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February 27, 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.

<u>Docket No. UD-17-01</u>

Dear Ms. Johnson:

Entergy New Orleans, Inc. ("ENO") hereby submits for your further handling and filing an original and three copies of ENO's Comments in Support of its Proposed Modifications to the Council's Integrated Resource Planning Criteria and Procedures, along with four (4) Exhibits 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.

Sincerel

Harry M. Barton

HMB/bkd Enclosures

cc: Official Service List (via email)

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#### **BEFORE THE**

#### COUNCIL OF THE CITY OF NEW ORLEANS

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

# ENTERGY NEW ORLEANS, INC.'S COMMENTS IN SUPPORT OF ITS PROPOSED MODIFICATIONS TO THE COUNCIL'S INTEGRATED RESOURCE PLAN CRITERIA AND PROCEDURES

Entergy New Orleans Inc. ("ENO") respectfully submits these Comments in Support of ENO's Proposed Modifications to the Council of the City of New Orleans' (the "Council") Integrated Resource Plan ("IRP") Criteria and Procedures. On January 26, 2017, the Council issued Resolution No. R-17-32 (the "Resolution"), which established Docket No. UD-17-01 to consider changes to the Council's IRP Requirements and triennial IRP process. The Resolution requires that:

By February 24, 2017, Parties interested in proposing changes to the Council's IRP Requirements (attached [to the Resolution] as Appendix A) or to improve the Council's IRP process for the development and consideration of the triennial IRP submittals should submit specific language which amends or modifies the Council's IRP Requirements or improves the Council's IRP process. Specific language must be proposed if the Council is to consider any such modifications or amendments.

In compliance with this directive, ENO's present filing proposes specific language for modifying the Council's IRP Requirements and attaches ENO's Proposed Amended IRP Requirements hereto as Exhibit 1, with a "redline" document depicting ENO's proposed modifications attached as Exhibit 2.<sup>1</sup> ENO also attaches, as Exhibits 3 and 4, a proposal for a Modified IRP Process to be considered for the 2018 triennial cycle. ENO's Comments explain the rationale behind its

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<sup>&</sup>lt;sup>1</sup> Exhibit 2 depicts the original, unmodified text of the IRP Requirements in black; additions to or deletions of the original text are depicted in red; instances where the original text was cut and pasted to re-order the text are depicted in green.

proposed modifications and set forth the reasons why those modifications are appropriate for, and will greatly improve, the Council's IRP Requirements and process. Specifically, ENO's proposed modifications will (i) improve the efficiency of, and shorten the timeline for, the IRP process, (ii) create the potential for the incorporation of more meaningful Stakeholder input, (iii) allow for more effective, efficient, and comprehensive public engagement throughout the entire IRP process, (iv) allow for greater flexibility and adaptability in the 2018 and future triennial cycles, and (v) better conform the IRP process and Requirements to the Council's stated purpose for the IRP – serving as a general resource planning roadmap to the Council and ENO, rather than a forum for evaluating specific resource acquisition, certification or deployment decisions. ENO asks that the Council, its Advisors, and the Stakeholders carefully consider ENO's proposal and the potential improvements it would bring to the Council's IRP process and purpose.

#### I. Background and Introduction to ENO's Comments

As the Resolution notes, the Council adopted the current IRP Requirements nearly seven years ago, via Council Resolution No. R-10-142. Since adoption of the IRP Requirements, the Council, the Advisors, the Stakeholders and ENO have participated in two cycles of the IRP process and have learned many lessons together by doing so. ENO seeks to incorporate the lessons learned in the past two cycles into the improvements proposed in this filing.<sup>2</sup>

The 2015 IRP cycle provided particularly valuable insight for the proposed modifications submitted here. As Council Resolution No. R-14-224 documents, the 2015 IRP cycle began with consensus among the Parties on several issues, including (i) the methods for performing the Demand Side Management ("DSM") Potential Study, (ii) the process through which ENO and ICF International ("ICF") assigned value to DSM programs and modeled them in AURORA, (iii) the topics to be addressed and decided at each Milestone, and (iv) that Stakeholders would provide actionable feedback on proposed changes to inputs and assumptions to be used in

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<sup>&</sup>lt;sup>2</sup> ENO also seeks to update the IRP Requirements to reflect the fact that the Entergy System Agreement has terminated and to note that ENO's transmission planning now occurs through the MISO Transmission Expansion Planning (MTEP) process.

modeling prior to the time that ENO performed modeling for the IRP.<sup>3</sup> All the Parties to this Docket are aware, and several public filings make clear, that this consensus dissolved into acrimony as the 2015 IRP cycle progressed. Indeed, the Parties spent the better part of a year litigating the merits of the 2015 Final IRP and well over a year debating inputs and assumptions used for AURORA modeling after that modeling had already occurred. This litigation occurred within a procedural schedule that was extended multiple times and even split off into a separate "Show Cause" Docket (Docket No. UD-16-01). Ultimately, 31 months of acrimony and protracted litigation resulted in a Final 2015 IRP that was largely set aside when the Council accepted it for the limited purpose of DSM planning.<sup>4</sup>

ENO's proposed changes seek to prevent the 2018 IRP cycle from following a similar path by attempting to address the root causes of the disagreements that derailed the 2015 cycle. During the 2015 IRP, much of the contentious nature of the proceedings seemed to result from a perception that the outcome of the IRP would somehow affect the Council's decision on ENO's Application to Construct the New Orleans Power Station ("NOPS"). This perception seemed to exist, in part, because the Preferred Portfolio in the Final 2015 IRP included a 250 MW combustion turbine. ENO has proposed adding language to the IRP Requirements to clearly indicate the separation between the IRP and resource certification proceedings and has also suggested moving away from the practice of selecting a "preferred portfolio" and devoting extensive discussion and analysis to this one portfolio at the expense of a broader IRP Report.

Stakeholders also expressed dissatisfaction with "stale" data being used in the Final 2015 IRP. ENO believes that this issue can be addressed by both shortening the procedural schedule (to prevent inputs from becoming dated or "stale" during a lengthy process) and establishing points in the schedule at which inputs will be definitively set and no longer up for debate or revisions. Ideally, the point at which the inputs are set would be immediately prior to the beginning of modeling and the production of the IRP Report. ENO is also proposing that a

<sup>&</sup>lt;sup>3</sup> See R. 14-224 at pgs. 7-8. <sup>4</sup> See Council Resolution No. 17-30.

greater percentage of the procedural schedule be devoted to discussions of the inputs and assumptions to be used for the DSM Potential Study and modeling the IRP planning scenarios. It is ENO's hope that by allocating more time to discussion of inputs at the start of the procedural schedule, rather than using the bulk of the procedural schedule to debate the resulting outputs as in the 2015 IRP cycle, the Parties can engage in a more productive and less contentious process for the 2018 IRP cycle.

ENO does not raise these issues for the purpose of re-litigating the merits of the 2015 IRP Report, but rather to frame the point that improvements to the IRP process and requirements are needed. Indeed, despite the fact that ENO serves fewer customers than any other Entergy Operating Company, ENO spends more time and resources on its IRP process than any other Operating Company. ENO submits its proposed changes in order to make future IRP cycles more efficient and productive and to ensure the process serves its designated purpose, namely to provide a general planning roadmap for ENO's ability to serve its customers in the future. ENO urges the Council, Advisors, and all Stakeholders to give open and fair consideration to ENO's proposed changes with this purpose in mind.

#### II. Modifying the IRP Requirements to Reflect the IRP's True Purpose

ENO believes that much of the acrimony that engulfed the latter half of the 2015 IRP cycle can be avoided with clear direction from the Council about the purpose of the IRP and modifications to the IRP Requirements to make them consistent with that purpose. As has been noted repeatedly, the IRP is meant to provide a general roadmap for the paths ENO may take in order to continue to provide reliable, affordable service to its customers in an uncertain future. The IRP Docket is not, however, a resource certification docket; the Council does not approve the deployment of any resource or program in the IRP Docket. The 2015 cycle demonstrated that clarifying this distinction is necessary. As such ENO proposes specific language for this purpose. ENO also proposes a modification to the IRP Requirements that will bring focus back to the general planning purpose of the IRP and away from any specific resources, *i.e.*, removing

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<sup>&</sup>lt;sup>5</sup> See, e.g., generally, Council Resolution No. 10-142.

the requirement that ENO select and devote the bulk of its analysis to the Utility Preferred Resource Portfolio ("UPRP"). Finally, ENO proposes certain changes to language to reflect that the ultimate purpose of the IRP is planning for ENO's ability to provide service to its customers and, therefore, should only evaluate issues that directly affect the cost to do so in a quantifiable way. ENO discusses each of these modifications and its supporting reasoning in turn.

# a. Clarifying that the IRP is not a Resource Certification Proceeding or a DSM Program Deployment Decision

As the Council and Advisors know and have repeatedly stated, the IRP is not a resource certification Docket and decisions made in the IRP Docket do not have any precedential effect on ongoing or future resource certification Dockets. However, the events of the 2015 IRP cycle clearly demonstrate that Stakeholders and the public do not fully understand this distinction. As the Council knows, on June 15, 2016 the Council hosted a meeting "to allow the public to express its views regarding the Final 2015 Integrated Resource Plan." Yet, the comments from the public at that meeting largely focused on ENO's yet-to-be-filed NOPS Application and not the IRP. Even the Alliance for Affordable Energy (the "Alliance"), one of the longest participating Stakeholders in the Council's Utility proceedings, seems to have misunderstood the purpose of the meeting. The Alliance distributed several public communications indicating that NOPS was to be the focus of the IRP Community Meeting and the then-acting president of its Board of Directors emailed the Alliance's constituents to describe "a public meeting on June

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<sup>&</sup>lt;sup>6</sup> See, e.g., Transcript of the June 15, 2016 Integrated Resource Plan Community Hearing, at pg.4 lns. 4-11, ("The Integrated Resource Plan does not approve any specific resource but acts as a roadmap for the next few years until Entergy performs the next update to the plan. When Entergy does want to acquire or build a specific resource, it must still submit a specific, detailed plan to the Council for review and approval.") quoting Ms. Emma F. Hand; Council Resolution No. 17-30 at Ordering Paragraph 2 ("APPROVAL OF THIS IRP SHALL HAVE NO PRECEDENTIAL EFFECT WITH RESPECT TO THE COUNCIL'S EVALUATION OF ENO'S NOPS CT APPLICATION IN COUNCIL DOCKET UD-16-02.") (emphasis in original).

<sup>&</sup>lt;sup>7</sup> See Council Resolution No. R-16-104 at Ordering Paragraph 5.

<sup>&</sup>lt;sup>8</sup> Several social media messages distributed by the Alliance about the Community Hearing on the IRP invited the public to comment on ENO's plans to build a "natural gas power plant in New Orleans East." *See*, generally, http://www.facebook.com/all4energy. On June 13, 2016, two days in advance of the IRP Community Meeting, and a week before the NOPS Application was filed, the Alliance distributed a list of frequently asked questions about "a new natural gas power plant in New Orleans East." See, http://all4energy.org/2016/06/new-natural-gas-plant-new-orleans-east/.

15th at 12:30pm at City Hall in which Entergy will be presenting a plan to build a \$250MM 200 MW single cycle natural gas power plant in New Orleans East." More recently, at the January 19, 2017 meeting of the Council's Utility Committee, comments from the public and Stakeholders were indicative of a belief that the IRP and the NOPS Application were the same thing, with one Stakeholder going so far as to request that the Council "vote no to the construction of the IRP plant" on that day. Clearly, the Council's IRP Requirements need language providing an unambiguous indication that any action taken with regard to the IRP does not constitute approval of, or have any effect on, any specific resource certification application.

As such, ENO has proposed the following specific language, which both makes this purpose clear and modifies the prior requirement that the IRP include an "implementation plan" for the UPRP.<sup>11</sup>

#### Component 5 – Submission and Public Presentation of IRP

The Utility shall file its IRP with the Council. 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. Provided the IRP fulfills the requirements contained herein and was developed in compliance with the procedural schedule established for the triennial cycle, the Council shall accept the Utility's IRP as filed in compliance with the Council's substantive and procedural requirements. 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 or implementation of any supply- or demand-side resource or program.

ENO believes that inclusion of this language within the IRP Requirements will have the muchneeded effect of correcting the misconception that the IRP constitutes a resource certification
docket or application. ENO's hope is that once the Stakeholders and the public understand this
distinction, they will not have as much desire to approach the IRP as a litigated proceeding in
which the parties fight over the "correct" outcome and will instead participate in the IRP process
in a manner that is more consistent with its purpose as a general planning exercise.

<sup>10</sup> See Transcript of NOCC UCTTC 1/19/2017 Meeting, pgs. 16-21 of 87. The Council's agenda for that meeting did not contain any items related to Docket No. UD-16-02.

 $<sup>^9</sup>$  See Exh. 13 to ENO's September 29, 2016 filing in Docket No. UD-16-01.

<sup>&</sup>lt;sup>11</sup> ENO discusses the modifications to the UPRP requirement more fully in the next section of this filing.

Along these lines, ENO also proposes modifications to the IRP Requirements to clarify that, although the IRP is useful for general planning with regard to DSM, it is not the forum in which the Council makes specific decisions about the Energy Smart program. ENO files separate implementation plans, which are developed from the most recent IRP, but require the Council's specific direction and approval before ENO can actually begin deploying DSM resources as part of Energy Smart. As such, ENO has proposed to eliminate certain language from the IRP Requirements that relates to specific program performance and implementation benchmarks for Energy Smart. <sup>12</sup> Such issues are better suited for consideration as part of the Council's evaluation of a specific Program Year of Energy Smart, not within the IRP process.

## b. Eliminating the "Preferred Portfolio" Requirement and Associated Analyses

ENO's next proposal dovetails with the idea that the IRP Requirements need to reinforce the "general planning" purpose of the IRP, rather than placing undue focus on any one resource or portfolio. To this end, ENO recommends that the Council eliminate the requirements that ENO identify, present, vet, defend, and analyze risks associated with a "preferred resource plan that best addresses the most likely contingencies while providing flexibility for less likely scenarios." As noted above, this "preferred resource plan" is also referred to in the current IRP Requirements as the Utility Preferred Resource Plan or "UPRP." The Council's current IRP Requirements are heavily focused on the UPRP and demand in depth analyses of it, such as a rate impacts analysis, a stochastic risk-assessment, and the development and discussion of an implementation plan detailing the "timeline including all major steps necessary to implement the preferred plan." ENO believes that this in-depth focus on one resource portfolio is inconsistent with the idea that the IRP is meant to serve as a high-level, general planning tool and not meant to determine the acquisition of a specific resource or portfolio. As such, ENO proposes the following suggested language in lieu of the requirement to identify a "preferred resource plan,"

<sup>&</sup>lt;sup>12</sup> See Exhibit 2 at pgs. 5 and 6.

<sup>&</sup>lt;sup>13</sup> See Council's IRP Requirements at pg. 1, item 8.

<sup>&</sup>lt;sup>14</sup> See Council's IRP Requirements at pg. 7, item 17.

Component 4: Develop several (at least three, but no more than five) Planning Scenarios that incorporate different economic and environmental circumstances and regulatory and legislative policies. 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 Alternative Planning Scenarios (including a Stakeholder Input Scenario) that account for alternative circumstances and policies. Through optimization, the Utility shall identify the Least Cost Resource Portfolio for each Planning Scenario, based on total supply cost. Resource Portfolios shall consist of optimized combinations of supply- and demand-side resources, while recognizing constraints including transmission/distribution costs.

In addition to the above-quoted language, ENO's proposed modifications in this regard remove the requirements that ENO undertake various in-depth analyses of the UPRP in favor of conducting higher level analyses of the Least Cost Resource Portfolio for each Planning Scenario. Specifically, ENO proposes that it be required to,

"[I]nclude a discussion and presentation of results for each Planning Scenario considered, 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, and a description of the supply-side and demand-side resources that are planned and their principal rationale for selection."

Limiting ENO's discussion and evaluation of each Portfolio to this level is necessary to allow for the evaluation of multiple Resource Portfolios. It would simply not be feasible for ENO to conduct the type of analyses previously required for the UPRP for each Resource Portfolio under each Planning Scenario. Moreover, the type of "deep dive" analyses presently required for the UPRP are more appropriate for evaluating a specific resource certification request, which the Council has repeatedly indicated is not the purpose of the IRP. ENO believes that a higher-level analysis of multiple Portfolios and Scenarios is better suited to achieving the purpose of providing a roadmap to ENO and the Council to allow for general planning of how best to serve ENO's customers in any number of possible future circumstances.

ENO also believes that removing the "preferred portfolio" requirement has the potential to eliminate some of the contentiousness that characterized the latter part of the 2015 IRP cycle.

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<sup>&</sup>lt;sup>15</sup> Because many of the current IRP Requirements focus on the UPRP and analyses associated with it, the full extent of the specific language changes that would be necessary to put ENO's proposed modification into effect are set forth in Exhibits 1 and 2 rather than in the body of these Comments.

As noted above, and as demonstrated by multiple filings in Docket No. UD-08-02, once ENO previewed the UPRP at Milestone 3 and then filed the final version of the UPRP as part of the Final 2015 IRP, the Parties' efforts began to singularly focus on litigating the merits of the UPRP and the methods ENO used for deriving it. This came at the expense of a meaningful evaluation of other portfolios in the 2015 IRP. Indeed, several comments from Stakeholders and the public criticized the Final 2015 IRP for "fail[ing] to include any renewable energy at all." Of course, four of the six supply-side resource portfolios in the Final 2015 IRP contained renewable resources, but these portfolios were lost in the shuffle of the extensive debate over the merits of the UPRP. ENO respectfully suggests that had the UPRP not been so heavily emphasized in the IRP Requirements, perhaps the other portfolios that did contain renewable resources may have been more carefully evaluated by the Parties. Regardless, this Rulemaking Docket presents the Council with the opportunity to remedy this situation in the future by removing the UPRP requirement and associated analyses from the IRP Requirements.

# c. Ensuring that the IRP Sticks to Evaluating Issues Directly Affecting ENO's Ability to Serve its Customers

Apart from the updates to reflect ENO's exit from the System Agreement and entry into MISO, which are discussed in the last section of this filing, the remaining suggested modifications to the IRP Requirements seek to ensure that the scope of the IRP remains focused on its ultimate purpose, *i.e.*, planning for contingencies that could affect ENO's ability to provide reliable, low-cost service to its customers. When reviewing the IRP Requirements, ENO noted many instances of general discussions of "costs" and "risks." As shown in Exhibit 2, ENO inserted the modifier "quantifiable" to describe the types of costs and risks that should be evaluated in the IRP. These modifications are relatively minor, but ENO believes them to be necessary to bring certainty to the process and to emphasize that costs and benefits that cannot be quantified cannot be accounted for in modeling and are inappropriate for inclusion in the IRP.

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<sup>&</sup>lt;sup>16</sup> See, e.g., Transcript of the June 15, 2016 Integrated Resource Plan Community Hearing, at pg.29 lns. 24-25.

<sup>&</sup>lt;sup>17</sup> The Show Cause Resolution characterized the CT Portfolio and the combined CT and Solar Portfolio from the Final 2015 IRP as "comparable" in terms of levelized supply cost. *See* Resolution R-16-263 at pg. 5.

ENO also made a similar proposed modification to the language concerning "social and environmental effects." The language in the current IRP Requirements states that "the IRP shall assess any directly quantifiable social and environmental effects of its choices." In order to provide balance and certainty for the framework of any such assessments, and ensure that they are relevant to the purpose of the IRP, ENO proposes the following language:

[T]he IRP shall assess any social and environmental effects of the Portfolios to the extent that: 1) those effects can be quantified for all resource options within all Resource Portfolios, and 2) it is possible to determine the impact of those effects on the cost of providing service to the Utility's customers.

The purpose of the first proposed modification is to clarify that any categories of benefits or detriments that may be attributable to one type of resource, but are unknown or unquantifiable for another type of resource, should not be included in the quantification of costs and benefits. ENO believes that such language is required to ensure that all resources are evaluated on an equal footing. This principle is a cornerstone of the Council's IRP process and necessary to preserve the integrity of the analyses underlying it. The modification is not intended to preclude an evaluation of "social and environmental effects," but rather to ensure that such evaluations do not skew the IRP analyses or modeling through asymmetric inputs.

The second proposed modification is intended to ensure that the scope of these types of cost-benefit quantifications is limited to the Council's stated purpose for the IRP of balancing costs and risks to ENO's customers. To the extent that a social or environmental benefit associated with a particular resource that will not ultimately impact the costs of providing service to ENO's customers, as reflected in the bills they pay, that benefit is not appropriate for consideration in the context of the IRP. Again, this principle is already implicitly acknowledged and reinforced throughout the current IRP Requirements as regarding other costs and benefits; ENO's proposed modification simply clarifies that the principle applies to "social and environmental" costs and benefits as well.

<sup>&</sup>lt;sup>18</sup> See IRP Requirements at pg. 1

# III. Maximizing the Value of Parties' Contributions through a More Efficient Process

The 2015 IRP cycle formally began on June 27, 2014 with the Milestone 1 Technical Conference and concluded 31 months later on January 26, 2017 with the passage of Resolution No. R-17-30.<sup>19</sup> A shorter timeline will help to address the problem with inputs and data becoming "stale" during a lengthy process, which was a chief source of Stakeholder frustration in the 2015 cycle. A shorter timeline will also help eliminate "the unbelievably difficult delays" associated with the process, which have been a chief source of frustration to the Council.<sup>20</sup>

However, ENO also believes it is important to ensure that a shorter timeline will not detract from the robustness of the IRP analyses, the opportunities for meaningful input from Stakeholders, or engagement with the public. As such, ENO is proposing a procedural structure that will increase opportunities for Stakeholder and public involvement, while decreasing the overall timeline of the process. The biggest change in ENO's proposed process involves shifting to a non-linear work flow for the 2018 IRP cycle, which will allow efforts to overlap in time and result in completion of the process within 13 months. ENO attaches a flowchart of its proposed process to this filing as Exhibit 3 and a narrative description that details the steps involved in ENO's proposed process as Exhibit 4. Those attachments fulfill the Resolution's request of providing the "specific language" that improves the Council's process, but ENO will briefly summarize the rationale for and benefits of its proposed process changes.

#### a. Reducing the Overall Timeline with Overlapping "Work Streams"

As noted above, ENO is proposing to drastically reduce the timeline from the beginning of the IRP process to filing of the IRP Report, while maintaining the robustness and integrity of the substantive analyses required for the IRP. ENO proposes that this be accomplished through establishing overlapping work streams that would focus on the major components of the IRP: the DSM Potential Study (Work Stream 1), determining inputs and assumptions for the modeling

<sup>&</sup>lt;sup>19</sup> Of course, ENO's work for the 2015 cycle began well in advance of the June 27, 2014 Conference.

<sup>&</sup>lt;sup>20</sup> See, e.g., Transcript of December 14, 2016 UCTTC Meeting at pg. 37 of 148 (quoting Council Member Head).

analyses (Work Stream 2), and preparing, presenting and submitting the IRP Report (Work Stream 3). By structuring the process in this way, as opposed to continuing to use sequential, linear Milestones, the Council can allow for the same rigorous analysis of inputs to the IRP in a shorter period of time.

As depicted in Exhibit 3 and described in Exhibit 4, Work Stream 1 and Work Stream 2 would overlap, such that the production of the DSM Potential Study and the process of determining the inputs and assumptions for modeling analyses would be completed simultaneously. This proposed process would allow for the Parties, through a series of technical conferences and comment periods, to achieve consensus on, or at the very least understanding of, both the DSM inputs to the IRP and the planning assumptions and inputs prior to the commencement of modeling. Achieving this understanding and, if possible, consensus, prior to the commencement of modeling also allows for eliminating the portion of the procedural schedule that was devoted to debating the outcome of the model runs once they were completed, but before the IRP was produced, which took up a large portion of, and resulted in significant delays to, the 2015 IRP cycle. Once the inputs are "locked down," the process can then move seamlessly into Work Stream 3, which would be devoted to production, compilation, presentation, and filing of the IRP Report. In all, the process ENO is proposing would take 13 months from the public kickoff meeting to the submission of the IRP Report.

# b. Increasing the Focus on Meaningful Stakeholder Input Prior to Conducting Modeling Analyses

As noted above, ENO has taken care to create opportunities for more meaningful Stakeholder input and review, despite proposing a shorter procedural schedule. In all, ENO's proposed process would allow for nine total meetings, which would include two public meetings and seven technical conferences with the Advisors and Intervenors in the IRP Docket. Three of the technical conferences would be part of the DSM Work Stream and four would be part of the Inputs and Assumptions Work Stream. In conjunction with the technical conferences, ENO proposes that the Parties be required to submit materials two weeks prior to the technical

conference to allow for preparation by the reviewing Parties. The proposed schedule also provides for comment periods following key technical conferences. Through this process, ENO believes the Parties will have a good chance of accomplishing the Resolution's stated goals of achieving greater consensus earlier in the process. ENO also believes that devoting more time to working toward this consensus prior to conducting modeling, and less time to debating results of model runs after the fact, will yield a more productive and efficient process, which ultimately benefits ENO's customers and the Council's constituents.

ENO also would like the Council to note that, in addition to allowing for comment on ENO's proposed inputs and assumptions, the process ENO is proposing creates the opportunity for Intervenors to facilitate two of the technical conferences, at which the inputs and assumptions to be used for the Stakeholder Input Scenario would be presented and discussed. This change to the IRP process would provide Intervenors with an opportunity to present coherent, actionable, and meaningful input for inclusion in the Stakeholder Input Scenario before the AURORA analyses are conducted. Given the number of Intervenors in the IRP Docket, ENO will not be able to accommodate modeling multiple Stakeholder Input Scenarios in AURORA. However, ENO believes the Intervenors in the IRP Docket should be able to reach consensus on the alternate inputs and assumptions they will present for inclusion in the Stakeholder Input Scenario in advance of the technical conferences that ENO proposes to devote to this purpose. <sup>21</sup> In this way, ENO's proposal seeks to create a better opportunity for Stakeholder involvement.

## c. Increased Public Engagement Throughout the Entire Process

ENO's proposal also allows for meaningful public engagement and does so in a manner that will not detract from the efficiency of the technical work that must be performed when creating the IRP. The first step in ENO's proposed schedule is a public education and kickoff meeting during which ENO would provide a complete overview of the IRP process and timeline,

<sup>&</sup>lt;sup>21</sup> ENO notes that the IRP process established by the Arkansas Public Service Commission in its Order No. 6 in Docket No. 06-028-R includes the creation of a Stakeholder Committee that meets separately and crafts and submits its own report on the IRP, including suggested alternate inputs and assumptions, reflecting a reasonable alternative approach to the Stakeholder Input Scenario being considered here. The utility must include the Stakeholder Committee's report with its filed IRP.

a breakdown of the different parts of the IRP report, and a description of the types of inputs and assumptions that are used to create the report. ENO will also provide information on the resources it proposes to make available to the public, which would include online informational resources and updates on the progress of the IRP as well as a portal through which ENO's customers can submit questions or comments at any time. These resources will allow for public engagement on a continuous basis throughout the entirety of the IRP cycle. ENO's proposed schedule also includes a public meeting near the end of the process for the presentation of the IRP Report and another opportunity for questions from its customers.

ENO is proposing to expand the scope of public engagement while balancing the need to keep technical conferences truly "technical" in order to maintain the efficiency and integrity of the IRP process. Due to the extremely specialized, and at times Highly Sensitive and Protected, nature of the materials that will be discussed and reviewed at the proposed technical conferences, ENO does not believe such technical conferences are an appropriate or particularly effective setting for public engagement. To extend an analogy the Alliance used at the January UCTTC Meeting, although "popping the hood" can be an educational experience for a lay person, a mechanic who has to explain the basic function and purpose of a carburetor to 50 people during the course of her work is not likely to fix the car in a timely manner. Thus, ENO is attempting to create a forum for public engagement without jeopardizing the efficiency of the specialized work the IRP requires. Additionally, the public will be well-represented at each technical conference by individuals who are employed to advocate on their behalf, such as the Council's Advisors, and entities whose missions involves advancing particular views of the public's interest, such as the Alliance, the Sierra Club, 350 Louisiana, and the Deep South Center for Environmental Justice. Given these procedural safeguards to the public interest inherent in the IRP process, ENO believes its proposal for public engagement for the IRP strikes the appropriate balance for engaging the public, but not doing so in a manner that drags out the process to the detriment of ENO's customers.

#### d. Procedural Safeguards to Keep the Process on Track

As noted above, the 2015 IRP process required 31 months to complete. This was in part due to multiple extensions of the procedural schedule. The blame does not lie with any one Party as all Parties to the Docket, and even the Council, requested extensions or deferrals of deadlines during the 2015 cycle and consent was liberally granted for those extensions where good cause, such as intervening events, meaningful settlement negotiations, or changes in circumstances, was shown. ENO believes more clarity and structure around the rules applying to requests for extensions are needed in order to preserve the integrity, efficiency, and temporal relevance of the IRP. As such, ENO is proposing the following specific language to be included in the Council resolution that establishes the procedural schedule for the 2018 IRP cycle.

- 1. Comments, technical papers, or other filings submitted after the deadlines established by this Resolution shall be stricken from the record in this Docket and shall not require any response, or consideration from any Party to the Docket, the Council, or the Advisors. This provision shall also apply to filings not contemplated, authorized, or solicited by the procedural schedule established by this Resolution.
- 2. Requests for extensions to the procedural deadlines set forth in the Resolution of more than seven (7) calendar days shall not be granted except upon a demonstration of good cause for why such extension is necessary to facilitate the completion of the Council's IRP process. Requests for extensions of seven (7) or fewer days may be granted where all parties to the Docket consent to such extensions, provided that no more than three (3) such consent extensions shall be allowed within an IRP cycle.
- 3. With the exception of extensions requested due to large-scale emergencies, such as natural disasters, forced evacuations, etc., any request for an extension of a deadline set forth in this Resolution must be filed with the Clerk of Council no less than ten (10) calendar days prior to the deadline for which the extension is being requested. <sup>22</sup>

ENO believes such language is more than reasonable and will provide fair notice to all Parties that they are to adhere to the Council's deadlines, which will in turn protect the integrity of whatever process the Council establishes for the 2018 IRP cycle.

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The last minute filing of the Alliance and Sierra Club's Motion for Extension of the deadline to file these comments highlights the necessity of requiring requests for extension to be filed far enough ahead of deadlines to allow for the Hearing Officer to consider and rule on requests prior to the arrival of the deadline at issue.

#### e. ENO Cautions Against Revisiting the DSM Working Group Concept

ENO notes that it did consider the Council's suggestion that the Parties return to the "DSM Working Group" model as a method of achieving consensus around the DSM supply curve and costs. However, a review of filings from the 2012 IRP cycle, during which the Council experimented with the "DSM Working Groups" concept, reveals that the use of this time-consuming approach did not result in greater consensus around the integration of DSM resources into the IRP or creation of the DSM Potential Study. For example, on April 30, 2013, following completion of the 2012 DSM Working Groups process, the Alliance submitted comments that included a lengthy and scathing criticism of the approach to DSM planning that resulted from the DSM Working Groups.<sup>23</sup> Despite the Parties' participation in the DSM Working Groups, the Alliance ultimately concluded that, "ENO fail[ed] to provide the optimal level of DSM in the plan they have presented to the Council." Clearly, the DSM Working Groups did not succeed in achieving greater consensus on this issue and ENO respectfully suggests that the Council not resurrect this failed attempt at doing so. ENO believes that its proposal for focusing Work Stream 1 around three technical conferences, comments, and an agreed upon date for "locking down" the inputs into the DSM Potential Study can achieve the consensus desired by the Council. ENO urges the Council to consider implementing ENO's proposed schedule rather than re-using a procedural structure that did not achieve the Council's stated goal of achieving consensus during the 2012 IRP cycle.

# IV. Updating the Criteria to Reflect the Termination of the System Agreement and MISO Membership.

The Resolution acknowledges that certain changes may be necessary to reflect the fact that the Entergy System Agreement has terminated. The changes ENO has proposed to reflect this reality in the IRP Requirements are shown in Exhibits 1 and 2 and do not require explanation as the changes simply remove requirements that relate only to the System Agreement. Another similar development that has occurred since the Council issued its IRP Requirements is ENO's

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<sup>&</sup>lt;sup>23</sup> See Comments of the Alliance for Affordable Energy, submitted on April 30, 2013, in Docket No. UD-08-02 at pgs. 4-15.

entry into MISO. While ENO does not believe any modifications are necessary to reflect this reality, ENO is concerned that one of the areas for possible modifications discussed in the Resolution may unnecessarily complicate the IRP given ENO's membership in MISO.

In the Resolution, the Council suggested that "Transmission planning should be more fully integrated into the IRP process to ensure that transmission solutions as alternatives to supply-side and demand-side resources are evaluated and that any reliability concerns are addressed." However, as a MISO member, all of ENO's transmission planning is done through the MISO Transmission Expansion Planning ("MTEP") process. This process occurs on an ongoing basis and is governed by a complex set of requirements, complete with its own stakeholder engagement process. <sup>24</sup> ENO has been and will continue to be an active participant in the MISO reliability and economic transmission planning processes. ENO's involvement in the MISO planning process will include submitting transmission project and project ideas for MISO's consideration to ensure that the Company's transmission system is reliable, complaint with the NERC reliability standard and can serve customers at the lowest reasonable cost and participation in the MISO stakeholder processes. ENO is more than willing to continue to include any transmission projects being planned for ENO's service territory through MTEP in the IRP. Should any Stakeholders desire to be more directly involved in transmission planning that pertains to ENO, ENO encourages them to do so through the MISO Stakeholder process. <sup>25</sup>

ENO does not believe any changes to the current IRP Requirements are necessary to account for its participation in the MTEP process or obligations as a MISO Transmission Owner. However, to the extent that any Parties to this Docket propose requirements for the IRP with regard to transmission planning that would not be in line with the rules that exist for, or ENO's obligations within, the MTEP process, or that would be unnecessarily duplicative of that process, ENO respectfully cautions the Council against including such requirements as part of the IRP

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<sup>&</sup>lt;sup>24</sup> See generally,

www.misoenergy.org/Planning/TransmissionExpansionPlanning/Pages/TransmissionExpansionPlanning.aspx

<sup>&</sup>lt;sup>25</sup> https://www.misoenergy.org/StakeholderCenter/Pages/StakeholderCenter.aspx

Requirements or process.<sup>26</sup> To do so would simply add costs and time to the Council's IRP process without the possibility of any benefits inuring to ENO's customers and the Council's constituents as transmission planning must ultimately be done through MTEP and not the IRP.

#### V. Conclusion

ENO believes the proposed modifications to the IRP Requirements and process set forth with this filing can greatly benefit the 2018 and other future IRP cycles. ENO requests that the Council, its Advisors, and Intervenors in this Docket carefully evaluate ENO's proposal with this goal in mind and ENO encourages Intervenors to offer any constructive suggestions for improving or adding to ENO's proposal in their reply comments, due to be filed on March 27, 2017.

Respectfully submitted:

BY:

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ATTORNEYS FOR ENTERGY NEW ORLEANS, INC.

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<sup>&</sup>lt;sup>26</sup> ENO will alert the Council to any such concerns that may exist with regard to any proposals from Intervenors in its reply comments.

#### ATTACHMENT TO RESOLUTION R-17-XX

# ELECTRIC UTILITY INTEGRATED RESOURCE PLAN REQUIREMENTS of the Council of the City of New Orleans

Council Resolution R-08-295 set forth an Integrated Resource Planning framework and reporting requirements for Entergy New Orleans, Inc. ("Utility"). Through Council Resolution R-10-142 and the Resolution accompanying this document, the Council of the City of New Orleans clarifies the components required with respect to Integrated Resource Plan ("IRP") filings and revises the reporting requirements, filing periods, and deadlines.

The IRP should include a risk analysis which balances quantifiable costs with quantifiable risks to customers. These IRP requirements stress the importance of the integrated resource planning process as a whole and the interdependence of matters such as renewable energy, energy efficiency, distributed generation, transmission, regional developments, price stability, environmental and climate change legislation, rather than a discrete analysis of individual issues. These requirements evaluate all resource options, from the perspective of both the Utility and all stakeholders, integrating both the supply- and demand-sides in a fair and consistent manner while minimizing quantifiable costs to all stakeholders (not just costs to the Utility), and the creation of a flexible plan that allows for uncertainty through a risk analysis permitting adjustment in response to changed circumstances.

The IRP 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 demand and supply 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.<sup>1</sup>

The IRP must include the following steps, which are defined fully in the subsequent sections:

- 1) <u>Component 1: IRP Objectives and Data Collection</u>--Identify the objectives and procedures for the planning process, including time horizon and procedural schedule; Collect data needed for the planning process, including a market analysis;
- 2) <u>Component 2: Load Forecast</u>--Develop several demand, energy and load profile forecasts in the detail needed to evaluate all resource options;

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

- 3) <u>Component 3: Resource Options</u>--Identify all stakeholder resource options on the demand-side and supply-side. Evaluate all demand-side resources by conducting benefit-cost analyses which include the Total Resource Cost test as well as the Ratepayer Impact Measure test, and considering any directly quantifiable environmental externalities;
- 4) Component 4: Planning Scenarios and Resource Portfolios--Develop several (at least three, but no more than five) Planning Scenarios that incorporate different economic and environmental circumstances and regulatory and legislative policies. 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 Alternative Planning Scenarios (including a Stakeholder Input Scenario) that account for alternative circumstances and policies. Through optimization, the Utility shall identify the Least Cost Resource Portfolio for each Planning Scenario, based on total supply cost. Resource Portfolios shall consist of optimized combinations of supply- and demand-side resources, while recognizing constraints including transmission/distribution costs; and
- 5) <u>Component 5: Submission and Presentation of the IRP</u>— File the IRP with the Council and publicly present it.

#### Component 1 - IRP Objectives and Data Collection

The IRP shall state and support specific objectives to be accomplished, which include but are not limited to the following: (1) to optimize the integration of generation and transmission services with demand-side resource options to provide New Orleans ratepayers with reliable electricity at the lowest practicable cost; (2) to promote the Utility's financial integrity; (3) to anticipate and mitigate risks associated with increasing fuel costs and other economic changes; (4) to comply with codified regulatory requirements and policies; and (5) to evaluate the appropriateness of incorporating advances in technology, including a careful mix of new renewable resources. Another important objective of resource portfolio procurement is to achieve a specified range of acceptable risk in the trade-off between price and risk. Therefore, an initial step must be the development of market outlooks or forecasts of costs, prices, and other input variables, as well as measures of their uncertainty, expressed as possible future price ranges along with associated probabilities and the correlations among them.

The IRP shall demonstrate how the Utility achieves or will achieve these objectives. In doing so, the IRP shall address the following: (1) supply-side resources such as central station generation, purchased power, and distributed generation; (2) demand-side resource options such as interruptible load and energy efficiency program initiatives; (3) use of the transmission and distribution systems to deliver power to New Orleans; and (4) any other factors identified by the Utility as necessary to achieve the Utility's listed objectives.

The IRP shall identify and quantify the costs and benefits of its Resource Portfolios. In addition to economic costs, the IRP shall assess any social and environmental effects of the Portfolios to the extent that: 1) those effects can be quantified for all resource options within all Resource

Portfolios, and 2) it is possible to determine the impact of those effects on the cost of providing service to the Utility's customers.

In the identification and presentation of the Resource Portfolios, it is important that the Utility perform analyses that show the cost impact of utilizing alternative probable input assumptions (*i.e.*, the Planning Scenarios) while holding each Resource Portfolio constant. These analyses need to be presented in the Utility's IRP filing so that the Council can comprehend the robustness of each Resource Portfolio across the range of Planning Scenarios. The Council anticipates that assumptions regarding load growth, fuel price, adoption and penetration of demand-side programs, and environmental regulation, may be appropriate for sensitivity analyses.

#### **Component 2 - Load Forecast**

The IRP shall provide an annual demand (MW) and energy use (kWh) forecast ("Forecast") for no less than a rolling ten-year planning horizon. The Utility shall identify all assumptions relied upon in developing its Forecast.

Data supplied with the forecast shall include:

- 1) Historical demand and energy data for the Utility for the ten (10) years immediately preceding the forecast period;
- 2) A reference planning scenario forecast, a low growth planning scenario forecast, and a high growth planning scenario forecast;
- 3) A discussion of the forecasting methodology and a list of key independent variables utilized to develop the reference planning scenario forecast;
- 4) Forecasts of the key independent variables utilized in developing the reference planning scenario forecast, low growth planning scenario forecast, and high growth planning scenario forecast;
- 5) Forecasted demand and energy usage by customer class under the reference planning scenario forecast, with the supporting development from the forecasted key independent variables; and
- 6) Construction of the composite of customer load profiles based on the forecasted demand and energy usage by customer class and relevant load profile data, including the factors which determine future load levels and shape.

#### **Component 3 – Resource Options**

The IRP shall identify and evaluate all of the Utility's existing resources used to serve New Orleans ratepayers' load based on their cost. These costs shall include fixed and variable costs (e.g., fuel), the cost of current and future emissions controls (to the extent practicable), and other costs identified by the Utility. The IRP shall include a comparison of current costs to annual costs incurred for the previous ten (10) years.

To the extent the Utility anticipates altering its existing resource portfolio during the planning period, the IRP shall (1) identify the specific changes in resources anticipated, (2) the estimated change in costs to New Orleans ratepayers, and (3) a time-line for and description of those changes including the process the Utility relied upon to ensure that the modified resource portfolio will provide New Orleans ratepayers with reliable electricity at the lowest practicable cost.

The IRP shall incorporate quantifiable energy efficiency and conservation results implemented under the Energy Smart New Orleans program using verified data available to ENO from prior Program Years.

The IRP shall consider the types and combination of resources relied upon to ensure reliable, balanced Resource Portfolios that incorporate factors including, but not limited to, fuel cost forecasts, anticipated load growth, environmental regulations, timing and changes to the total revenue requirements to New Orleans ratepayers, the Utility's continued financial integrity, and relevant, quantifiable conditions outside the Utility's control.

The data supplied in the Utility's IRP filing shall include:

- 1) A table depicting all of the Utility's existing supply-side and demand-side resources, anticipated capacity available at time of peak, and deactivation date assumptions or resource contractual termination date:
- 2) A table showing the Reference Planning Scenario demand forecast and planning reserve margin in comparison with the Utility's existing resources;
- 3) A monthly Reference Planning Scenario fuel price forecast for all fuels considered for utilization in all existing and potential supply-side resources;
- 4) Alternative fuel price forecasts for fuels for which a significant variability in price could be expected;
- 5) A monthly forecast of on-peak and off-peak energy prices in the market which is consistent with the Reference Planning Scenario fuel price forecast;
- 6) A description of each supply-side resource considered, including a technology description, operating characteristics and limitations, capital cost or demand charge, fixed operation and maintenance costs, variable charges, variable operation and maintenance costs, operating characteristics, earliest date available to provide supply, expected life or contractual term of resource, and fuel type with reference to fuel forecast. Supply options must include non-utility sources of power (e.g., bulk power purchases from independent power producers and cogenerated power);
- 7) A description of each demand-side resource considered, including a description of the resource or program, expected penetration levels by planning year, and results of appropriate cost benefit analyses and acceptance tests which are consistent with the planning assumptions utilized within the IRP planning process. At a minimum, the Total Resource Cost ("TRC") test, based on a total

stakeholders' perspective, as well as the Ratepayer Impact Measure ("RIM") test<sup>2</sup>, defining the impacts on revenue requirements to ratepayers, should be used for initial screening of resource options. The cost effective demand response programs should include those programs enabled by the deployment of Advanced Metering Infrastructure ("AMI"); and

8) The results of any Requests for Proposals for power supply that were conducted within the past three years.

#### **Component 4 – Planning Scenarios and Resource Portfolios**

The IRP shall include a discussion and presentation of results for each Planning Scenario considered, 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, and a description of the supply-side and demand-side resources that are planned and their principal rationale for selection (*i.e.*, supply peak demand, supply non-peak demand or operational constraints, achieve more economical production of energy).

The IRP shall explain how Entergy's current transmission system, and any planned transmission system expansions, 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. To the extent major changes in the operation or planning of the transmission system are contemplated in the planning horizon, the Utility should describe the anticipated changes and provide an assessment of the cost impact to the Utility.

#### Component 5 – Submission and Public Presentation of IRP

The Utility shall file its IRP with the Council. 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. Provided the IRP fulfills the requirements contained herein and was developed in compliance with the procedural schedule established for the triennial cycle, the Council shall accept the Utility's IRP as filed in compliance with the Council's substantive and procedural requirements. 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 or implementation of any supply- or demand-side resource or program.

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<sup>&</sup>lt;sup>2</sup> California Standard Practice Manual: Economic Analysis of Demand-Side Programs and Projects, State of California Governor's Office of Planning and Research, July 2002

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The Utility shall also make its IRP available for public review subject to the provisions of Council Resolution R-10-142.

#### ATTACHMENT TO RESOLUTION R-170-XX142

# ELECTRIC UTILITY INTEGRATED RESOURCE PLAN REQUIREMENTS of the Council of the City of New Orleans

Council Resolution R-08-295 set forth an Integrated Resource Planning framework and reporting requirements for Entergy New Orleans, Inc.; ("Utility"). Through Council Resolution R-10-142 and the Resolution accompanying this document, the Council of the City of New Orleans clarifies the components required with respect to Integrated Resource Plan ("IRP") filings; and revises the reporting requirements, filing periods, and deadlines, and expands the IRP filing requirements to all electric utilities subject to the Council 's jurisdiction ("Utility[ies]").

The IRP should include a risk analysis which balances <u>quantifiable</u> costs with <u>quantifiable</u> risks to customers. These IRP requirements stress the importance of the integrated resource planning process as a whole and the interdependence of matters such as renewable energy, energy efficiency, distributed generation, transmission, regional developments, price stability, environmental and climate change legislation, rather than a discrete analysis of individual issues. These requirements evaluate all resource options, from the perspective of both the Utility and all stakeholders, integrating both the supply- and demand-sides in a fair and consistent manner while minimizing <u>quantifiable</u> costs to all stakeholders (not just costs to the Utility), and the creation of a flexible plan that allows for uncertainty through a risk analysis permitting adjustment in response to changed circumstances.

The IRP should include modeling of specific parameters and their relationships consistent with market fundamentals, and as appropriate for long-term portfolio planning. The IRP should be a combination of (a) deterministic based modeling (specific parameters and relationships) for market fundamentals, and (b) stochastic modeling (ranges of values as probability distributions) for portfolio planning. This overall modeling approach is an accepted analytic approach used in resource planning considering the range of both demand and supply 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. 

1. \*\*Total Control of Control

The IRP must consist of include the following steps, which are defined fully in the subsequent

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

sections:

- 1) <u>Component 1: IRP Objectives and Data Collection--</u>Identify the objectives and procedures <u>for the planning process</u>, including time horizon <u>and procedural schedule (Component 1)</u>;
- Collect data needed for the planning process, including a market analysis;
- 2) Component 2: Load Forecast—Develop several demand, energy and load profile forecasts in the detail needed to evaluate all resource options (Component 2);
- 4) <u>Component 3: Resource Options--</u>Identify all stakeholder resource options on the demand-side and supply-side (Component 3);
- Evaluate all demand-side resources by conducting benefit-cost analyses which include the Total Resource Cost test as well as the Ratepayer Impact Measure test, and considering any directly quantifiable environmental externalities;

3)

Component 4: Planning Scenarios and Resource Portfolios--Develop several (at least three, but no more than five) Planning Scenarios that incorporate different economic and environmental circumstances and regulatory and legislative policies. 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 Alternative Planning Scenarios (including a Stakeholder Input Scenario) that account for alternative circumstances and policies. Through optimization, the Utility shall identify the Least Cost Resource Portfolio for each Planning Scenario, based on total supply cost. Resource Portfolios shall consist of optimized combinations of supply- and demand-side resources, while recognizing constraints including transmission/distribution costs; and

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- Component 5: Submissiont and PpPresentation of the IRP (Component 5); and
- 5) Monitor, evaluate, report, and revise the IRP (Component 6) File the IRP with the Council and publicly present it.-

The IRP should be a combination of (a) deterministic based modeling (specific parameters and relationships) for market fundamentals, and (b) stochastic modeling (ranges of values as probability distributions) for portfolio planning. This overall modeling approach is an accepted analytic approach used in resource planning considering the range of both demand and supply 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.<sup>2</sup>

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

### Component 1 -- IRP Objectives and Data Collection

The IRP shall state and support specific objectives to be accomplished, which include but are not limited to the following: (1) to optimize the integration of generation and transmission services with demand-side resource options to provide New Orleans ratepayers with reliable electricity at the lowest practicable cost; (2) to promote the Utility's financial integrity; (3) to anticipate and mitigate risks associated with increasing fuel costs and other economic changes; (4) to comply with codified regulatory requirements and policies; and (5) to evaluate the appropriateness of incorporating advances in technology, including a careful mix of new renewable resources. Another important objective of resource portfolio procurement is to achieve a specified range of acceptable risk in the trade-off between price and risk. Therefore, aAn initial step in resource portfolio planning must be market outlooks or forecasts of costs, prices, and other input variables, as well as measures of their uncertainty, expressed as possible future price ranges along with associated probabilities and the correlations among them.

The IRP shall demonstrate how the Utility achieves or will achieve these objectives. In doing so, the IRP shall address the following: (1) supply-side resources such as <u>central station</u> generation <u>development</u>, purchased power, and distributed generation; (2) demand-side resource options such as interruptible load and energy efficiency program initiatives; (3) use of the transmission and distribution systems to deliver power to New Orleans; and (4) any other factors identified by the Utility as necessary to achieve the Utility's listed objectives.

The IRP shall identify and quantify the costs and benefits of its resource <u>PP</u>ortfolio<u>s. and</u> compare those to alternatives available in the market. In addition to economic costs, the IRP shall assess any <u>directly quantifiable</u> social and environmental effects of <u>its choicesthe Portfolios to the extent that: 1</u>) those effects can be quantified for all resource options within all Resource <u>Portfolios, and 2</u>) it is possible to determine the impact of those effects on the cost of providing <u>service to the Utility's customers.</u>

In the identification and presentation of the preferred IRP planResource Portfolios, it is important that the Utility develop alternatives to the preferred plan or, at a minimum, perform analyses that show the cost impact of utilizing alternative probable input assumptions (*i.e.*, the Planning Scenarios) while holding the resource planeach Resource Portfolio constant. These sensitivity analyses need to be presented in the Utility's IRP filing so that the Council can comprehend the robustness of the preferred plan aeach Resource Portfolio acrossnd the range of possible outcomes Planning Scenarios to the extent that the Utility's reference planning assumptions do not hold true. The Council anticipates that assumptions regarding load growth, fuel price, adoption and penetration of demand-side programs, and environmental regulation, may be appropriate for sensitivity analyses. An initial step in resource portfolio planning must be market outlooks or forecasts of costs, prices, and other input variables, as well as measures of their uncertainty, expressed as possible future price ranges along with associated probabilities and the correlations

among them. Estimated market prices will be used to analyze potential conservation initiatives and available supply-side resources to meet forecasted resource requirements. The market analysis must include all expected price and price ranges assumed through the planning period.

Additionally, as the electric utilities under the Council's jurisdiction are currently parties to the Entergy System Agreement among the Entergy Operating Companies, the Utility should consider any certain or probable changes to the Entergy System Agreement, parties to the System Agreement, or alternative cost sharing arrangements that are currently being contemplated.

As utility system planning typically utilizes a cumulative present worth analysis to rank planning scenarios, it is important that the Utility present not only the cumulative present worth of the reference planning scenario and sensitivities, but the annual estimates of costs that result in the cumulative present worth so that the Council may understand the timing of costs and savings under alternative scenarios.

#### Component 2 - Demand and Energy UseLoad Forecast

The IRP shall provide an annual demand (MW) and energy use (kWh) forecast ("Forecast") for no less than a rolling ten-year planning horizon. The Utility shall identify all assumptions relied upon in developing its Forecast. The IRP shall identify forecasted energy use by customer class.

Data supplied with the forecast shall include:

- 1) Historical demand and energy data for the Utility for the ten (10) years immediately preceding the forecast period;
- 2) A reference planning scenario forecast, a low growth planning scenario forecast, and a high growth planning scenario forecast;
- 3) A discussion of the forecasting methodology and a list of key independent variables utilized to develop the reference planning scenario forecast;
- 4) Forecasts of the key independent variables utilized in developing the reference planning scenario forecast, low growth planning scenario forecast, and high growth planning scenario forecast;
- 5) Forecasted demand and energy usage by customer class under the reference planning scenario forecast, with the supporting development from the forecasted key independent variables; and
- 6) Construction of the composite of customer load profiles based on the forecasted demand and energy usage by customer class and relevant load profile data, including the factors which determine future load levels and shape.; and

  To the extent the utility is a party to the Entergy System Agreement or other cost sharing
  - To the extent the utility is a party to the Entergy System Agreement or other cost sharing arrangement among the Entergy Operating Companies where costs are allocated on the basis of demand or energy, the Utility should supply the reference planning scenario demand and energy forecasts and coincident peak demand forecasts for the Utilities who are parties to the cost sharing

#### arrangements.

## **Component 3 – Supply - and Demand-Side Resources** Resource Options

The IRP shall identify and evaluate <u>all of</u> the Utility's existing resources used to serve New Orleans ratepayers' load based on their cost, including resources used to serve base-load and incremental demand. These costs shall include fixed and variable costs (e.g., fuel), the cost of current and future emissions controls (to the extent practicable), and other costs identified by the Utility. The IRP shall include a comparison of current costs to annual costs incurred for the previous ten (10) years.

To the extent the Utility anticipates altering its existing resource portfolio during the ten year planning period, the IRP shall (1) identify the specific changes in resources anticipated, (2) the resultant change in costs to New Orleans ratepayers, and (3) a time-line for and description of those changes including the process the Utility relied upon to ensure that the new resource portfolio will provide New Orleans ratepayers with reliable electricity at the lowest practicable cost.

The IRP shall identify and quantify the success of its efforts to develop and implement programs that promote energy efficiency, conservation, demand-side management, distributed generation, interruptible load, and price responsive demand. To the extent the Utility has not achieved its objectives identified as part of the IRP, the IRP shall include a time line indicating when the Utility anticipates achieving those objectives.

The IRP shall incorporate quantifiable energy efficiency and conservation results implemented under the Energy Smart New Orleans program following program implementation using verified data available to ENO from prior Program Years.

The IRP shall consider the types and combination of resources relied upon to ensure a reliable, balanced Resource portfolios that incorporates factors including, but not limited to, fuel cost forecasts, anticipated load growth, environmental riskregulations, timing and changes to the total revenue requirements to New Orleans ratepayers, the Utility's continued financial integrity, and relevant, quantifiable conditions outside the Utility's control.

To the extent the Utility anticipates altering its resource portfolio during the ten-year planning period, the IRP shall (1) identify the specific changes in resources anticipated, (2) the resultant change in costs to New Orleans ratepayers, and (3) a time-line for and description of those changes including the process the Utility relied upon to ensure that the new resource portfolio will provide New Orleans ratepayers with reliable electricity at the lowest practicable cost.

The data supplied in the Utility's IRP filing shall include:

- 1) A table depicting all of the Utility's existing supply-side and demand-side resources, anticipated capacity available at time of peak, and planning retirement deactivation date assumptions or resource contractual termination date;
- 2) A table showing the <u>reference Reference planning Planning scenario Scenario demand forecast</u> and planning reserve <u>margin</u> in comparison with the Utility's existing resources;
- A monthly reference <u>Reference planning Planning scenario Scenario</u> fuel price forecast for all fuels considered for utilization in all existing and potential supply-side resources;
- 4) Alternative fuel price forecasts for fuels for which a significant variability in price could be expected;
- 5) A monthly forecast of on-peak and off-peak energy prices in the market which is consistent with the Reference pPlanning Secenario fuel price forecast;
- A description of each supply-side resource considered, including a technology description, operating characteristics and limitations, capital cost or demand charge, fixed operation and maintenance costs, variable charges, variable operation and maintenance costs, operating characteristics, earliest date available to provide supply, expected life or contractual term of resource, and fuel type with reference to fuel forecast. Supply options must include non-utility sources of power (e.g., bulk power purchases from independent power producers and cogenerated power);
- A description of each demand-side resource considered, -including a description of -the resource or program, expected penetration levels by planning year, and results of appropriate cost benefit analyses and acceptance tests which are consistent with the planning assumptions utilized within the IRP planning process. At a minimum, the Total Resource Cost ("TRC") test, based on a total stakeholders' perspective, as well as the Ratepayer Impact Measure ("RIM") test<sup>3</sup>, defining the impacts on revenue requirements to ratepayers, should be used for initial screening of resource options. The cost effective demand response programs should include those programs enabled by the "smart grid" and the associated the deployment of Advanced Metering Infrastructure ("AMI"); and. For those options where implementation of a managed resource may necessitate the approval of cost recovery mechanisms associated with the implementation, include all timing and cost impacts on revenue requirements.
- 8) The results of any Requests for Proposals for power supply that were conducted within the past three years.
- 9) A description of the Utility Preferred Resource Plan ("UPRP") to meet the forecasted loads of the Utility(ies) and a table showing the supply side and demand side resources that are planned and their principal rational for selection (i.e., supply peak demand, supply non-peak demand or operational constraints, achieve more economical production of energy);

<sup>3</sup> California Standard Practice Manual: Economic Analysis of Demand-Side Programs and Projects, State of California Governor's Office of Planning and Research, July 2002

- 10) A schedule of costs showing the annual total demand related costs, energy related costs, and total supply costs associated with the UPRP;
- 11) If the UPRP is not the least cost plan, the Utility shall provide the basis for rejecting the least cost plan and provide a schedule of costs showing the annual total demand related costs, energy related costs, and total supply costs associated with the least cost plan.
- 12) An analysis of the rate impacts of the UPRP on the Utility's ratepayers including the timing of increased revenue requirements;
- 13)A schedule of identifying, for the planning horizon, annual payments or receipts under each service schedule of the Entergy System Agreement with consideration of any Operating Companies that have submitted a notice to terminate participation in the Entergy System Agreement;
- 14)To the extent an alternate cost sharing arrangement, other than the Entergy System Agreement, among the Operating Companies is considered or anticipated, the Utility must provide a description of the alternate arrangement, a list of the Operating Companies assumed to be participating, and a schedule of payments and receipts under each of the cost sharing components of the alternate arrangement.
  - 15)A risk assessment of the UPRP is required to evaluate the riskiness of alternative portfolios using the range of potential costs along with their associated probabilities. The IRP must provide an evaluation of various resource mixes showing both the expected outcome in terms of average price and the potential range of outcomes around the expected price. The IRP should present the expected cost per MWh of the UPRP in selected future years, along with the range of annual average costs foreseen for the 10th and 90th percentiles of simulated possible outcomes. Those ranges should be the result of 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. For example, the widely used Monte Carlo-style analysis varies renewable resources, load projections, forced outages, environmental costs, and gas price data with multiple iterations of potential future conditions.4 The simulation results should be used to estimate the regional electric market, and the iterations collectively form the UPRP of the IRP. Identify the trade-off between risk and cost similar to finding the optimal mix of risk and return, but the trade off is future costs against resource cost variation.
- 16) A discussion and presentation of results for each alternative planning scenario considered, including a schedule of costs showing the annual total demand related costs, energy related costs, and total supply costs associated with each alternative planning scenario; and
- 17)An implementation plan and timeline including all major steps necessary to implement the preferred plan; scenarios of resource portfolio options are used to identify tipping points that

<sup>&</sup>lt;sup>4</sup>—Monte Carlo modeling involves the use of simulated random sampling of possible conditions to project how the system can be expected to perform in terms of economics.

would change the UPRP under alternative conditions. The scenarios should identify changes to underlying assumptions that could alter the UPRP, such as changes to load growth, capital costs, resource upgrades, the emergence of other small renewable projects and resource alternatives. Demand side/load management options would be dispatched in an optimal manner similar to the dispatch of utility generating units.

<del>18)</del>

## Component 4 - Integration of Delivery Planning Scenarios and Resource Portfolios

The IRP shall include a discussion and presentation of results for each Planning Scenario considered, 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, and a description of the supply-side and demand-side resources that are planned and their principal rationale for selection (*i.e.*, supply peak demand, supply non-peak demand or operational constraints, achieve more economical production of energy).

The IRP shall explain how Entergy's current transmission system, and any planned transmission system expansions, 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. To the extent major changes in the operation or planning of the transmission system are contemplated in the planning horizon, the Utility should describe the anticipated changes and provide an assessment of the cost impact to the Utility.

## Component 5 - Submission and Public Presentation of IRP

The Utility shall file its IRP with the Council. 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. Provided the IRP fulfills the requirements contained herein and was developed in compliance with the procedural schedule established for the triennial cycle, the Council shall accept the Utility's IRP as filed in compliance with the Council's substantive and procedural requirements. 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 or implementation of any supply- or demand-side resource or program.

The Utility shall <u>also</u> make its IRP available for public review subject to the provisions of Council Resolution R-10--142.

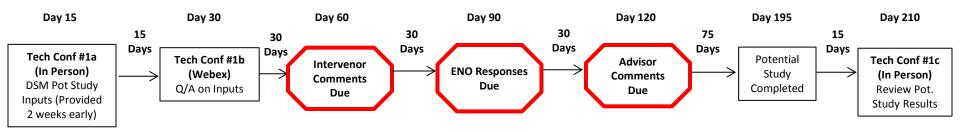
#### **Component 6 - Reporting Requirements and Council Resolutions**

In addition to its triennial IRP filing, the Utility shall file IRP status reports intended to provide the Council with an update on the Utility's progress in meeting the objectives established in the IRP. The Utility shall file its initial IRP status report fifteen (15) months following the Council's initial approval of The Utility's IRP and shall file subsequent IRP status reports every eighteen (18) months thereafter. The Council reserves the right to issue subsequent resolutions requiring the submission of additional filings and informational reports to ensure compliance with these IRP requirements.

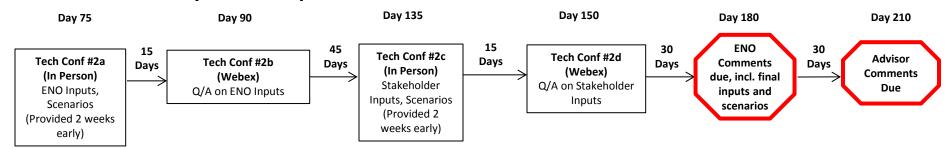
The reports should compare: (a) actual resource portfolio performance for the current period with the previous period and (b) actual resource portfolio performance with the annual portfolio expectation.

The Council will consider the Utility's IRP status reports, implementation of the requirements and the Utility's success in achieving its objectives in rate making proceedings that address among other things the prudency of costs incurred by the Utility to construct generation, and purchase and deliver electricity.

## Work Stream 1—DSM Potential Study

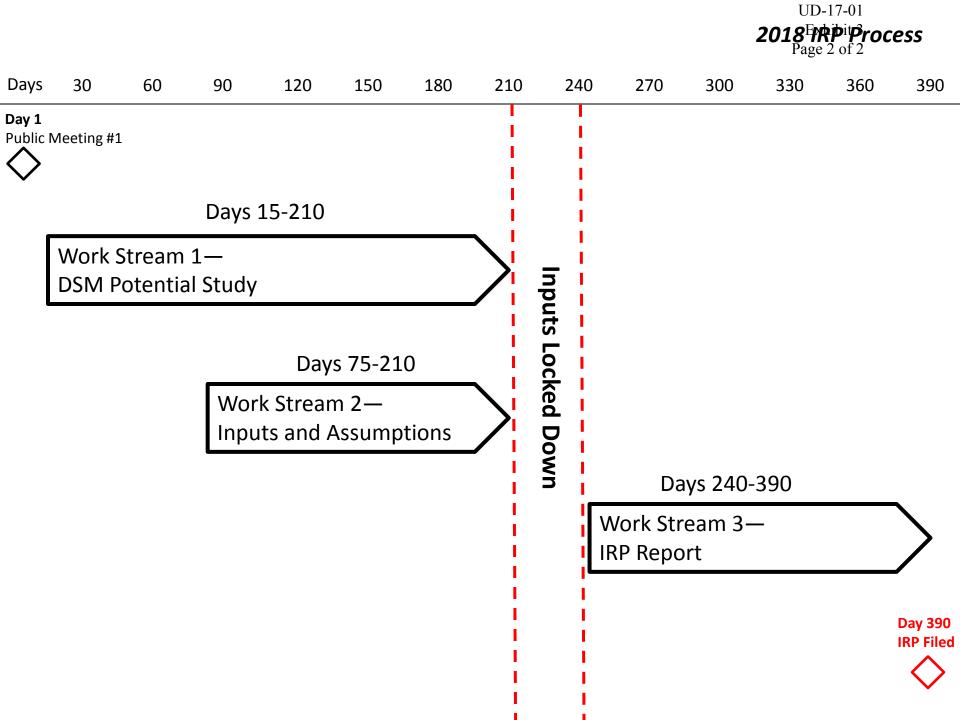


## Work Stream 2—Input Assumptions



## Work Stream 3—IRP Report





#### 2018 IRP Process—Overview

#### <u>Introduction</u>

In response to the Council's request in Resolution 17-32 for proposed changes to improve the IRP process, ENO submits the attached illustrative timeline and description. The proposed process is intended to achieve the following results:

- Reduce the Overall Timeline—Responding to concerns expressed throughout the 2015
  IRP cycle that the overall timeline was too long, which led to the inputs, assumptions,
  and modeling results growing stale during the pendency of the cycle, the proposed
  process is designed to complete the IRP cycle in approximately 13 months.
- Restructure the Process—Rather than working through a series of sequential milestones, the new process would group activities into three work streams focused on the DSM Potential Study, Input Assumptions, and IRP Report, that would overlap in part and reduce the overall time required without compromising the quality of the outputs.
- Improve the DSM Potential Study—The first work stream would focus on the DSM
  Potential Study in order to achieve greater consensus regarding the inputs to that study,
  as recommended by the Council. Since the Study is a direct output of the assumptions
  used, achieving early consensus among the Stakeholders should reduce disputes over
  this product later.
- Increase Focus on Stakeholder Input—Nine total meetings would be held, including two public information sessions and seven technical conferences (four in person and three via WebEx), which would include ENO, Intervenors, and the Council Advisors. Structured comment deadlines are included to ensure Stakeholders have the opportunity to provide input on a timely basis so that the overall schedule of the IRP process can be maintained. It is important to note that on Day 240, assuming the other steps in the work streams have been completed, the IRP inputs and assumptions and the inputs derived from the DSM Potential Study will be locked down. By preventing further revisions from this point, the proposed schedule will allow ENO to produce the IRP based on those inputs and facilitate the parties' focus on completing the process rather than reopening earlier steps.

<u>Process Overview</u>—Days indicated are counted from the initiation of the IRP cycle as shown on the accompanying flowchart.

Day 1: Public Meeting #1 (In person; facilitated by ENO)—IRP process would commence with a public meeting where ENO would provide a complete overview of the IRP process and timeline, a breakdown of the different parts of the IRP report, and a description of the types of inputs and assumptions that are used to create the report. To facilitate public input throughout the

entirety of the process, ENO will accept questions and comments from the public through its website for the entire IRP cycle. ENO will also provide informational resources, such as a list of Frequently Asked Questions and all public IRP documents, through its IRP website to aid in educating the public about the IRP.

#### Work Stream 1—DSM Potential Study

- Day 15: Technical Conference #1a (In person; facilitated by ENO)—Focus on DSM Potential Study inputs. These proposed inputs would be provided 2 weeks before the meeting to give the parties an opportunity to prepare. Working session to thoroughly review the assumptions and sources of information to be used in developing the Potential Study and discuss alternative inputs contemplated by Intervenors and the Advisors.
- Day 30: Technical Conference #1b (Webex; facilitated by ENO)—Opportunity for follow up Q/A and discussion on inputs presented at previous technical conference.
- Day 60: Intervenor Comments Due—Intervenors file comments regarding ENO's proposed inputs, including any suggested alternative inputs to the Potential Study
- Day 90: ENO Responses Due—ENO files its responsive comments and details the inputs identified through the work stream to be used in the Study.
- Day 120: Advisor Comments Due—Advisors file any comments or recommendations on the assumptions to be used in the Study.
- Day 195: Potential Study Completed
- Day 210: Technical Conference #1c (In person; facilitated by ENO)—Review the results and conclusions of the Potential Study that will be incorporated into the IRP modeling process

#### Work Stream 2—Input Assumptions

- Day 75: Technical Conference #2a (In person; facilitated by ENO)—Focus on ENO's proposed IRP inputs, assumptions, and scenarios. These proposed inputs would be provided 2 weeks before the meeting to give the parties an opportunity to prepare. Working session to thoroughly review the assumptions and scenarios proposed by ENO for use in creating the IRP.
- Day 90: Technical Conference #2b (Webex; facilitated by ENO)—Opportunity for follow up Q/A on information and inputs presented at previous technical conference.
- Day 135: Technical Conference #2c (In person; facilitated by Intervenors or Advisors)— Intervenors present the inputs and assumptions they propose to include in the Stakeholder Input Scenario (SIS). These proposed inputs would be provided 2 weeks

- before the meeting to give the parties an opportunity to prepare. Working session to thoroughly review those inputs and discuss their inclusion in Aurora modeling runs.
- Day 150: Technical Conference #2d (Webex; facilitated by Intervenors or Advisors)— Opportunity for follow up Q/A on inputs presented at previous technical conference.
- Day 180: ENO Comments due—ENO files comments in response to SIS as well as final proposed inputs, assumptions, and scenarios to be used in creating the IRP.
- Day 210: Advisor Comments due—Advisors file any comments or recommendations on the ENO input assumptions and SIS input assumptions.

#### Work Stream 3—IRP Report

- Day 240: All IRP Inputs Locked Down—Between Days 210 and 240, complete any final adjustments to the DSM Potential Study results, ENO Inputs, and Intervenor SIS inputs.
- Day 330: IRP Report Completed.
- Day 360: Public Meeting #2 (In person; facilitated by ENO)—Present IRP Report; Answer additional questions from the public.
- Day 375: Intervenor and Advisor Comments Due—Intervenors and Advisors file any comments or suggestions regarding presentation of IRP report.
- Day 390: IRP Report Filed

# CERTIFICATE OF SERVICE <u>Docket No. UD-17-01</u>

I hereby certify that I have this 27<sup>th</sup> day of February 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 27th day of February 2017.

Harry M. Barton