. Modeling of the intersection of a Planning Scenario and a Planning Strategy results in a Resource Portfolio. For example, if four Planning Scenarios and two separate Planning Strategies are defined, there would be eight Resource Portfolios.

16. "Regional Transmission Organization" (RTO) – refers to the Midcontinent Independent System Operator (MISO) or any successor RTO of which the Utility is a participating member.

17. "Stakeholder" -- refers to any person potentially impacted by the outcome of the IRP, whether that person formally intervenes in the proceeding or not.

18. "Stakeholder Process" – refers to the meaningful engagement of stakeholders

throughout the IRP process, specifically addressed in the Initiating Resolution commencing an IRP cycle.

19. "Utility" – refers to any electric utility subject to the Council's regulatory jurisdiction.

Section 3. Objectives

A. The Utility shall state and support specific objectives to be accomplished in the IRP planning process, which include but are not limited to the following:

1. optimize the integration of supply-side resources and~~,~~ demand-side resources, while taking into account transmission and distribution, to provide New Orleans ratepayers with reliable electricity at the lowest practicable cost given an acceptable level of risk;

2. maintain the Utility's financial integrity;

3. anticipate and mitigate risks associated with fuel and market prices, environmental compliance costs, and other economic factors;

4. support the resiliency and sustainability of the Utility's systems in New Orleans;

5. comply with local, state and federal regulatory requirements and regulatory requirements and any policies established by the Council that are identified in the Initiating Resolution;

6. evaluate the appropriateness of incorporating advances in technology, including, but not limited to, renewable energy, storage, and DERs, among others;

7. achieve a range of acceptable risk in the trade-off between price and risk; and

8. maintain transparency and engagement with stakeholders throughout the IRP process by conducting technical conferences and providing for stakeholder feedback regarding the Planning Scenarios, Planning Strategies, input parameters, and assumptions.

B. In the IRP Report, ~~T~~the Utility shall ~~demonstrate~~ discuss ~~in the IRP how it has~~its efforts to achieve~~d or will achieve~~ the specific objectives ~~of the IRP in its triennial planning cycle~~identified above.

Section 4. Load Forecast

A. The Utility shall develop a reference case Load Forecast and at least two alternative Load Forecasts applicable to the Planning Period which are consistent with the Planning Scenarios identified in Section 7C. The following data shall be supplied in support of each Load Forecast:

1. The Utility's forecast of demand and energy usage ~~by the Utility and~~ by customer class for the Planning Period;

2. A detailed discussion of the forecasting methodology and a list of key independent variables and their reference sources utilized to develop the Load Forecast, including

assumptions and econometrically evaluated estimates. The details of the Load Forecast should identify the energy and demand impacts of customer-owned DERs that are interconnected to deliver energy to the grid and then existing Utility-sponsored DSM programs;

3. Forecasts of the key independent variables for the Planning Period, including their probability distributions and statistical significance;

4. The expected value of the Load Forecast as well as the probability distributions (uncertainty ranges) around the expected value of each Load Forecast; and

5. A discussion of the extent to which line losses have been incorporated in the Load Forecast.

B. The Utility shall construct composite customer hourly load profiles based on the forecasted demand and energy usage by customer class and relevant load research data, including the factors which determine future load levels and shape.

C. Concurrent with the presentation of the Load Forecasts to the Advisors, CURO, and stakeholders, the Utility shall provide historical demand and energy data for the five (5) years immediately preceding the Planning Period. At a minimum, the following data shall be provided:

1. monthly energy consumption ~~for the Utility~~in total and for each customer class;

2. monthly coincident peak demand for the Utility ~~and each customer class; and~~

3. ~~monthly peak demand for each customer class~~;

D. The data and discussions developed pursuant to Section 4A and Section 4B, and Section 4C shall be provided as an attachment ~~supplement~~ to the IRP report and summarized in the IRP report.

E. The Utility shall also provide a list of the co-generation and DERs larger than 300 kW ~~existing on~~that are interconnected to deliver energy to the grid on the Utility's system, including resources maintained by the City of New Orleans for city/parish purposes, (*e.g.* Sewerage and Water Board, Orleans Levee District, or by independent agencies or entities such as universities, etc.).

Section 5. Resource Options

A. Identification of resource options. The Utility shall identify and evaluate all existing supply-side and demand-side resources and identify a variety of potential supply-side and demand-side resources which can be reasonably expected to meet the Utility's projected resource needs during the Planning Period.

1. Existing supply-side resources. For existing supply-side resources, the Utility should incorporate all fixed and variable costs necessary to continue to utilize the resource as part of a Resource Portfolio. Costs shall include the costs of any anticipated renewal and replacement projects as well as the cost of regulatory mandated current and future

emission controls.

a. The Utility shall identify important changes to the Utility's resource mix that occurred since the last IRP including large capital projects, resource procurements, changes in fuel types, and actual or expected operational changes regardless of cause.

b. Data supplied as part of the Utility's IRP filing should include a list of the Utility's existing supply-side resources including: the resource name, fuel type, capacity rating at time of summer and winter peak, and typical operating role (*e.g.* base, intermediate, peaking).

2. For existing demand-side resources, the Utility should account for load reductions attributable to the then-existing demand-side resources in each year of the Planning Period. Each existing demand-side resource will be identified as either a specific energy efficiency program or DR program with an individual program lifetime and estimated energy and demand reductions applicable to the Planning Period, or as a then-existing Utility owned or Utility-managed distributed generation resource with energy and demand impacts that are estimated for applicable years of the Planning Period. Data supplied as part of the Utility's IRP filing should include:

   a. Details of projected kWh/kW reductions from existing DSM programs based on quantifiable results and other credible support derived from Energy Smart New Orleans, or any successor program, using verified data available to the Utility from prior DSM program implementation years.

   b. A list categorizing the Utility's existing demand-side resources including anticipated capacity at time of summer and winter peak.

3. With respect to potential supply-side resources, the Utility shall consider: Utility-owned and purchased power resources; conventional and new generating technologies including technologies expected to become commercially viable during the Planning Period; technologies utilizing renewable fuels; energy storage technologies; grid interconnected cogeneration resources; and grid interconnected Distributed Energy Resources, among others.

   a. The Utility should ~~incorporate~~ include for evaluation any ~~then-effective~~ Council policy goals identified in the Initiating Resolution with respect to resource acquisition, including, but not limited to, renewable resources, energy storage technologies, and DERs.

   b. Data supplied as part of the Utility's IRP filing should include: a description of each potential supply-side resource including a technology description, operating characteristics, capital cost or demand charge, fixed operation and maintenance costs, variable charges, variable operation and maintenance costs, earliest date available to provide supply, expected life or contractual term of resource, and fuel type with reference to fuel forecast.

4. Potential demand-side resources. With respect to potential demand-side resources, the Utility should consider and identify all cost-effective demand-side resources through the

development of a DSM potential study. All DSM measures with a Total Resource Cost Test[1] value of 1.0 or greater shall be considered cost effective for DSM measure screening purposes.

a. The DSM potential study shall include, but not be limited to: identification of eligible measures, measure life expectancies, baseline standards, load reduction profiles, incremental capacity and energy savings, measure and program cost assumptions, participant adoption rates, market development, and avoided energy and capacity costs for DSM measure and program screening purposes.

b. The principal reference document for the DSM potential study shall be the New Orleans Technical Reference Manual.

c. In the development of the DSM potential study, all four California Standard Practice Tests[2] (*i.e.* TRC, PACT, RIM and PCT) will be calculated for the DSM measures and programs considered.

d. The Utility should ~~incorporate~~ include for evaluation any ~~then-effective~~ Council policy goals or targets identified in the Initiating Resolution with respect to demand-side resources.

e. The cost-effective DR programs should include consideration of those programs enabled by the deployment of Advanced Meter Infrastructure, including both direct load control and DR pricing programs for both Residential and Commercial customer classes.

f. Data supplied as part of the Utility's IRP filing should include: a description of each potential demand-side resource considered, including a description of the resource or program; expected penetration levels by planning year; hourly load reduction profiles for each DSM program utilized in the IRP process; and results of appropriate cost-benefit analyses and acceptance tests, as part of the planning assumptions utilized within the IRP planning process.

B. Through the Stakeholder Process, the Utility shall strive to develop a consensus among the Advisors and a majority of the Intervenors regarding the potential supply-side and potential demand-side resources and their associated defining characteristics (*e.g.*, capital cost, operating and maintenance costs, emissions, amount of DSM load reduction, etc.).

1. To the extent a consensus can be achieved among the Utility, the Advisors, and a majority of the Intervenors,[1][10][3] the resulting collection of potential supply-side and demand-side resources and their associated defining characteristics will be utilized in the reference Planning Strategy developed pursuant to Section 7D.

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[1] California Standard Practice Manual: Economic Analysis of Demand-Side Programs and Projects, State of California Governor's Office of Planning and Research, July 2002.

[2] *Id.*

[3] An Intervenor not consenting to the majority position and thus not joining in the consensus retains the ability to oppose the consensus position before the Council and assert its own position.

2. To the extent such a consensus cannot be achieved, the Utility shall ~~develop~~incorporate, in coordination with the requirements in Section 7D, two distinct Planning Strategies: a reference Planning Strategy and a stakeholder Planning Strategy. The reference Planning Strategy will be based on the Utility's assessment of the collection of potential supply-side and demand-side resources and their associated defining characteristics. The stakeholder Planning Strategy will be ~~developed by~~provided to the Utility by the Advisors based on the collection of potential supply-side and demand-side resources and their associated defining characteristics resulting from a consensus of the majority of the Intervenors.[4] The procedure for determining the Intervenors' majority position shall be defined in the Initiating Resolution and administered by the Advisors or CURO. To maintain consistency in the modeling process, the Advisors will work with Intervenors and consult with the Utility to ensure that~~should be cognizant of the Utility's modeling capabilities and~~ Intervenors provide input only on parameters that can be accommodated within the framework of the existing model and software. The Utility shall have no obligation to incorporate an element(s) of the stakeholder Planning Strategy that cannot be accommodated by the Utility's modeling capabilities

Section 6. Transmission and Distribution

A. The Utility shall explain how the Utility's current transmission system, and any planned transmission system expansions (including regional transmission system expansion planned by the RTO in which the Utility participates) and the Utility's distribution system are integrated into the overall resource planning process to optimize the Utility's resource portfolio and provide New Orleans ratepayers with reliable electricity at the lowest practicable cost.

B. Models developed for the integrated resource planning process should incorporate the planned configuration of the Utility's transmission system and the interconnected RTO during the Planning Period.

C. To the extent major changes in the operation or planning of the transmission system and/or distribution system (including changes to accommodate the expansion of DERs) are contemplated in the Planning Period, the Utility should describe the anticipated changes and provide an assessment of the cost and benefits to the Utility and its customers.

~~D. To the extent that new resource additions are selected by the Utility for a Resource Portfolio based on reliability needs rather than as a result of the optimized development of a Resource Portfolio, the Utility shall demonstrate that there are no economically feasible transmission solutions that can be employed to either reduce the size, delay, or eliminate the need for the new resource additions.~~

~~E. The Utility shall evaluate the extent to which reliability of the distribution system can be improved through the strategic location of DERs or other resources identified as part of the IRP planning process, and if so, the Utility should provide an analysis, discussion, and~~

[4] An Intervenor not consenting to the majority position and thus not joining in the consensus retains the ability to oppose the consensus position before the Council and assert its own position. However, the Utility shall have no obligation to accommodate anything other than the majority position.

~~quantification of the costs and benefits.~~

Section 7. Integrated Resource Plan Analyses

A. The integrated resource planning process should include modeling of specific parameters and their relationships consistent with market fundamentals, and as appropriate for long-term Portfolio planning. This overall modeling approach is an accepted analytic approach used in resource planning considering the range of both supply-side and demand-side options as well as uncertainty surrounding market pricing. To represent and account for the different characteristics of alternative types of resource options, mathematical methods such as a linear programming formulation should be used to optimize resource decisions.[5]

B. The optimization process shall be constrained to mitigate the over-reliance on forecasted revenues from external capacity market sales and external energy market sales driving the selection of resources.

C. The Utility shall develop ~~at least~~ three to four Planning Scenarios that incorporate different economic and environmental circumstances and national and regional regulatory and legislative policies.

1. The Planning Scenarios should include a reference Planning Scenario that represents the Utility's point of view on the most likely future circumstances and policies, as well as two alternative Planning Scenarios that account for alternative circumstances and policies.

2. In the development of the Planning Scenarios, the Utility should seek to achieve a consensus among the Utility, Advisors, and a majority of Intervenors[6] regarding the assumptions surrounding each of the Planning Scenarios. To the extent a consensus is not reasonably attainable on the Planning Scenarios; the Utility ~~should develop~~shall model a fourth Planning Scenario which is based upon input from a consensus of the majority of the Intervenors.[7] The procedure for determining the Intervenors' majority position on the substance of the fourth Planning Scenario shall be defined in the Initiating Resolution and administered by the Advisors or CURO.

3. For each IRP Planning Scenario, data supplied as part of the Utility's IRP filing should include:

a. a fuel price forecast for each fuel considered for utilization in any existing or potential supply-side resource;

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[5] Linear programming is a mathematical method or model of optimizing linear functions or relationships within constraints to achieve the lowest costs.

[6] An Intervenor not consenting to the majority position and thus not joining in the consensus retains the ability to oppose the consensus position before the Council and assert its own position. However, the Utility shall have no obligation to accommodate anything other than the majority position.

[7] An Intervenor not consenting to the majority position and thus not joining in the consensus retains the ability to oppose the consensus position before the Council and assert its own position. However, the Utility shall have no obligation to accommodate anything other than the majority position.

b. an hourly market price forecast for energy (*e.g*. locational marginal prices);

c. an annual ~~market price forecast~~value for capacity ~~(*e.g*. capacity market auction clearing prices)~~; and

d. forecasts of price for any other price related components that are defined by the Planning Scenario (*e.g*. CO_2 price forecast, etc.).

D. Distinct from the Planning Scenarios, the Utility shall identify ~~several~~ between two to four Planning Strategies which constrain the optimization process to achieve particular goals, regulatory policies and/or business decisions over which the Council, the Utility, or stakeholders have control.

1. The Utility shall develop a Strategy that allows the optimization process to identify the lowest reasonable cost options for meeting any needs identified in the IRP.

~~1.~~2. The Utility shall develop a reference Planning Strategy based on a consensus of the Utility, Advisors, and a majority of the Intervenors. [8] To the extent a consensus cannot be reasonably achieved, the reference Planning Strategy shall reflect the Utility's point of view on resource input parameters and constraints, and the Utility shall ~~develop~~ model a separate stakeholder Planning Strategy based upon a consensus of the majority of the Intervenors.[9] The procedure for determining the Intervenors' majority position on the substance of the Intervenor Planning Strategy shall be defined in the Initiating resolution and administered by the Advisors or CURO.

~~2.~~3. As necessary, the Utility shall develop an alternate Planning Strategy~~ies~~ to reflect the policy goals of the Council as ~~established~~ identified in the Initiating Resolution prior to the beginning of the IRP planning cycle.

E. Prior to the development of optimized Resource Portfolios, the parameters developed for the Planning Scenarios and Planning Strategies shall be set, considered finalized, and not subject for alteration during the remainder of the IRP planning cycle.

F. Resource Portfolios shall be developed through optimization utilizing the Utility's modeling software. The Utility shall identify the least-cost Resource Portfolio for each Planning Scenario and Planning Strategy combination, based on total supply cost. Resource Portfolios shall consist of optimized combinations of supply-side and demand-side resources, while recognizing constraints including transmission and distribution.

G. The Utility shall provide a discussion and presentation of results for each Planning Scenario/Planning Strategy combination, the annual total demand related costs, energy related costs, and total supply costs associated with each least-cost Resource Portfolio

[8] An Intervenor not consenting to the majority position and thus not joining in the consensus retains the ability to oppose the consensus position before the Council and assert its own position. However, the Utility shall have no obligation to accommodate anything other than the majority position.

[9] An Intervenor not consenting to the majority position and thus not joining in the consensus retains the ability to oppose the consensus position before the Council and assert its own position. However, the Utility shall have no obligation to accommodate anything other than the majority position.

identified under each Planning Scenario/Planning Strategy combination, a load and capability table indicating the total load requirements and identifying all supply-side and demand-side resources included in the Resource Portfolio (including identifying the impacts of existing demand-side resources on the total load requirements), and a description of the supply-side and demand-side resources that are planned and, if applicable, their principal rationale for selection (*i.e.*, supply peak demand, supply non-peak demand or operational constraints, achieve more economical production of energy, etc.).

1. Data supplied as part of the Utility's IRP filing shall include a cumulative present worth summary of the results as well as the annual estimates of costs that result in the cumulative present worth to enable the Council to understand the timing of costs and savings of each least-cost Resource Portfolio.

~~H. The IRP report's discussion and presentation of results for each Resource Portfolio should identify tipping points that would guide the preference of a Resource Portfolio under alternative conditions incorporated in the cost/risk analysis, such as changes to underlying assumptions that impact load growth, capital costs, resource upgrades, the emergence of other renewable projects, and DER technologies.~~

~~I.~~H. The Utility will develop and include a scorecard template or set of quantitative and qualitative metrics to assist the Council in assessing the IRP based on the Resource Portfolios. Such metrics ~~should~~ may include but not necessarily be limited to: cost[10]; revenue impact ~~on rates~~; ~~risk;~~ flexibility of resource options[11]; reasonably quantifiable environmental impacts~~(such as national average emissions for the technologies chosen, amount of groundwater consumed, etc.)~~; consistency with established, published city policies, ~~such as the City's sustainability plan~~as identified in the Initiating Resolution; and ~~any other industry-standard IRP evaluation criteria~~~~macroeconomic impacts in New Orleans~~. On the scorecard, the Utility shall rank the Resource Portfolios generated through the IRP according to how well they meet each metric, to the extent the Utility is reasonably able to perform such a ranking.

Section 8. Risk Analyses

A. The Utility shall develop a cost/risk analysis which balances quantifiable costs with quantifiable risks of the identified least-cost Resource Portfolios. The risk assessment must be presented in the IRP to allow the Council to comprehend the ~~robustness~~ impact of each Resource Portfolio across the cost/risk range of possible Resource Portfolios.

1. In quantifying Resource Portfolio costs/risks, the IRP shall assess ~~any social and environmental effects of the Resource Portfolios to the extent that~~key cost drivers that are determined to be susceptible to volatility to the extent that: 1) those effects can be quantified for a Resource Portfolio, including the applicable Planning Period years ~~and ranges of uncertainty surrounding each externality cost~~, and 2) each quantified cost must be clearly identified by the portion which relates to the Utility's revenue requirements or

[10] The cost metric should include the cost of quantified externalities as well as Utility costs resulting from the IRP optimization.
[11] The flexibility metric includes response to load swings and quick start.

cost of providing service to the Utility's customers under the Resource Portfolio.

2. A risk assessment is required to evaluate both the expected outcome of potential costs as well as the distribution and potential range and associated probabilities of probable outcomes.

3.

The risk assessment for each IRP cycle shall be defined and agreed upon by the Utility and the Advisors consistent with the modeling capabilities of the Utility, and the procedural schedule defined in the Initiating Resolution. include the expected cost per MWh of the Resource Portfolios in selected future years, along with the range of annual average costs foreseen for the 10th and 90th percentiles of simulated possible outcomes.

3.2. The supporting methodology shall be included, such as the iterations or simulations performed for the selected years, in which the possible outcomes are drawn from distributions that describe market expectations and volatility as of the current filing date.

Section 9. IRP Process Requirements

A. At a minimum, the IRP process shall include, but not be limited to, the following elements:

1. The opportunity for Intervenors to participate in the concurrent development of inputs and assumptions for the major components of the IRP in collaboration with the Utility within the confines of the IRP timeline and procedural schedule.

2. At least four technical conferences, to be noticed, administered, and moderated by CURO, focused on each major IRP component that include the Utility, Intervenors, CURO, and the Advisors with structured comment deadlines so that conference participants have the opportunity to present inputs and assumptions and provide comments while remaining mindful of the procedural schedule established in the Initiating Resolution.

3. At least 3 public engagement meetings advertised by CURO through multiple media channels at a minimum of 2 weeks prior to the meeting.
   a. A public education and kickoff meeting, to be noticed, administered, and moderated by CURO, that explains the following: the purpose of the IRP and the corresponding process; the IRP timeline as delineated in the Council's Initiating Resolution with respect to major process deadlines; the inputs and assumptions that are considered in the IRP process and summarized in the report; and ways in which public can remain informed throughout the IRP cycle (*e.g.*, online information resources that provide status updates, portal through which customers can submit questions or concerns to the Utility);

   b. A public presentation of the IRP; and

   c. A public hearing, to be noticed, administered, and moderated by CURO, opportunity after presentation of the IRP report to give the public the opportunity to provide comment on the record.

4. In addition to a live presentation, all public meetings should also be broadcast via the

~~Utility's~~ Council's website and archived for later viewing.

Section 10. Submission and Public Presentation of IRP

A. The Utility shall make its IRP available for public review subject to the provisions of the Council Resolution initiating the current IRP planning cycle and referenced in Section 1B.

B. The Utility shall file its IRP with the Council consistent with and subject to the provisions of the Council Resolution initiating the current IRP planning cycle referenced in Section 1B.

C. The IRP report should discuss the stakeholders' engagement throughout the IRP process; the access to data inputs and specific modeling results by all parties; the consensus reached regarding all demand-side and supply-side resource inputs and assumptions; specific descriptions of unresolved issues regarding inputs, assumptions, or methodology; the formulation of the stakeholder Planning Scenario and/or stakeholder Planning Strategy as needed; and recommendations to improve the transparency and efficiency of the IRP process for prospective IRP cycles.

D. The IRP shall include an action plan and timeline discussing any steps or actions the Utility may propose to take as a result of the IRP, understanding that the Council's acceptance of the filing of the Utility's IRP would not operate as approval of any such proposed steps or actions.

E. Provided the IRP fulfills the requirements contained herein and was developed in compliance with the procedural schedule established for the triennial IRP cycle, the Council shall accept the Utility's IRP as filed in compliance with the Council's substantive and procedural requirements.

F. The Council's acceptance of the Utility's IRP as described herein shall have no precedential effect with respect to the Council's evaluation of any application for approval of the acquisition, implementation, or deactivation of any supply-side or demand-side resource or program.

–END--

EXHIBIT A

PROPOSED ELECTRIC UTILITY INTEGRATED RESOURCE PLAN RULES of the Council of the City of New Orleans

ELECTRIC UTILITY INTEGRATED RESOURCE PLAN
RULES
of the
Council of the City of New Orleans

Section 1. Overview

A. These rules supersede the "Electric Utility Integrated Resource Plan Requirements of the Council of the City of New Orleans" adopted by Council Resolution R-10-142. The purpose of these rules is to establish an open and transparent process by which all electric utilities, subject to the Council of the City of New Orleans (Council) regulatory jurisdiction, develop and file Integrated Resource Plans (IRP).

B. Each IRP triennial planning cycle shall be commenced with an Initiating Resolution of the Council which outlines the IRP process and timeline, Intervenor and public participation, policy objectives for consideration in the IRP, and other matters as deemed necessary by the Council.

C. Each Utility IRP is intended to serve as a general resource planning tool to the Utility and the Council, rather than a forum for the approval of the acquisition, implementation, or deactivation of any supply-side or demand-side resource.

D. To the extent there is non-compliance with these rules, after the showing of cause consistent with the provisions of Chapter 158 Article II, Division 8, Sec. 158-512 of the Code of the City of New Orleans and all applicable due process requirements, the Council may impose penalties for non-compliance with these rules.

Section 2. Definitions

A. In these rules, unless otherwise specified, the following terms shall have the meaning defined in this Section:

1. "Advanced Metering Infrastructure" (AMI) - refers to meters and their underlying technology, including communication and data handling systems, that record customer usage for time intervals of one hour or less, and can transmit information to the Utility without the need for a human meter reader. The meter allows for two-way flow of information and can notify the Utility of a power outage, and facilitate Demand Response programs.

2. "Advisors" – refers to the legal and technical consultants retained by the Council to assist it in its regulatory responsibilities.

3. "CURO" – refers to the Council Utilities Regulatory Office.

4. “Demand Side Management” (DSM) – refers to energy efficiency and Demand Response programs administered by the Utility.

5. “Demand Response” (DR) - refers to a program that seeks to modify customer loads to reduce or shift loads from hours with high electricity costs or reliability constraints to other hours. Demand Response programs include, but are not limited to: (a) those Demand Response programs that are dispatchable or controlled by the Utility, such as interruptible loads and direct load control of appliances, and
(b) those Demand Response programs that are not controlled by the Utility, but rather involve a customer response during peak periods, such as critical peak pricing, time-of-use (TOU) rates, and any other rate design that sends market signals to customers to encourage efficient electricity consumption. Demand Response also includes any other programs that shift loads from higher- to lower-energy cost times that may become available through the deployment of AMI or other technologies.

6. “Distributed Energy Resources” (DERs) - refers to generation or energy storage facilities owned or leased by retail customers and located on the customer side of the meter, that are primarily for the use and consumption of energy by the retail customer. Distributed Energy Resources may include renewable/non-renewable generators, combined heat and power, and storage technology including electric vehicles, and any other technology that may similarly serve or dispatch energy from the customer side of the meter.

7. “Initiating Resolution” – refers to a resolution of the Council which initiates the triennial IRP planning cycle and establishes the procedural schedule and such other matters as the Council deems appropriate; and process to be utilized by the Utility, stakeholders and Interested Parties throughout the IRP development process. The Initiating Resolution shall be issued at least three (3) months prior to the first required step in the IRP procedural schedule.

8. “Interested Person” – refers to an individual or entity who desires to receive information and notices of public meetings as part of the IRP process and who is not a party to the proceeding. CURO shall maintain a list of Interested Persons and forward to them copies of all filings, issuances, and notices occurring in the proceeding. This may be accomplished through the Council's electronic docketing system once that docketing system develops the necessary capabilities.

9. “Intervenor” – refers to persons who have intervened in the case pursuant to the New Orleans, Louisiana Code of Ordinances, Chapter 158, Article III.

10. “Load Forecast” – refers to a forecast of electricity demand (MW) and energy (MWh) for the Utility that takes into account currently implemented demand-side resources, and customer-owned DERs that are interconnected to deliver energy to the grid, but does not include any anticipated or incremental demand-side resources.

11. “New Orleans Technical Reference Manual” (NOTRM) – refers to a single common reference document for estimating energy and peak demand savings

resulting from the installation of energy efficiency measures promoted by utility-administered programs in New Orleans. This document is a compilation of deemed savings values previously approved by the Council and the Advisors for use in estimating savings for energy efficiency measures. The NOTRM is updated periodically as required by the Council through a collaborative process involving the Council, the Advisors, the Utility, the third party Evaluation, Measurement and Verification ("EM&V") contractor, and other parties as-needed. The data and methodologies in this document are to be used by program planners, administrators, implementers and evaluators for forecasting, reporting and evaluating energy and demand savings from energy efficiency measures installed in New Orleans.

12. "Planning Period" – refers to the number of projected years over which the existing resources and various potential resource options are evaluated in the IRP process.

13. "Planning Scenario"– refers to a distinct definition of a market outlook for the IRP Planning Period consisting of key variables which are not controlled by the Utility or the Council. Several Planning Scenarios are constructed to identify the plausible futures of the IRP Planning Period. Various Planning Strategies are then evaluated relative to each of the defined Planning Scenarios.

14. "Planning Strategy" – refers to the defining of distinct resource constraints, regulatory policies, or business decisions over which the Council, the Utility, or Intervenors have control. For example, a Planning Strategy can be traditional utility planning, Intervenors defining resource inputs, or a Planning Strategy reflecting Council policies. Each distinct Planning Strategy is evaluated relative to each Planning Scenario, resulting in a Resource Portfolio for each Planning Scenario/Planning Strategy combination.

15. "Resource Portfolio" - refers to combinations of supply-side and demand- side resources, taking into account transmission investment, for comparative evaluation in IRP modeling and reporting. Modeling of the intersection of a Planning Scenario and a Planning Strategy results in a Resource Portfolio. For example, if four Planning Scenarios and two separate Planning Strategies are defined, there would be eight Resource Portfolios.

16. "Regional Transmission Organization" (RTO) – refers to the Midcontinent Independent System Operator (MISO) or any successor RTO of which the Utility is a participating member.

17. "Stakeholder" -- refers to any person potentially impacted by the outcome of the IRP, whether that person formally intervenes in the proceeding or not.

18. "Stakeholder Process" – refers to the meaningful engagement of stakeholders throughout the IRP process, specifically addressed in the Initiating Resolution commencing an IRP cycle.

19. "Utility" – refers to any electric utility subject to the Council's regulatory jurisdiction.

Section 3. Objectives

A. The Utility shall state and support specific objectives to be accomplished in the IRP planning process, which include but are not limited to the following:

1. optimize the integration of supply-side resources and demand-side resources, while taking into account transmission and distribution, to provide New Orleans ratepayers with reliable electricity at the lowest practicable cost given an acceptable level of risk;

2. maintain the Utility's financial integrity;

3. anticipate and mitigate risks associated with fuel and market prices, environmental compliance costs, and other economic factors;

4. support the resiliency and sustainability of the Utility's systems in New Orleans;

5. comply with local, state and federal regulatory requirements and regulatory requirements and any policies established by the Council that are identified in the Initiating Resolution;

6. evaluate the appropriateness of incorporating advances in technology, including, but not limited to, renewable energy, storage, and DERs, among others;

7. achieve a range of acceptable risk in the trade-off between price and risk; and

8. maintain transparency and engagement with stakeholders throughout the IRP process by conducting technical conferences and providing for stakeholder feedback regarding the Planning Scenarios, Planning Strategies, input parameters, and assumptions.

B. In the IRP Report, the Utility shall discuss its efforts to achieve the specific objectives identified above.

Section 4. Load Forecast

A. The Utility shall develop a reference case Load Forecast and at least two alternative Load Forecasts applicable to the Planning Period which are consistent with the Planning Scenarios identified in Section 7C. The following data shall be supplied in support of each Load Forecast:

1. The Utility’s forecast of demand and energy usage by customer class for the Planning Period;

2. A detailed discussion of the forecasting methodology and a list of key independent variables and their reference sources utilized to develop the Load Forecast, including assumptions and econometrically evaluated estimates. The details of the Load Forecast should identify the energy and demand impacts of customer-owned DERs that are interconnected to deliver energy to the grid and then existing Utility-sponsored DSM programs;

3. Forecasts of the key independent variables for the Planning Period, including their probability distributions and statistical significance;

4. The expected value of the Load Forecast as well as the probability distributions (uncertainty ranges) around the expected value of each Load Forecast; and
5. A discussion of the extent to which line losses have been incorporated in the Load Forecast.

B. The Utility shall construct composite customer hourly load profiles based on the forecasted demand and energy usage by customer class and relevant load research data, including the factors which determine future load levels and shape.

C. Concurrent with the presentation of the Load Forecasts to the Advisors, CURO, and stakeholders, the Utility shall provide historical demand and energy data for the five (5) years immediately preceding the Planning Period. At a minimum, the following data shall be provided:

1. monthly energy consumption in total and for each customer class;

2. monthly coincident peak demand for the Utility

3. ;

D. The data and discussions developed pursuant to Section 4A and Section 4B, and Section 4C shall be provided as an attachment to the IRP report and summarized in the IRP report.

E. The Utility shall also provide a list of the co-generation and DERs larger than 300 kW that are interconnected to deliver energy to the grid on the Utility's system, including resources maintained by the City of New Orleans for city/parish purposes, (*e.g*. Sewerage and Water Board, Orleans Levee District, or by independent agencies or entities such as universities, etc.).

Section 5. Resource Options

A. Identification of resource options. The Utility shall identify and evaluate all existing supply-side and demand-side resources and identify a variety of potential supply-side and demand-side resources which can be reasonably expected to meet the Utility's projected resource needs during the Planning Period.

1. Existing supply-side resources. For existing supply-side resources, the Utility should incorporate all fixed and variable costs necessary to continue to utilize the resource as part of a Resource Portfolio. Costs shall include the costs of any anticipated renewal and replacement projects as well as the cost of regulatory mandated current and future emission controls.

a. The Utility shall identify important changes to the Utility's resource mix that occurred since the last IRP including large capital projects, resource procurements, changes in fuel types, and actual or expected operational changes regardless of cause.

b. Data supplied as part of the Utility's IRP filing should include a list of the Utility's existing supply-side resources including: the resource name, fuel type, capacity rating

at time of summer and winter peak, and typical operating role (*e.g.* base, intermediate, peaking).

2. For existing demand-side resources, the Utility should account for load reductions attributable to the then-existing demand-side resources in each year of the Planning Period. Each existing demand-side resource will be identified as either a specific energy efficiency program or DR program with an individual program lifetime and estimated energy and demand reductions applicable to the Planning Period, or as a then-existing Utility owned or Utility-managed distributed generation resource with energy and demand impacts that are estimated for applicable years of the Planning Period. Data supplied as part of the Utility's IRP filing should include:

    a. Details of projected kWh/kW reductions from existing DSM programs based on quantifiable results and other credible support derived from Energy Smart New Orleans, or any successor program, using verified data available to the Utility from prior DSM program implementation years.

    b. A list categorizing the Utility's existing demand-side resources including anticipated capacity at time of summer and winter peak.

3. With respect to potential supply-side resources, the Utility shall consider: Utility-owned and purchased power resources; conventional and new generating technologies including technologies expected to become commercially viable during the Planning Period; technologies utilizing renewable fuels; energy storage technologies; grid interconnected cogeneration resources; and grid interconnected Distributed Energy Resources, among others.

    a. The Utility should include for evaluation any Council policy goals identified in the Initiating Resolution with respect to resource acquisition, including, but not limited to, renewable resources, energy storage technologies, and DERs.

    b. Data supplied as part of the Utility's IRP filing should include: a description of each potential supply-side resource including a technology description, operating characteristics, capital cost or demand charge, fixed operation and maintenance costs, variable charges, variable operation and maintenance costs, earliest date available to provide supply, expected life or contractual term of resource, and fuel type with reference to fuel forecast.

4. Potential demand-side resources. With respect to potential demand-side resources, the Utility should consider and identify all cost-effective demand-side resources through the development of a DSM potential study. All DSM measures with a Total Resource Cost Test[1] value of 1.0 or greater shall be considered cost effective for DSM measure screening purposes.

a. The DSM potential study shall include, but not be limited to: identification of eligible

[1] California Standard Practice Manual: Economic Analysis of Demand-Side Programs and Projects, State of California Governor's Office of Planning and Research, July 2002.

measures, measure life expectancies, baseline standards, load reduction profiles, incremental capacity and energy savings, measure and program cost assumptions, participant adoption rates, market development, and avoided energy and capacity costs for DSM measure and program screening purposes.

b. The principal reference document for the DSM potential study shall be the New Orleans Technical Reference Manual.

c. In the development of the DSM potential study, all four California Standard Practice Tests[2] (*i.e.* TRC, PACT, RIM and PCT) will be calculated for the DSM measures and programs considered.

d. The Utility should include for evaluation any Council policy goals or targets identified in the Initiating Resolution with respect to demand-side resources.

e. The cost-effective DR programs should include consideration of those programs enabled by the deployment of Advanced Meter Infrastructure, including both direct load control and DR pricing programs for both Residential and Commercial customer classes.

f. Data supplied as part of the Utility's IRP filing should include: a description of each potential demand-side resource considered, including a description of the resource or program; expected penetration levels by planning year; hourly load reduction profiles for each DSM program utilized in the IRP process; and results of appropriate cost-benefit analyses and acceptance tests, as part of the planning assumptions utilized within the IRP planning process.

B. Through the Stakeholder Process, the Utility shall strive to develop a consensus among the Advisors and a majority of the Intervenors regarding the potential supply-side and potential demand-side resources and their associated defining characteristics (*e.g.*, capital cost, operating and maintenance costs, emissions, amount of DSM load reduction, etc.).

1. To the extent a consensus can be achieved among the Utility, the Advisors, and a majority of the Intervenors,110[3] the resulting collection of potential supply-side and demand-side resources and their associated defining characteristics will be utilized in the reference Planning Strategy developed pursuant to Section 7D.

2. To the extent such a consensus cannot be achieved, the Utility shall incorporate, in coordination with the requirements in Section 7D, two distinct Planning Strategies: a reference Planning Strategy and a stakeholder Planning Strategy. The reference Planning Strategy will be based on the Utility's assessment of the collection of potential supply-side and demand-side resources and their associated defining characteristics. The stakeholder Planning Strategy will be provided to the Utility by the Advisors based on the collection of potential supply-side and demand-side resources and their associated

[2] *Id.*

[3] An Intervenor not consenting to the majority position and thus not joining in the consensus retains the ability to oppose the consensus position before the Council and assert its own position.

defining characteristics resulting from a consensus of the majority of the Intervenors.[4] The procedure for determining the Intervenors' majority position shall be defined in the Initiating Resolution and administered by the Advisors or CURO. To maintain consistency in the modeling process, the Advisors will work with Intervenors and consult with the Utility to ensure that Intervenors provide input only on parameters that can be accommodated within the framework of the existing model and software. The Utility shall have no obligation to incorporate an element(s) of the stakeholder Planning Strategy that cannot be accommodated by the Utility's modeling capabilities

Section 6. Transmission and Distribution

A. The Utility shall explain how the Utility's current transmission system, and any planned transmission system expansions (including regional transmission system expansion planned by the RTO in which the Utility participates) and the Utility's distribution system are integrated into the overall resource planning process to optimize the Utility's resource portfolio and provide New Orleans ratepayers with reliable electricity at the lowest practicable cost.

B. Models developed for the integrated resource planning process should incorporate the planned configuration of the Utility's transmission system and the interconnected RTO during the Planning Period.

C. To the extent major changes in the operation or planning of the transmission system and/or distribution system (including changes to accommodate the expansion of DERs) are contemplated in the Planning Period, the Utility should describe the anticipated changes and provide an assessment of the cost and benefits to the Utility and its customers.

Section 7. Integrated Resource Plan Analyses

A. The integrated resource planning process should include modeling of specific parameters and their relationships consistent with market fundamentals, and as appropriate for long-term Portfolio planning. This overall modeling approach is an accepted analytic approach used in resource planning considering the range of both supply-side and demand-side options as well as uncertainty surrounding market pricing. To represent and account for the different characteristics of alternative types of resource options, mathematical methods such as a linear programming formulation should be used to optimize resource decisions.[5]

B. The optimization process shall be constrained to mitigate the over-reliance on forecasted revenues from external capacity market sales and external energy market sales driving the selection of resources.

[4] An Intervenor not consenting to the majority position and thus not joining in the consensus retains the ability to oppose the consensus position before the Council and assert its own position. However, the Utility shall have no obligation to accommodate anything other than the majority position.

[5] Linear programming is a mathematical method or model of optimizing linear functions or relationships within constraints to achieve the lowest costs.

C. The Utility shall develop three to four Planning Scenarios that incorporate different economic and environmental circumstances and national and regional regulatory and legislative policies.

1. The Planning Scenarios should include a reference Planning Scenario that represents the Utility's point of view on the most likely future circumstances and policies, as well as two alternative Planning Scenarios that account for alternative circumstances and policies.

2. In the development of the Planning Scenarios, the Utility should seek to achieve a consensus among the Utility, Advisors, and a majority of Intervenors[6] regarding the assumptions surrounding each of the Planning Scenarios. To the extent a consensus is not reasonably attainable on the Planning Scenarios; the Utility shall model a fourth Planning Scenario which is based upon input from a consensus of the majority of the Intervenors.[7] The procedure for determining the Intervenors' majority position on the substance of the fourth Planning Scenario shall be defined in the Initiating Resolution and administered by the Advisors or CURO.

3. For each IRP Planning Scenario, data supplied as part of the Utility's IRP filing should include:

   a. a fuel price forecast for each fuel considered for utilization in any existing or potential supply-side resource;

   b. an hourly market price forecast for energy (*e.g*. locational marginal prices);

   c. an annual value for capacity ; and

   d. forecasts of price for any other price related components that are defined by the Planning Scenario (*e.g*. CO_2 price forecast, etc.).

D. Distinct from the Planning Scenarios, the Utility shall identify between two to four Planning Strategies which constrain the optimization process to achieve particular goals, regulatory policies and/or business decisions over which the Council, the Utility, or stakeholders have control.

1. The Utility shall develop a Strategy that allows the optimization process to identify the lowest reasonable cost options for meeting any needs identified in the IRP.

2. The Utility shall develop a reference Planning Strategy based on a consensus of the Utility, Advisors, and a majority of the Intervenors. [8] To the extent a consensus cannot be

[6] An Intervenor not consenting to the majority position and thus not joining in the consensus retains the ability to oppose the consensus position before the Council and assert its own position. However, the Utility shall have no obligation to accommodate anything other than the majority position.

[7] An Intervenor not consenting to the majority position and thus not joining in the consensus retains the ability to oppose the consensus position before the Council and assert its own position. However, the Utility shall have no obligation to accommodate anything other than the majority position.

[8] An Intervenor not consenting to the majority position and thus not joining in the consensus retains the ability to oppose the consensus position before the Council and assert its own position. However, the Utility shall have no obligation to accommodate anything other than the majority position.

reasonably achieved, the reference Planning Strategy shall reflect the Utility's point of view on resource input parameters and constraints, and the Utility shall model a separate stakeholder Planning Strategy based upon a consensus of the majority of the Intervenors.[9] The procedure for determining the Intervenors' majority position on the substance of the Intervenor Planning Strategy shall be defined in the Initiating resolution and administered by the Advisors or CURO.

3. As necessary, the Utility shall develop an alternate Planning Strategy to reflect the policy goals of the Council as identified in the Initiating Resolution prior to the beginning of the IRP planning cycle.

E. Prior to the development of optimized Resource Portfolios, the parameters developed for the Planning Scenarios and Planning Strategies shall be set, considered finalized, and not subject for alteration during the remainder of the IRP planning cycle.

F. Resource Portfolios shall be developed through optimization utilizing the Utility's modeling software. The Utility shall identify the least-cost Resource Portfolio for each Planning Scenario and Planning Strategy combination, based on total supply cost. Resource Portfolios shall consist of optimized combinations of supply-side and demand-side resources, while recognizing constraints including transmission and distribution.

G. The Utility shall provide a discussion and presentation of results for each Planning Scenario/Planning Strategy combination, the annual total demand related costs, energy related costs, and total supply costs associated with each least-cost Resource Portfolio identified under each Planning Scenario/Planning Strategy combination, a load and capability table indicating the total load requirements and identifying all supply-side and demand-side resources included in the Resource Portfolio (including identifying the impacts of existing demand-side resources on the total load requirements), and a description of the supply-side and demand-side resources that are planned and, if applicable, their principal rationale for selection (*i.e.*, supply peak demand, supply non-peak demand or operational constraints, achieve more economical production of energy, etc.).

1. Data supplied as part of the Utility's IRP filing shall include a cumulative present worth summary of the results as well as the annual estimates of costs that result in the cumulative present worth to enable the Council to understand the timing of costs and savings of each least-cost Resource Portfolio.

H. The Utility will develop and include a scorecard template or set of quantitative and qualitative metrics to assist the Council in assessing the IRP based on the Resource Portfolios. Such metrics may include but not necessarily be limited to: cost[10]; revenue impact; flexibility of resource options[11]; reasonably quantifiable environmental impacts;

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[9] An Intervenor not consenting to the majority position and thus not joining in the consensus retains the ability to oppose the consensus position before the Council and assert its own position. However, the Utility shall have no obligation to accommodate anything other than the majority position.

[10] The cost metric should include the cost of quantified externalities as well as Utility costs resulting from the IRP optimization.

[11] The flexibility metric includes response to load swings and quick start.

consistency with established, published city policies, as identified in the Initiating Resolution; and any other industry-standard IRP evaluation criteria. On the scorecard, the Utility shall rank the Resource Portfolios generated through the IRP according to how well they meet each metric, to the extent the Utility is reasonably able to perform such a ranking.

Section 8. Risk Analyses

A. The Utility shall develop a cost/risk analysis which balances quantifiable costs with quantifiable risks of the identified least-cost Resource Portfolios. The risk assessment must be presented in the IRP to allow the Council to comprehend the impact of each Resource Portfolio across the cost/risk range of possible Resource Portfolios.

1. In quantifying Resource Portfolio costs/risks, the IRP shall assess key cost drivers that are determined to be susceptible to volatility to the extent that: 1) those effects can be quantified for a Resource Portfolio, including the applicable Planning Period years, and 2) each quantified cost must be clearly identified by the portion which relates to the Utility's revenue requirements or cost of providing service to the Utility's customers under the Resource Portfolio.

2. A risk assessment is required to evaluate both the expected outcome of potential costs as well as the potential range of probable outcomes. The risk assessment for each IRP cycle shall be defined and agreed upon by the Utility and intervenors consistent with the modeling capabilities of the Utility, and the procedural schedule defined in the Initiating Resolution.

Section 9. IRP Process Requirements

A. At a minimum, the IRP process shall include, but not be limited to, the following elements:

1. The opportunity for Intervenors to participate in the concurrent development of inputs and assumptions for the major components of the IRP in collaboration with the Utility within the confines of the IRP timeline and procedural schedule.

2. At least four technical conferences, to be noticed, administered, and moderated by CURO, that include the Utility, Intervenors, CURO, and the Advisors with structured comment deadlines so that conference participants have the opportunity to present inputs and assumptions and provide comments while remaining mindful of the procedural schedule established in the Initiating Resolution.

3. At least 3 public engagement meetings advertised by CURO through multiple media channels at a minimum of 2 weeks prior to the meeting.
    a. A public education and kickoff meeting, to be noticed, administered, and moderated by CURO, that explains the following: the purpose of the IRP and the corresponding process; the IRP timeline as delineated in the Council's Initiating Resolution with respect to major process deadlines; the inputs and assumptions that are considered in the IRP process and summarized in the report; and ways in which public can remain informed throughout the IRP cycle (*e.g.*, online information resources that provide

status updates, portal through which customers can submit questions or concerns to the Utility);

b. A public presentation of the IRP; and

c. A public hearing, to be noticed, administered, and moderated by CURO, after presentation of the IRP report to give the public the opportunity to provide comment on the record.

4. In addition to a live presentation, all public meetings should also be broadcast via the Council's website and archived for later viewing.

Section 10. Submission and Public Presentation of IRP

A. The Utility shall make its IRP available for public review subject to the provisions of the Council Resolution initiating the current IRP planning cycle and referenced in Section 1B.

B. The Utility shall file its IRP with the Council consistent with and subject to the provisions of the Council Resolution initiating the current IRP planning cycle referenced in Section 1B.

C. The IRP report should discuss the stakeholders' engagement throughout the IRP process; the access to data inputs and specific modeling results by all parties; the consensus reached regarding all demand-side and supply-side resource inputs and assumptions; specific descriptions of unresolved issues regarding inputs, assumptions, or methodology; the formulation of the stakeholder Planning Scenario and/or stakeholder Planning Strategy as needed; and recommendations to improve the transparency and efficiency of the IRP process for prospective IRP cycles.

D. The IRP shall include an action plan and timeline discussing any steps or actions the Utility may propose to take as a result of the IRP, understanding that the Council's acceptance of the filing of the Utility's IRP would not operate as approval of any such proposed steps or actions.

E. Provided the IRP fulfills the requirements contained herein and was developed in compliance with the procedural schedule established for the triennial IRP cycle, the Council shall accept the Utility's IRP as filed in compliance with the Council's substantive and procedural requirements.

F. The Council's acceptance of the Utility's IRP as described herein shall have no precedential effect with respect to the Council's evaluation of any application for approval of the acquisition, implementation, or deactivation of any supply-side or demand-side resource or program.

–END--

CERTIFICATE OF SERVICE
Docket No. UD-17-01

I hereby certify that I have this 25th day of May 2017, served the required number of copies of the foregoing report upon all other known parties of this proceeding, by the following: electronic mail, facsimile, overnight mail, hand delivery, and/or United States Postal Service, postage prepaid.

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New Orleans, Louisiana, this 25th day of May 2017.

_____
Harry M. Barton