RESOLUTION
NO. R-20-52

CITY HALL: February 20,2020

BY: COUNCILMEMBERS MORENO, WILLIAMS, GIARRUSSO, BANKS AND BROSSETT

IN RE: 2018 TRIENNIAL INTEGRATED RESOURCE PLAN OF ENTERGY NEW ORLEANS, INC.

RESOLUTION AND ORDER ACCEPTING AND APPROVING ENTERGY NEW ORLEANS, INC.'S 2018 TRIENNIAL INTEGRATED RESOURCE PLAN

DOCKET NO. UD-17-03

WHEREAS, pursuant to the Constitution of the State of Louisiana and the Home Rule Charter of the City of New Orleans ("Charter"), the Council of the City of New Orleans ("Council") is the governmental body with the power of supervision, regulation, and control over public utilities providing service within the City of New Orleans ("City"); and

WHEREAS, pursuant to its powers of supervision, regulation, and control over public utilities, the Council is responsible for fixing and changing rates and charges of public utilities; and

WHEREAS, Entergy New Orleans, Inc. ("ENO" or "Company") is a public utility providing electric and natural gas service to all of New Orleans; and

WHEREAS, the Council has required utilities subject to its jurisdiction to complete an IRP under rules set forth by the Council since 2008;[1] and

WHEREAS, subsequent to ENO's 2015 Triennial Integrated Resource Plan, the Council in Resolution R-17-332 adopted new Electric Utility Integrated Resource Plan Rules ("IRP Rules") to govern the triennial integrated resource plan process for ENO; and

[1] Council Resolution No. R-08-295, "Resolution Regarding Proposed Rulemaking to Establish IRP Components and Reporting Requirements for Entergy New Orleans; Inc."

WHEREAS, in Resolution No. R-17-429 the Council amended the IRP Rules; and

WHEREAS, in the IRP Rules, the Council set forth specific objectives for the IRP, including, but not limited to: (1) optimize the integration of supply-side resources and demand-side resources, while taking into account transmission and distribution, to provide New Orleans ratepayers with reliable electricity at the lowest practicable cost given an acceptable level of risk; (2) maintain the Utility's financial integrity; (3) anticipate and mitigate risks associated with fuel and market prices, environmental compliance costs, and other economic factors; (4) support the resiliency and sustainability of the Utility's systems in New Orleans; (5) comply with local, state and federal regulatory requirements and regulatory requirements and known policies (including such policies identified in the Initiating Resolution) established by the Council; (6) evaluate the appropriateness of incorporating advances in technology, including, but not limited to, renewable energy, storage, and DERs, among others; (7) achieve a range of acceptable risk in the trade-off between cost and risk; and (8) maintain transparency and engagement with stakeholders throughout the IRP process by conducting technical conferences and providing for stakeholder feedback regarding the Planning Scenarios, Planning Strategies, input parameters, and assumptions;[2] and

WHEREAS, pursuant to the IRP Rules, the Council adopted its Initiating Resolution, Resolution No. R-17-430[3] which established a procedural schedule for the 2018 IRP in new Docket No. UD-17-03, set forth certain policy objectives, and determined the Council would hire its own, independent consultant to perform a demand-side management ("DSM") Potential Study, as well as addressing other procedural matters; and

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[2] IRP Rules at Section 3.A.

[3] Resolution No. R-17-430 was amended twice, by Resolution Nos. R-17-503 and R-18-135. The term "Initiating Resolution" used herein refers to R-17-430, as amended by both subsequent Resolutions.

WHEREAS, a number of parties intervened in the case, including 350 New Orleans, the Alliance for Affordable Energy ("AAE"), Air Products and Chemicals, Inc. ("Air Products"), Wisznia Company, Inc., U.S. Green Building Council, Louisiana Chapter, Sewerage and Water Board of New Orleans ("S&WB"), Lower Nine House of Music, Green Light New Orleans, The Water Collaborative of Greater New Orleans, American Institute of Architects, Gulf States Renewable Energy Industries Association ("GSREIA"), Deep South Center for Environmental Justice, Greater New Orleans Housing Alliance, PosiGen, and the Advanced Energy Management Alliance; and

WHEREAS, the process for selection and retention of the independent DSM consultant took longer than originally contemplated in Resolution No. R-17-429, and therefore, the Council adopted Resolution No. R-17-503 extending certain deadlines in the procedural schedule set forth in Resolution No. R-17-429 and directing the Hearing Officer, working with ENO, the Advisors and parties in the docket to adjust other dates as necessary; and

WHEREAS, on March 26, 2018, the Hearing Officer issued an order adjusting the other dates in the procedural schedule ("March 26 Order"); and

WHEREAS, the Council selected Optimal Energy, Inc. ("Optimal") as the Council's independent consultant to provide a DSM Potential Study; and

WHEREAS, ENO subsequently convened various technical meetings of the parties and public meetings regarding the development of the IRP and ultimately submitted its IRP to the Council on July 19, 2019 ("2018 IRP Report").[4] AAE filed comments on the 2018 IRP Report

[4] Entergy New Orleans, LLC., 2018 Integrated Resource Plan, Docket No. UD-17-03, July 19, 2019.

on September 16, 2019,[5] ENO filed comments in response on October 29, 2019,[6] and the Advisors filed their Advisors' Report on December 2, 2019; and

WHEREAS, under the IRP Rules, the Council first determines whether or not the 2018 IRP is in compliance with the Council's IRP Rules and the procedural schedule established for this triennial IRP cycle; in which case the Council shall accept ENO's IRP as filed in compliance with the Council's substantive and procedural requirements (if it is not in compliance with the requirements, it may be rejected without prejudice to the utility refiling the IRP once it has corrected the deficiencies).[7] The Council's acceptance of the IRP has no precedential effect with respect to the Council's evaluation of any application for approval of the acquisition, implementation, or deactivation of any supply-side or demand-side resource or program;[8] and

WHEREAS, once the Council has determined the Company's 2018 IRP is in compliance, and after consideration of all of the evidence entered into the record, the Council may also decide to approve the accepted IRP, approve it subject to conditions or with modifications, approve it in part and reject it in part, reject it in its entirety, or choose to terminate the proceeding without either approving or rejecting the accepted IRP;[9] and

Whether the 2018 IRP Should be Accepted as In Compliance with the Council's Requirements

WHEREAS, Section 10.E of the IRP Rules states in part:

> Provided the IRP fulfills the requirements contained herein and was developed in compliance with the procedural schedule established for the triennial IRP cycle, the Council shall accept the Utility's IRP as filed in compliance with the Council's substantive and procedural requirements. Failure of the utility to substantially comply with the provisions of these Rules may result in summary rejection of the Utility's IRP.

[5] Alliance for Affordable Energy's Comments on Entergy New Orleans, LLC's Integrated Resource Plan Report ("AAE Comments"), Docket No. UD-17-03, Sept. 16, 2019.
[6] Entergy New Orleans, LLC's Reply Comments Concerning the 2018 Integrated Resource Plan Report ("ENO Reply Comments"), Docket No. UD-17-03, Oct. 29, 2019.
[7] IRP Rules at Section 10.E.
[8] IRP Rules at Section 10.F.
[9] IRP Rules at Section 10.E.

Such rejection may be without prejudice to the refiling of the IRP once the utility has corrected the deficiencies.

WHEREAS, the IRP Rules, the Initiating Resolution and the March 26 Order set forth specific procedural requirements, a specific procedural schedule for the case, and numerous substantive requirements for the IRP analysis and report. As is required in the IRP Rules,[10] ENO included as Appendix A to its 2018 IRP Report a Rules Compliance Matrix setting forth each requirement and explaining how ENO met each requirement;[11] and

WHEREAS, with respect to the procedural requirements, AAE does not, in its Comments, allege that ENO failed to meet any of the procedural requirements of the Council's IRP Rules or the Initiating Resolution. In their Advisors' Report, the Advisors provided a table summarizing ENO's procedural requirements through the date of their Report and whether and how ENO met each requirement:[12]

IRP Rules Requirement *(Initiating Resolution as modified by March 26 Order, and IRP Rules Section 9)*	**Action(s) Taken**	**Whether Requirement Was Met**
Initial public meeting (kickoff and educational meeting) no later than Sept. 25, 2017	Meeting held Sept. 25, 2017	Yes
Technical Meeting 1 of the parties between January 10 and January 22, 2018 (discussion of Planning Scenarios and Strategies)	Meeting held Jan. 22, 2018	Yes
Completion of DSM Potential Studies by Aug. 31, 2018	Filed Aug. 31, 2018	Yes
Technical Meeting 2 of the parties (to confirm Scenarios and Strategies), between Sept. 17 and Sept. 28, 2018	Meeting held Sept. 14, 2018 (date chosen with consensus of the parties)	Yes
Technical Meeting 3 of the parties (finalization of Scenarios and Strategies and lock down of inputs) between Nov. 19 and 30, 2018	Meeting held Nov. 28, 2018	Yes

[10] IRP Rules Section 1.
[11] 2018 IRP Report, Appendix A: Rules Compliance Matrix.
[12] Advisors' Report at 4-5.

IRP Rules Requirement *(Initiating Resolution as modified by March 26 Order, and IRP Rules Section 9)*	**Action(s) Taken**	**Whether Requirement Was Met**
Finalization of all IRP inputs, Dec. 7, 2018	Agreement among parties reached at Technical Meeting 3, memorialized in Advisor email to parties dated Dec. 4, 2018	Yes
Completion of all optimized portfolio development and results, April 8, 2019	Completed on time, circulated to parties on April 17, 2019 in advance of Technical Meeting 4	Yes
Technical Meeting 4 of the parties (to review the optimized portfolios and finalize scorecard metrics) between April 22 and May 3, 2019	Meeting held May 1, 2019	Yes
2018 IRP Report filed July 19, 2019	Filed July 19, 2019	Yes
Second Public Meeting (present the 2018 IRP Report) between July 29 and Aug. 9, 2019	Meeting held Aug. 9, 2019	Yes
Third Public Meeting (to receive public comment on the 2018 IRP Report) between Aug. 28 and Sept. 11, 2019	Meeting held Sept. 11, 2019	Yes
Technical Meeting 5 of the parties (to discuss Energy Smart Implementation Plan) between Aug. 28 and Sept. 11, 2019	Meeting held Sept. 11, 2019	Yes
Intervenor Comments filed Sept. 16, 2019	Comments filed Sept. 16, 2019	Yes
(Not required under the IRP Rules, held by agreement of the parties.) Technical Meeting 6 (to discuss Energy Smart Demand Response Program design)	Meeting held Oct. 29, 2019	N/A
ENO Reply Comments filed Oct. 29, 2019	Comments filed Oct. 29, 2019	Yes

WHEREAS, the Advisors concluded in the Advisors' Report that ENO did meet the procedural requirements of the IRP Rules, the Initiating Resolution and the March 26 Order;[13] and

[13] Advisors' Report at 5.

WHEREAS, upon review of the 2018 IRP Report and the record of the case, the Council finds that ENO has met the procedural requirements of the Council's IRP Rules and Initiating Resolution, as amended by the March 25 Order; and

WHEREAS, the IRP Rules and Initiating Resolution also set forth numerous substantive requirements for the IRP analysis and report. As is required in the IRP Rules,[14] ENO included as Appendix A to its 2018 IRP Plan a Rules Compliance Matrix setting forth each requirement and explaining how ENO met each requirement;[15] and

WHEREAS, while the AAE's comments indicate a desire for more information on certain topics, AAE does not allege that ENO has failed to meet the substantive requirements of the Council for the information and analyses to be included in the 2018 IRP Report.[16] The Advisors state in their report that they have reviewed ENO's Rules Compliance Matrix, and verified the information contained therein, and find that it is complete and does demonstrate to the Advisors' satisfaction that ENO has complied with the substantive requirements of the IRP Rules and Initiating Resolution;[17] and

WHEREAS, upon review of the record, the Council concurs with the Advisors that ENO has met the substantive requirements set forth for the IRP analysis in the IRP Rules and Initiating Resolution; and

WHEREAS, having found that ENO has complied with the procedural and substantive requirements of the Council's IRP Rules and Initiating Resolution as modified by the March 26 Order, the Council accepts the 2018 IRP, noting that, as set forth under the rules, acceptance of the IRP has no precedential effect with respect to the Council's evaluation of any application for

[14] IRP Rules, Section 1.C
[15] 2018 IRP Report, Appendix A
[16] AAE Comments at 4-7.
[17] Advisors' Report at 5.

approval of the acquisition, implementation, or deactivation of any supply-side or demand-side resource or program;[18] and

Whether or Not the 2018 IRP Should be Approved, Approved Subject to Conditions or With Modifications, Approved in Part and Rejected in Part, or Rejected

WHEREAS, the second part of Section 10.E of the IRP Rules states:

> Further, after consideration of all the evidence entered into the record, the Council may approve the accepted Utility IRP, approve it subject to stated conditions, approve it with modifications, approve it in part and reject it in part, reject it in its entirety, or choose to terminate the proceeding without either approving or rejecting the accepted Utility IRP. Nothing in this provision limits the Council's ability to take any action with respect to the IRP that is within its authority, including the Council's ability to open a prudence investigation for noncompliance on the part of the Utility.

WHEREAS, having determined that the 2018 IRP should be accepted as in compliance with the Council's requirements, the Council must now determine what further findings, if any, to make with respect to the 2018 IRP; and

IRP Analysis Performed by ENO in Consultation with the Parties and Advisors

WHEREAS, as ENO describes in detail in the 2018 IRP Report, future market conditions were recognized in the IRP process through three different Planning Scenarios, defined by key market assumptions, while policy and planning objectives were recognized by five different Planning Strategies.[19] The IRP modeling process produced fifteen optimized resource portfolios from the combinations of planning scenarios and planning strategies;[20] and

WHEREAS, the three Planning Scenarios were agreed to by the parties as being representative of the different possible future market outcomes.[21] Planning Scenario 1 was essentially a middle-of-the-road or reference Scenario that assumed moderate load growth, natural gas prices, and CO_2 prices, a low level of deactivations of coal and legacy gas resources

[18] IRP Rules at Section 10.F.
[19] 2018 IRP Report at 53-56.
[20] 2018 IRP Report at 57-60.
[21] Advisors' Report at 6.

and a moderate mix of new gas resources and renewable resources being added to MISO going forward.[22] Planning Scenario 2 was a scenario that was essentially favorable to the addition of traditional fossil generating resources, with high load growth, low natural gas and CO_2 prices, a moderate level of retirement of legacy resources, and a high mix of new natural gas in MISO relative to new renewables.[23] Planning Scenario 3 was a scenario that was essentially favorable to greater deployment of renewables and distributed energy resources, with low load growth, high natural gas and CO_2 prices the highest percentage of retirements of existing resources and an even mix of new fossil resources and new renewable resources in MISO;[24] and

WHEREAS, the Advisors concur with the parties that these three Planning Scenarios capture a reasonable range of possible future scenarios that could occur over the next twenty years.[25] The Advisors note that in all likelihood the actual market future will not match any of the three scenarios precisely but will likely fall somewhere within the range of futures the scenarios represent;[26] and

WHEREAS, the Council agrees that the Planning Scenarios developed by ENO and the parties capture a reasonable range of possible future scenarios and meet the requirements for Scenarios set forth in the Council's IRP Rules and Initiating Resolution; and

WHEREAS, the five Planning Strategies agreed to by the parties were intended to represent the different policy and planning objectives that could be achieved by various optimized resource portfolios.[27] Strategy 1 was designed to demonstrate the least expensive portfolios that would result in a reliable power supply for the city across each of the three

[22] 2018 IRP Report at 54.
[23] 2018 IRP Report at 54.
[24] 2018 IRP Report at 54.
[25] Advisors' Report at 6.
[26] Advisors' Report at 6.
[27] Advisors' Report at 6.

possible future scenarios.[28] Strategy 2 was designed to demonstrate the least expensive portfolios that would achieve the Council's 2% energy efficiency savings goal and provide reliable power across each of the three possible future scenarios.[29] Strategy 3 was designed to demonstrate the least expensive portfolio assuming the level of achievable energy efficiency and demand response determined in the Optimal DSM potential study while assuring reliable power across each of the three possible future scenarios.[30] Strategy 4 was designed to demonstrate the least expensive portfolios that would achieve the high case of energy efficiency and demand response determined in the Navigant DSM Potential Study while assuring reliable power across each of the three possible future scenarios.[31] Finally, Strategy 5 was the Stakeholder Strategy, chosen by the stakeholders, which was designed to demonstrate the least expensive portfolios that reached the level of achievable energy efficiency and demand response determined in the Optimal DSM potential study using only DSM, renewable and energy storage resources while assuring reliable power across each of the three possible future scenarios;[32] and

WHEREAS, the Council finds that the five Strategies agreed upon by ENO and the parties reflect a reasonable range of different policy and planning objectives and meet the requirements for Strategies set forth in the Council's IRP Rules and Initiating Resolution, including the requirement that at least one Strategy reflect the Council's policies; and

WHEREAS, the Scenarios and Strategies resulted in fifteen optimized portfolios, as set forth in Table 16 of the 2018 IRP Report.[33] The Advisors report that the optimized portfolios presented the total supply cost to serve customers' energy and demand needs reliably under the

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[28] 2018 IRP Report at 55.
[29] 2018 IRP Report at 55.
[30] 2018 IRP Report at 55.
[31] 2018 IRP Report at 55-56.
[32] 2018 IRP Report at 55-56.
[33] 2018 IRP Report at 58.

assumptions of each portfolio through the 20-year planning horizon.[34] The fifteen optimized portfolios included different combinations of renewables, battery storage, combustion turbines, and DSM programs based on specific planning assumptions;[35] and

WHEREAS, in particular, because DSM is recognized as an important demand-side resource, the five planning strategies enabled the evaluation of two separate DSM potential studies as inputs to the IRP process -- one DSM potential study from ENO and a separate DSM potential study authorized by the Council.[36] The parties agreed on separate assignments of DSM inputs from either study to each of the five Strategies analyzed in the IRP modeling, which was exhibited in the comparative results of the portfolios;[37]and

WHEREAS, ENO cautioned in the 2018 IRP Report regarding direct comparisons between optimized resource portfolios based on different DSM potential studies, writing, "[i]t is important to note that the total costs of Portfolios incorporating DSM inputs from the two different studies cannot be directly compared."[38] ENO's caution regarding comparative results between the two DSM potential studies was also extended to the IRP scorecard.[39] Since the IRP represents a principal DSM source to inform the implementation of Energy Smart DSM programs in the city over the next few years, the triennial DSM cost-benefit analysis and selection of DSM programs by the independent Energy Smart Third Party Administrator and Third Party Evaluator in turn represent valuable sources for IRP DSM inputs.[40] The 2018 IRP Report alluded to the increased complexity of the analysis with DSM inputs from two DSM potential studies, but it is necessary for the IRP process to include the range of energy and

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[34] Advisors' Report at 7.
[35] Advisors' Report at 7, 2018 IRP Report at 58, Table 16.
[36] Advisors' Report at 8.
[37] Advisors' Report at 8.
[38] 2018 IRP Report at 6.
[39] Advisors' Report at 8.
[40] Advisors' Report at 8.

demand reductions and associated costs represented by differing credible sources.[41] The Advisors note that the prospective three-year Energy Smart Implementation Plan is expected to include DSM program reductions and costs that differ from each of the two DSM potential studies used as IRP DSM inputs;[42] and

WHEREAS, each of the fifteen optimized portfolios represents the least cost portfolio that could be employed under the assumptions contained in the relevant Planning Scenario pursued under the relevant Planning Strategy.[43] When looking at the annual results of the IRP modeling, the Advisors note that based on current assumptions, the overall analysis shows that ENO will not have a need for new resources until 2033;[44] therefore, the Advisors note, the optimized portfolios produced are suggesting resources to be added in the 2033-2038 timeframe.[45] The Advisors state there will be several more triennial IRP plans performed between now and then that will further inform future planning before new resources are added.[46] Consequently, the Advisors suggest, the current 2018 IRP Report is best used to inform the near-term DSM goals, and specifically, the Energy Smart Program design to implement for the next set of program years.[47] Nevertheless, as the Advisors explain, there are a few key takeaways that can be gleaned from looking at the total range of long-term optimized resource portfolios produced;[48] and

[41] Advisors' Report at 8.
[42] Advisors' Report at 8.
[43] Advisors' Report at 7.
[44] Advisors' Report at 7, citing 2018 IRP Report at 5. The Advisors note that the 2018 IRP Report does assume that none of the current ENO resources would be retired or otherwise disposed of prior to the end of the life of the asset.
[45] Advisors' Report at 7. Advisors' Report at 7, fn. 22.
[46] Advisors' Report at 7.
[47] Advisors' Report at 7-8.
[48] Advisors' Report at 8.

WHEREAS, most notably, DSM plays a significant role in every portfolio, ranging from 159 to 278 MW, which indicates that continuing to invest in and grow DSM with the Energy Smart Program is desirable;[49] and

WHEREAS, additionally, the Advisors report that while the ideal amount of battery storage varied substantially across the scenarios, ranging from 20 MW to as much as 400 MW, fourteen of the fifteen optimized portfolios indicated that reasonable amounts of battery storage should be included in ENO's future resource portfolio;[50] and

WHEREAS, the Advisors further report that nine of the optimized portfolios included the addition of 346 MW of new natural gas capacity, but six did not include any new natural gas, while nine of the fifteen optimized portfolios included significant solar resources of at least 100 MW, ranging up to as much as 400 MW while six do not.[51] The Advisors note that four of the optimized portfolios include significant amounts of both solar and natural gas.[52] Based on recent trends, the Advisors anticipate that over the next few triennial IRP cycles, results are likely to show reliance on natural gas decreasing and reliance on solar increasing.[53] The Advisors conclude that the results of this IRP cycle, however, show that depending on which of the future planning scenarios come into being, there is potential for both solar and natural gas to continue to play significant resource roles in the future;[54] and

WHEREAS, AAE states that this IRP shows four potential pathways at a critical point in the city's history: between traditional energy models, based on utility-owned, centralized fossil-fueled power plants threaded together across distribution and transmission and an innovative

[49] Advisors' Report at 8.
[50] Advisors' Report at 8.
[51] Advisors' Report at 8.
[52] Advisors' Report at 8.
[53] Advisors' Report at 8.
[54] Advisors' Report at 8.

future that seeks to use energy more intelligently, reduce energy waste, and use renewable energy both distributed and utility-scale;[55] and

WHEREAS, the Advisors report that during a technical conference, the parties reviewed the initial set of fifteen optimized portfolios and agreed that a subset of five portfolios would be sufficiently representative to accomplish the planning objectives, since the remainder of the detailed supply cost analysis encompassed hourly production cost modeling, which would be onerous to analyze for all fifteen portfolios.[56] The Advisors also report that total supply costs for the initial set of 15 optimized portfolios were provided in the AURORA capacity expansion module which included a useable estimate of variable supply costs based on an annual hours and operating costs of resources compared to the more detailed hourly production cost modeling.[57] Comparative net present value ("NPV") revenue requirement results from the capacity expansion model were not provided for the fifteen optimized portfolios.[58] However, the Advisors state, the NPV revenue requirements for each of the subset five portfolios were developed for each of the three Planning Scenarios, exhibiting a revenue requirement range for the five subset portfolios;[59] and

WHEREAS, ENO states that the difference between the lowest total relevant supply costs of the five selected portfolios and the highest is relatively small;[60] and

WHEREAS, the Advisors note that a range of results was also provided for four of the five subset portfolios related to changes in the input assumptions of natural gas price and CO_2

[55] AAE Comments at 2.
[56] Advisors' Report at 8-9.
[57] Advisors' Report at 9.
[58] 2018 IRP Report at 58, Table 16.
[59] Advisors' Report at 9.
[60] 2018 IRP Report at 6.

price, as agreed upon by the parties, and these ranges of results helped to increase confidence in the IRP portfolios and their underlying assumptions;[61] and

WHEREAS, the 2018 IRP Report did include a scorecard, agreed upon by the parties, to assist the Council in assessing the IRP portfolios beyond the total supply cost metric.[62] The scorecard included several aspects of the Resource Portfolios, including social and environmental impacts, some of which could only be evaluated on a subjective basis.[63] ENO's 2018 IRP Report statements regarding the IRP scorecard were apprehensive, noting the difficulty inherent in trying to compare resource portfolios based on different assumptions and subjective characteristics.[64] Despite such apprehension, the Advisors found this first attempt to employ an IRP scorecard to be a valuable tool in comparing the various optimized resource portfolios;[65] and

WHEREAS, there was considerable discussion among the parties on the issue of how to evaluate existing resource retirements in the IRP planning process.[66] While existing resource retirement dates may be fixed for several reasons, the IRP planning process does represent an avenue to explore alternate possibilities related to resource retirement, including various economic based analyses.[67] It is the Advisors' understanding that AURORA's modeling capability provides for an economic analysis of retirement rather than fixed retirement dates as used in this IRP process.[68] IRP Rules Section 1.D states:

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

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[61] Advisors' Report at 9.
[62] Advisors' Report at 9.
[63] Advisors' Report at 9.
[64] Advisors' Report at 9.
[65] Advisors' Report at 9.
[66] Advisors' Report at 9.
[67] Advisors' Report at 9.
[68] Advisors' Report at 9.

WHEREAS, it is the Advisors' understanding of the IRP modeling capability that AURORA uses real levelized cost to provide an economic basis for decisions about new units and resource retirements. AURORA Capacity Expansion Long Term Optimization Logic enables Long-Term Optimization studies used to forecast capacity expansion resources and retirements.[69] The Advisors explain that future resources can be included in a resources table with pre-determined start dates.[70] Alternatively, a new resources table can be used in conjunction with long-term optimization logic to use market economics to select resource additions and retirements.[71] The Advisors explain that this optimization process simulates what happens in a competitive marketplace and produces a set of future resources that have the most value in the marketplace, and AURORA modeling can assume that new generators will be built (and existing generators retired) based on economics;[72] and

WHEREAS, the Advisors find that the 2018 IRP Report did present an acceptable summary of ENO's ongoing efforts related to the current status towards optimizing distributed energy resources on the distribution grid, including the current implementation of AMI and several associated software systems, the ongoing progress of grid modernization projects, and the implementation of the LoadSEER application to enable bottom-up capacity analyses at distribution feeders.[73] Similar to previous IRP reports, the 2018 IRP Report summarized the long-term hourly load forecast, and estimated load shapes for each customer class.[74] The forecasted energy, the forecasted peaks, and the forecasted customer class hourly profiles are calibrated together and typical load shapes for incremental solar and electric vehicle

[69] Advisors' Report at 9.
[70] Advisors' Report at 9.
[71] Advisors' Report at 9.
[72] Advisors' Report at 9.
[73] Advisors' Report at 10.
[74] Advisors' Report at 10.

consumption are used to allocate reduced or increased consumption to the appropriate hour of use.[75] However, future IRP final reports should include more detail regarding how specific various distributed energy resources impact the load forecast, with potential ranges of projected estimates;[76] and

Comments of the Parties on the 2018 IRP Report

WHEREAS, while many of the parties were active participants in the technical meetings and public hearings, AAE was the only party to file written comments regarding the 2018 IRP Report. AAE praised the report, writing that "[t]his IRP represents a significant step forward in modern energy planning and stakeholder engagement for New Orleans" and that the AAE "is encouraged to see the outcome."[77] AAE commented that the 2018 IRP Report is best used at this time to inform the upcoming years of Energy Smart programming.[78] AAE noted that while the two DSM Potential Studies project substantially different achievable energy efficiency potentials, they both outline opportunities to significantly increase efficiency and reduce peak demand.[79] AAE stated that just as ENO argues that Optimal's assumptions may have been more aggressive than Navigant's, the Council should consider that Navigant's assumptions may have been too conservative since they were based on past performance of the Energy Smart program in years where ENO was not required to achieve all cost-effective energy efficiency;[80] and

WHEREAS, AAE had difficulty understanding why none of the modeled portfolios achieve the full DSM potential identified in either potential study.[81] AAE requested that ENO provide tables, similar to Table 27 of the February 2, 2016 IRP report that show the annual

[75] Advisors' Report at 10.
[76] Advisors' Report at 10.
[77] AAE Comments at 1.
[78] AAE Comments at 2.
[79] AAE Comments at 3.
[80] AAE Comments at 3-4.
[81] AAE Comments at 4.

incremental addition of capacity for each of the four portfolios.[82] AAE also stated that more information is needed regarding the expected total MWh energy savings associated with the different programs that comprise each of the portfolios.[83] AAE requested information regarding the extent to which ENO expects to rely on behavioral programs to achieve the savings levels it includes in different portfolios.[84] AAE stated that ENO's omission of any discussion of Conservation Voltage Reduction measures is a significant omission that should be explained;[85] and

WHEREAS, AAE stated that more information is needed from ENO on the expectation of retirements associated with affiliate PPAs, and how these plant retirements impact the energy mix in terms of time, cost, and resource replacement.[86] AAE recommended that ENO plan to file Entergy Louisiana's Legacy Economic Study with the Council when the study is filed with the Louisiana Public Service Commission.[87] AAE objected that the 2018 IRP Report shows only information related to incremental additions to ENO's current resources, rather than allowing potentially lower-cost resources to compete and replace inefficient and uneconomic power.[88] AAE also argued that the resources allowed to compete are assumed to be investments by ENO, as opposed to contracted or acquired in other ways, and it may be far more cost-effective for ENO to contract with an unaffiliated third-party for resources than for ENO to build, own, and operate them;[89] and

WHEREAS, AAE referenced ongoing negotiations between ENO and S&WB regarding the electrification of the S&WB's drainage and water purification system, and noted that the

[82] AAE Comments at 4-5.
[83] AAE Comments at 5.
[84] AAE Comments at 5.
[85] AAE Comments at 5-6.
[86] AAE Comments at 6.
[87] AAE Comments at 7.
[88] AAE Comments at 7.
[89] AAE Comments at 7.

impact of additional load replacing S&WB's current self-generation would represent a significant change in New Orleans' energy system and load shape;[90] and

WHEREAS, AAE supported ENO's efforts to optimize distributed resources and modernize the distribution grid, including leveraging the value of the features inherent in Advanced Metering Infrastructure.[91] AAE noted that none of the portfolios included in the 2018 IRP Report include as many renewables as parties are proposing in the Renewable Portfolio Standards ("RPS") docket (UD-19-01).[92] AAE stated that ENO's proposed acquisition of 150 MW of renewables in the RPS docket would likely supplant existing resources, but existing resources are "baked in" to the IRP analysis and therefore it is difficult to use it to inform the Council's decision in the RPS docket.[93] AAE claimed that the best information to be gleaned from the IRP report is that optimized demand, plus renewable, efficient resources, all supported by backup storage would be the most cost effective new choices going forward;[94] and

WHEREAS, ENO submitted comments responsive to the AAE's comments, but reserved any comment on issues related to the Energy Smart Implementation Plan for when it was filed later 2019.[95] ENO notes that the 2018 IRP cycle has been the most collaboratively conducted IRP to date.[96] ENO states that in particular, the requirement in the new IRP Rules that parties work to achieve consensus on and "lock down" certain inputs and assumptions by specific dates in the process prior to conducting the modeling greatly improved the efficiency of

[90] AAE Comments at 7.
[91] AAE Comments at 8.
[92] AAE Comments at 9.
[93] AAE Comments at 9.
[94] AAE Comments at 9.
[95] ENO Reply Comments at 1.
[96] ENO Reply Comments at 2.

the process and has, evidently, significantly narrowed the number of issues about which the parties have outstanding concerns as related to the 2018 IRP Report;[97] and

WHEREAS, ENO argues that AAE's complaint that the IRP does not consider accelerated resource deactivations of existing units by "allowing potentially lower-cost resources to compete and replace inefficient and uneconomic power" was previously addressed in the rulemaking and Technical Meeting process adopted by the Council.[98] ENO argues that AAE provided no evidence to substantiate its assertions that the Grand Gulf Nuclear Station ("Grand Gulf") or any other resource is "uneconomic;"[99] and

WHEREAS, ENO argues that the parties clearly explained to AAE in Technical Meeting 2 that such analyses (i) were purposefully and intentionally rejected from inclusion in the Council's IRP Rules, (ii) would be beyond the scope of and increase cost and time associated with, the IRP, (iii) could not be accommodated by modeling constraints and timelines, and (iv) would ultimately not provide relevant information to the Council to inform its decision making process;[100] and

WHEREAS, ENO notes that various PPAs, tariffs, and rates associated with Grand Gulf and other resources are within the exclusive jurisdiction of the Federal Energy Regulatory Commission ("FERC").[101] ENO argues that therefore, because the Council cannot order the termination of agreements and rates approved by FERC, such analysis would not inform and empower effective Council decision-making;[102] and

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[97] ENO Comments at 2.
[98] ENO Comments at 2-3, citing Resolution No. R-17-429 at 26.
[99] ENO Comments at 3.
[100] ENO Reply Comments at 3.
[101] ENO Reply Comments at 3.
[102] ENO Reply Comments at 3.

WHEREAS, as to AAE's criticism of the Navigant DSM Potential Study, ENO argues that AAE has misunderstood Navigant's methodology.[103] ENO also explains that Navigant did not consider CVR in its study because it is a grid-level measure, not a program that incents participating customers to increase energy efficiency at a particular service location;[104] and

WHEREAS, ENO also provided several exhibits to its Reply Comments in response to AAE's request for additional information, including a table of the annual MW reductions to peak and annual program costs associated with all DSM programs selected in the five optimized portfolios, the annual MWh reduction attributed to the energy efficiency programs included in the optimized portfolios, and the Load and Capability assumed in ENO's Business Plan 2019 used as the basis for the 2018 IRP inputs, noting that the overall peak reductions in the portfolios are lower than the total potential identified in the cases in the two studies because the AURORA model selects the DSM programs at the ENO peak hour which in some cases reflect less savings than the total potential identified generally in the studies;[105] and

Advisor Recommendations Regarding the 2018 IRP and Future IRP Processes

WHEREAS, the Advisors believe that the 2018 IRP does provide a credible planning perspective to consider options for meeting forecasted utility electrical energy and demand over the 20-year planning period, assuming a range of expected market conditions in MISO.[106] Contrary to previous IRPs, which offered a "preferred portfolio," the revised IRP Rules and resulting 2018 IRP Report represents the first attempt to provide a useful planning tool for the Council to assist in evaluating future resource options;[107] and

[103] ENO Reply Comments at 4.
[104] ENO Reply Comments at 4.
[105] ENO Reply Comments at 4-5.
[106] Advisors' Report at 5.
[107] Advisors' Report at 5.

WHEREAS, the Advisors agree with the parties' assessment that this first IRP cycle under the new IRP Rules resulted in a more collaborative and efficient process with a less contentious result than prior IRP cycles under previous rules.[108] The Advisors also agree that while the 2018 IRP Report provides interesting insight into long-term resource planning, the most immediate application of the 2018 IRP Report should be in informing the Implementation Plan for Energy Smart Program Years 10-12, which was filed by ENO on December 9, 2019;[109] and

WHEREAS, further, while the Advisors do recognize that with respect to certain resources, the FERC, and not the Council, has the jurisdiction to determine the extent to which ENO can terminate its commitments and obligations, the Advisors believe it would be informative to the Council to see the results of AURORA's analysis as to when it would be economic to retire ENO's various existing resources rather than programming in a specific retirement date for each resource;[110] and

WHEREAS, finally, the Advisors note that there are various outstanding proceedings, such as the RPS Docket (UD-19-01) and the Smart Cities docket (UD-18-01) that may impact resource choices and should inform future triennial IRP cycles.[111] The IRP plan completed in this triennial cycle was initiated, and many steps in the IRP process were completed before these dockets began to take shape.[112] The Advisors argue, therefore, that while this 2018 IRP Report for 2018 may have points of interest worthy of discussion in such dockets, approval by the

[108] Advisors' Report at 12.
[109] Advisors' Report at 12.
[110] Advisors' Report at 12.
[111] Advisors' Report at 12.
[112] Advisors' Report at 12-13.

Council of this 2018 IRP Report should not be considered to have a precedential effect in any other ongoing docket;[113] and

WHEREAS, while the Advisors find that the 2018 IRP result is in compliance with the Council's requirements and should be approved subject to certain caveats, as discussed herein, the Advisors do recommend a few changes that can be implemented in the Initiating Resolution for the next IRP cycle that we believe would improve the resulting analyses;[114] and

WHEREAS, first, the Advisors recommend that it would be helpful for ENO to provide the parties with an estimate of the annual DSM costs for each portfolio modeled;[115] and

WHEREAS, second, the Advisors recommend that to the extent that the Council determines that it will use its own independent expert to produce a DSM Potential Study in the next IRP cycle, it would be helpful if the Council provided guidance to ENO and the independent consultant as to how to make resource portfolios produced using inputs from different studies more directly comparable;[116] and

WHEREAS, third, the Advisors state that the most recent DSM planning tool of the Energy Smart Third Party Administrator and Third Party Evaluator related to specific DSM measures' metrics and costs, as well as the most recent results of the program years implementation plan should also be considered among the DSM inputs to the various planning strategies;[117] and

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[113] Advisors' Report at 13.
[114] Advisors' Report at 13.
[115] Advisors' Report at 13.
[116] Advisors' Report at 13.
[117] Advisors' Report at 13.

WHEREAS, fourth, the Advisors recommend that the initial total supply costs from the Aurora capacity expansion module for all optimized portfolios related to the planning scenarios and planning strategies should be provided with supporting detail;[118] and

WHEREAS, fifth, the Advisors recommend future IRP final reports include more detail regarding how specific various distributed energy resources impact the load forecast, with potential ranges of projected estimates;[119] and

WHEREAS, sixth, the Advisors recommend that planning strategies include specific information reflecting Council policy contained in the RPS docket, Smart Cities docket, and other dockets related to the planning of future resources;[120] and

WHEREAS, seventh, the Advisors recommend that the qualitative analysis and subjective aspects of the IRP scorecard should be improved and updated to make the scorecard a more useful portfolio evaluation tool;[121] and

WHEREAS, finally, the Advisors recommend that ENO be directed to utilize AURORA's modeling capability for an economic analysis of retirement dates for ENO's existing assets rather than utilizing fixed retirement dates;[122] and

WHEREAS, the Council recognizes that other parties have not had opportunity to comment on the Advisors' suggestions for future IRP proceedings; and

WHEREAS, the Advisors find that ENO's 2018 IRP Action Plan appears reasonable.[123] The Advisors recommend that the Council approve the plan subject to the following caveats: (1) consistent with Section 1.D of the IRP Rules, approval of the plan does not constitute Council

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[118] Advisors' Report at 13.
[119] Advisors' Report at 13.
[120] Advisors' Report at 13.
[121] Advisors' Report at 13.
[122] Advisors' Report at 13.
[123] Advisors' Report at 5, 13.

approval of any specific future resource acquisition, any such acquisition must still be submitted for Council approval consistent with the Council's rules and regulations; (2) Council approval of the IRP does not preclude the Council from considering and/or ordering further actions by ENO relative to resource planning and acquisition, in particular, approval of the 2018 IRP shall have no precedential impact upon the Council's considerations in the RPS rulemaking docket (UD-19-01), the Smart Cities docket (UD-18-01) or any other future docket;[124] and

WHEREAS, the Council notes that ENO included in its 2018 IRP Report a 2018 IRP Action Plan, which consists of action items that have either all already been approved by the Council in a separate docket, will be addressed by the Council in a separate docket, or do not require Council approval.[125] The Council finds that the 2018 IRP Action Plan is reasonable, but notes that the separately listed dockets in the 2018 IRP Action Plan are the appropriate proceedings to consider the merits of the various individual action items in the 2018 IRP Action Plan and the Council's approval of this 2018 IRP Report and the 2018 IRP Action Plan contained therein shall neither alter any Council determinations already made in such dockets, nor have precedential effect upon future decisions of the Council in such dockets; and

WHEREAS, for the foregoing reasons and as explained herein; **NOW THEREFORE BE IT RESOLVED BY THE COUNCIL OF THE CITY OF NEW ORLEANS THAT:**

1. The 2018 IRP is accepted as in compliance with the substantive and procedural requirements of the Council's IRP Rules and its Initiating Resolution, as modified by the March 26 Order.
2. The 2018 IRP is approved, noting that approval of the 2018 IRP does not constitute approval of any specific future resource acquisition. Any such future resource acquisition must still be submitted for Council approval consistent with the Council's rules and regulations. Council approval of this 2018 IRP Report does not preclude the Council from considering and/or ordering further actions by ENO relative to resource planning and acquisition, and, in

[124] Advisors' Report at 13.
[125] 2018 IRP Report at 71.

particular, approval of this 2018 IRP shall have no precedential impact upon the Council's considerations in the RPS rulemaking docket (UD-19-01), the Smart Cities docket (UD-18-01), any of the dockets listed in the 2018 IRP Action Plan, or any other future docket.

3. Parties who wish to comment on the recommendations made by the Advisors for future IRP proceedings may file such comments within 30 days, and the Council will take such comments into consideration along with the Advisors' recommendations when issuing its Initial Resolution for the next IRP cycle.

THE FOREGOING RESOLUTION WAS READ IN FULL, THE ROLL WAS CALLED ON THE ADOPTION THEREOF, AND RESULTED AS FOLLOWS:

YEAS: Banks, Brossett, Giarrusso, Moreno, Nguyen, Williams - 6

NAYS: 0

ABSENT: Gisleson Palmer - 1

AND THE RESOLUTION WAS ADOPTED.

THE FOREGOING IS CERTIFIED
TO BE A TRUE AND CORRECT COPY
Lora W. Johnson
CLERK OF COUNCIL