RESOLUTION

NO. R-22-369

CITY HALL: August 18, 2022

BY: COUNCILMEMBERS MORENO, MORRELL, GIARRUSSO, HARRIS, KING, GREEN AND THOMAS

IN RE: 2021 TRIENNIAL INTEGRATED RESOURCE PLAN OF ENTERGY NEW ORLEANS, LLC

RESOLUTION AND ORDER ACCEPTING AND APPROVING ENTERGY NEW ORLEANS, LLC'S 2021 TRIENNIAL INTEGRATED RESOURCE PLAN

DOCKET NO. UD-20-02

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; 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 making all necessary rules and regulations governing the terms and conditions of service, and to govern applications for the fixing and changing of rates and charges of public utilities; and

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

Background

WHEREAS, the Council has required utilities subject to its jurisdiction to complete an Integrated Resource Plan ("IRP") under rules set forth by the Council since 2008; 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, 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

WHEREAS, in Resolution 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 demandside 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 system 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 for the 2021 IRP, Resolution R-20-257 on August 20, 2020, which established a procedural schedule

² IRP Rules at Section 3.A.

for the 2021 IRP in new docket UD-20-02, and set forth certain policy objectives, as well as addressing other procedural matters;³ and

WHEREAS, subsequent to the issuance of the Initiating Resolution, the Council decided to retain GDS Associates, Inc. to perform an independent DSM Potential Study on behalf of the Council to assess the potential to reduce energy demand in the city through demand management measures;⁴ and

WHEREAS, interventions in the proceeding were filed by the Alliance for Affordable Energy ("AAE"),⁵ Air Products and Chemicals, Inc. ("Air Products"),⁶ the Southern Renewable Energy Association,⁷ Sustainable Energy Economy Solutions,⁸ 350 New Orleans,⁹ Gulf States Renewable Energy Industries Association,¹⁰ and the National Audubon Society.¹¹ The Sierra Club participated as an Interested Party; and

WHEREAS, over the course of the proceeding, ENO held five technical meetings with the Advisors and Intervenors to discuss the details of the IRP analysis and get feedback from stakeholders on various components of the analysis, including a technical meeting to discuss the Energy Smart Implementation Plan. ENO also held three public meetings regarding the

³ The procedural schedule set forth in Resolution No. R-20-257 was amended in Resolution No. R-21-73 and later modified by the April 7 Order of the Hearing Officer ("April 7 Order") the term "Initiating Resolution" used herein refers to R-20-257, as modified by Resolution R-21-73 and the April 7 Order.

⁴ See Motion M-20-269 adopted Aug. 20, 2020 and Motion M-21-34 adopted Jan. 28, 2021.

⁵ Alliance for Affordable Energy, *Petition for Intervention and Inclusion on Service List*, Docket No. UD-20-02, (Aug. 21, 2020).

⁶ Air Products and Chemicals Inc., *Motion for Intervention and Inclusion on Service List*, Docket No. UD-20-02, (Sept. 3, 2020).

⁷ Southern Renewable Energy Association, *Petition for Intervention and Inclusion on Service List*, Docket No. UD-20-02, (Sept. 29, 2020).

⁸ Sustainable Energy Economy Solutions, *Petition for Intervention and Inclusion on Service List*, Docket No. UD-20-02, (Oct. 14, 2020)

States Renewable Energy Industry Association, Petition of Intervention and Inclusion on Service List, Docket No. UD-20-02, (Nov. 2, 2020).
 Gulf States Renewable Energy Industry Association, Petition of Intervention and Inclusion on Service List, Docket No. UD-20-02, (Nov. 2, 2020).

¹¹ National Audubon Society, *Petition to Intervene Out of Time and for Inclusion on Service List*, Docket No. UD-20-02, (Nov. 10, 2020).

development of the IRP and the IRP report to assist in informing the public of the IRP and obtaining public comment on it; and

WHEREAS, ENO submitted its IRP to the Council on March 25, 2022 ("Final 2021 IRP"). AAE filed comments on the Final 2021 IRP with the Council while 350 New Orleans circulated comments via email to the Service List. ENO filed responsive comments on June 7, 2022, and the Advisors submitted their Advisors' Report on July 12, 2022; and

Final 2021 IRP Compliance with the Council's Requirements

WHEREAS, under Section 10.E of the IRP Rules, if the IRP fulfills the requirements of the IRP Rules and is developed in compliance with the procedural schedule, it is in compliance with the Council's substantive and procedural requirements; and

WHEREAS, the IRP Rules and Initiating Resolution set forth specific procedural requirements and a specific procedural schedule. The Advisors' Report included the table below indicating whether each requirement of the IRP Rules and Initiating Resolution had been met;¹⁷ and

IRP Rules Requirement (IRP Rules Section 9 and Initiating Resolution as modified by R-21-73 and April 7 Order)	Action(s) Taken	Whether Requirement Was Met
Initial public meeting (kickoff and educational meeting) no later than October 16, 2020	Meeting held October 14, 2020	Yes
Technical Meeting 1 of the parties between November 30, 2020 and	Meeting held December 9, 2020	Yes

¹² Entergy New Orleans, LLC, 2021 Integrated Resource Plan, Docket No. UD-20-02, (March 25, 2022)

¹³ Alliance for Affordable Energy, Comments of the Alliance for Affordable Energy, UD-20-02 (May 9, 2022) ("Alliance Comments").

¹⁴ See, May 10, 2022 email from Marion Freistadt to the Service List in UD-20-02 conveying comments ("350 New Orleans Comments").

¹⁵ Entergy New Orleans, LLC, Entergy New Orleans, LLC's Reply Comments, UD-20-02 (June 7, 2022) ("ENO Reply Comments").

¹⁶ Advisors' Report Regarding the Entergy New Orleans, LLC 2021 Integrated Resource Plan, UD-20-02 (July 12, 2022) ("Advisors' Report").

¹⁷ Advisors' Report at 7-8.

December 11, 2020 (discussion of Planning Scenarios and Strategies)		
Completion of DSM Potential Studies by July 30, 2021	DSM Input Stakeholder Meeting held March 26, 2021; Filed July 30, 2021	Yes
Technical Meeting 2 of the parties (to confirm Scenarios and Strategies), between April 26 and April 30, 2021	Meeting held April 29, 2021 (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 Aug. 9 and 13, 2021	Meeting held Aug. 12, 2021	Yes
Finalization of all IRP inputs, Aug. 15, 2021	Agreement among parties reached at Technical Meeting 3, Aug. 12, 2021	Yes
Completion of all optimized portfolio development and results, December 21, 2021	Completed on time, circulated to parties December 20, 2021, in advance of Technical Meeting 4	Yes
Technical Meeting 4 of the parties (to review the optimized portfolios and finalize scorecard metrics) between Jan. 5 and Jan. 20, 2022	Meeting held Jan. 20, 2022	Yes
2021 IRP Final Report filed March 25, 2022	Filed March 25, 2022	Yes
Second Public Meeting (present IRP Report) between Apr. 8 and Apr. 15, 2022	Meeting held Apr. 13, 2022	Yes
Third Public Meeting (to receive public comment on IRP Report) between Aug. 29 and May 6, 2022	Meeting held May 3, 2022	Yes
Technical Meeting 5 of the parties (to discuss Energy Smart Implementation Plan) between Apr. 29 and May 6, 2022	Meeting held May 3, 2022	Yes
Intervenor Comments filed May 9, 2022	Comments filed May 9, 2022	Yes
ENO Reply Comments filed June 7, 2022	Comments filed June 7, 2022	Yes

WHEREAS, the Advisors concluded that ENO did meet the procedural requirements of the IRP Rules and the Initiating Resolution, ¹⁸ and no party has alleged that ENO had failed to meet the procedural requirements; and

WHEREAS, the Council finds that ENO has met the procedural requirements of the IRP Rules and Initiating Resolution; and

¹⁸ Advisors Report at 8.

WHEREAS, the IRP Rules and Initiating Resolution set forth numerous substantive requirements for the IRP analysis and Report; and

WHEREAS, the IRP Rules require the Utility to include a reference Planning Scenario that represents the Utility's point of view on the most likely future circumstances as well as two alternative Planning Scenarios that account for alternative circumstances. ¹⁹ The IRP Rules require the Utility to seek to develop a position agreed to by the Utility, Advisors and a majority of the Intervenors regarding assumptions surrounding each of the Planning Scenarios and that if such consensus is not reasonably attainable, the Utility shall model a fourth Planning Scenario based upon input agreed to by a majority of the Intervenors. ²⁰ In this IRP Proceeding, the parties reached consensus that three Scenarios would sufficiently capture the range of reasonably likely possible futures, and a separate stakeholder Scenario was not necessary; ²¹ and

WHEREAS, the Council finds that the three Scenarios modeled sufficiently capture the range of reasonably likely possible futures; and

WHEREAS, the IRP Rules then require that the utility develop two to four Planning Strategies which constrain the resource portfolios optimization process to achieve particular goals, regulatory policies and/or business decisions over which the Council, the Utility, or stakeholders have control.²² The IRP Rules require a Planning Strategy that allows the optimization to identify the lowest cost option for meeting the needs identified in the IRP process, a reference Planning Strategy agreed to by the Utility, Advisors and a majority of the Intervenors, and alternate Planning Strategies that reflect known utility regulatory goals of the Council.²³ The IRP Rules require that

¹⁹ IRP Rules at Section 7.C.1.

²⁰ IRP Rules at Section 7.C.2.

²¹ Advisors' Report at

²² IRP Rules at Section 7.D.

²³ IRP Rules at Sections 7.D.1-7.D.3.

if the Utility, Advisors and a majority of the Intervenors do not agree to a single Reference Planning Strategy, the Utility shall model a separate Stakeholder Planning Strategy based upon input determined by a majority of the Intervenors;²⁴ and

WHEREAS, in this IRP proceeding the parties agreed to four Planning Strategies: Strategy 1, the least cost planning strategy; Strategy 2, the reference strategy (a "but-for" Renewable Clean Portfolio Standard ("RCPS") strategy); Strategy 3, an RCPS compliance strategy; and Strategy 4, the Stakeholder Planning Strategy;²⁵ and

WHEREAS, while ENO did model a Stakeholder Planning Strategy (Strategy 4), that Strategy did not fully adhere to the instructions provided by the stakeholders. In Technical Meeting 3, the stakeholders requested that to build the stakeholder Planning Strategy ENO should use Strategy 3 as a base, but make two changes – use the NREL 2020 ATB²⁶ LCOE values for the renewable resources and use the GDS High Case for the DSM Inputs. However, in addition to making these changes, ENO did not include batteries in the input data set as a resource for the stakeholder Planning Strategy. The Advisors believe that this resulted in an incomplete input data set, and the stakeholders also expressed concern over this decision in Technical Meeting 4. ENO explained that it excluded batteries because the capacity expansion modeling was conducted using the inputs provided, and the Intervenors only provided alternative renewables inputs for solar and wind resources and did not include values for battery storage;²⁷ and

WHEREAS, the parties discussed the failure to include battery storage in the Strategy 4 in that Technical Meeting, and although 350 New Orleans argues in its comments that the failure

²⁴ IRP Rules at Section 7.D.2.

²⁵ Final 2021 IRP at 58-59.

²⁶ NREL's Annual Technology Baseline using levelized costs of energy provides a consistent set of technology cost and performance data for energy analysis.

²⁷ ENO Reply Comments at 1.

was not corrected and should be corrected, including potentially re-running models,²⁸ the Advisors report that in Technical Meeting 4 the majority of the Intervenors preferred that ENO model Manual Portfolios 1a, 3a, and 4a and Sensitivity 4b rather than requiring ENO to re-run the Strategy 4 modeling, which ENO did;²⁹ and

WHEREAS, while there were issues with ENO's modeling of the Stakeholder Strategy (Strategy 4), the Council finds that the additional modeling performed at the request of the Stakeholders satisfied that the Planning Strategy modeling component of the IRP content requirements has been met; and

WHEREAS, as is required in the IRP Rules,³⁰ ENO included as Appendix A to its Final 2021 IRP a Rules Compliance Matrix setting forth each requirement of the IRP Rules and Initiating Resolution, and explaining how ENO met each requirement,³¹ which the Council's Advisors have verified;³² and no party has challenged; and

WHEREAS, the Council finds that the Final 2021 IRP meets the content requirements of the IRP Rules and Initiating Resolution; and

Whether or Not the Final 2021 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.

²⁸ 350 New Orleans Comments.

²⁹ Advisors' Report at 9.

³⁰ IRP Rules Section 1.

³¹ Final 2021 IRP at Appendix A.

³² Advisors' Report at 8.

WHEREAS, having determined that the Final 2021 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 2021 IRP; and

WHEREAS, as ENO describes in detail in the Final 2021 IRP, ENO, the Advisors and the Intervenors agreed on three Planning Scenarios representing a range of market drivers and possible futures, and came to consensus on four Planning Strategies (one of which included a sensitivity analysis) that informed or constrained the optimized portfolio development process consistent with defined objectives or policies. ³³ Then, using the AURORA Capacity Expansion Model ("AURORA"), ³⁴ twelve optimized portfolios were developed based on a combination of each Planning Scenario and each Planning Strategy. ³⁵ Additionally, three manual portfolios were developed under Strategies 1, 3 and 4; ³⁶ and

WHEREAS, the three Planning Scenarios were agreed to by the parties for inclusion in the IRP.³⁷ Planning Scenario 1 was the reference case (*i.e.* continuation of the status quo) defined by reference load growth and gas prices, DSM additions and CO₂ reductions targets.³⁸ Scenario 2 was the Decentralized Focus Scenario (aggressive deployment of DERs and DSM), defined by low load growth and gas prices, high DSM additions, and moderately accelerated coal and legacy gas retirements.³⁹ Scenario 3 was the Stakeholder Focus (defined by the Intervenors), characterized by high load growth, gas prices, and DSM additions, as well as lower renewables

³³ Final 2021 IRP at 56.

³⁴ AURORA is forecasting and analysis software commonly used in the electricity industry for planning purposes.

³⁵ Final 2021 IRP at 56.

³⁶ Final 2021 IRP at 56.

³⁷ Final 2021 IRP at 56. The Council notes that the purpose of the three Scenarios is not to predict the future with precision, rather the purpose is to ensure that the IRP considers the full range of reasonably possible future outcomes so that the analysis can give an indication of what resources are likely to be the most economic resources in multiple possible future scenarios.

³⁸ Final 2021 IRP at 57.

³⁹ Final 2021 IRP at 57.

costs sourced from the NREL 2020 ATB instead of the Entergy Technology Assessment and stringent carbon mandates that drive much earlier retirement of non-ENO coal and legacy gas plants;⁴⁰ and

WHEREAS, the Planning Strategies were developed to support a range of potential planning objectives, Council policies, and clean energy priorities. Strategy 1 was the least cost planning strategy and elected demand and supply-side alternatives based solely on need and cost. Modeling this Strategy allows the Council to understand the impacts of Council policies on long-term planning. Strategy 2 was the "But for RCPS" Strategy and was intended to represent the resource plan that would comply with regulatory policies in New Orleans that existed before the Council's adoption of the RCPS. Modeling this strategy as an RCPS cost baseline allows the Council to determine the cost of RCPS compliance. Strategy 3 was designed to meet the requirements of the Council's RCPS policy and 2% DSM savings goal, and it excludes any resources that would not be compliant with the RCPS, such as fossil-fueled resources. Strategy 4 is the Stakeholder Strategy defined by the Intervenors, which uses lower renewables costs and forces the selection of all energy efficiency and demand response programs; A5 and

WHEREAS, the three Planning Scenarios and four Planning Strategies resulted in twelve different optimized portfolios, each of which reflects the least cost portfolio of resources under its particular combination of Planning Scenario and Planning Strategy, set forth in Figure 41 of the Final 2021 IRP; and⁴⁶

⁴⁰ Final 2021 IRP at 57.

⁴¹ Final 2021 IRP at 57.

⁴² Final 2021 IRP at 58.

⁴³ Final 2021 IRP at 59.

⁴⁴ Final 2021 IRP at 59.

⁴⁵ Final 2021 IRP at 59.

⁴⁶ Final 2021 IRP at 65.

WHEREAS, the Council observes that this is the first IRP analysis that has shown no new fossil-fueled resources being added to ENO's resource portfolio, even under the unconstrained least-cost planning strategy; and

WHEREAS, the Council also observes that battery storage resources appear in every optimized portfolio from which they were not specifically excluded in the modeling parameters. The IRP analysis also shows that excluding batteries results in the need to acquire significantly greater amounts of renewable capacity;⁴⁷ and

WHEREAS, this IRP result gives a strong indication that as the need for new capacity arises, it is most likely that under most of the currently anticipated possible future conditions, it would benefit New Orleans ratepayers for the utility to acquire some combination of solar and battery utility-scale resources and, under some conditions, wind resources; and

WHEREAS, DSM plays a significant role in every portfolio, ranging from 281 to 545 MW by 2041, which supports continued growth and expansion of the Energy Smart program.⁴⁸ The aggregate effects of ENO-sponsored DER, as well as customer-owned solar installations are included in the load forecast as a reduction in ENO's load;⁴⁹ and

WHEREAS, as a result of stakeholder discussions, ENO developed three additional manual portfolios to further analyze two issues: (1) the impact of deactivating Union Power Block 1 ("Union") in 2025 rather than its estimated retirement date of 2033, and (2) the impact of acquiring smaller amounts renewable capacity before the retirement of Union in 2033 in order to comply with the RCPS annual requirements solely through capacity additions; and

⁴⁷ Advisors Report at 17.

⁴⁸ Advisors' Report at 17.

⁴⁹ Advisors' Report at 12.

WHEREAS, Manual Portfolio 1a was identical to the Optimized Portfolio created under Scenario 1 and Strategy 1 (Reference Scenario and Least Cost Planning Strategy), except that it assumed Union retired in 2025 rather than 2033.⁵⁰ The same portfolio of resources was acquired, but those resources were acquired on an accelerated basis;⁵¹ and

WHEREAS, similarly, Manual Portfolio 4a was the same portfolio of resources as the Optimized Portfolio created under Scenario 3, Strategy 4 (the stakeholder Scenario and Strategy), except that it assumed Union was retired in 2025 rather than 2033 with the same portfolio of resources being acquired on an accelerated basis;⁵² and

WHEREAS, Manual Portfolio 3a reflected the same portfolio of resources as the Optimized Portfolio created under Scenario 1, Strategy 3 (reference Scenario, RCPS Compliance Strategy), but instead of only acquiring renewable resources as they are needed, Manual Portfolio 3a kept Union operating until 2033 but began adding new renewable resources in 2024 in the amounts that would be needed for RCPS compliance (assuming that ENO did not use unbundled RECs for compliance);⁵³ and

WHEREAS, the Advisors explain that, notwithstanding the development of "manual-selected" portfolios, AURORA's capacity expansion algorithm does not select supply side resources for portfolios unless there is an ENO capacity need.⁵⁴ The Advisors recommend that the Council consider requiring the early retirements of existing resources to be simultaneously considered in optimizing an energy-based model solution, and adjust the IRP procedural schedule as necessary to accommodate this analysis;⁵⁵ and

⁵⁰ Final 2021 IRP at 66.

⁵¹ Final 2021 IRP at 66.

⁵² Final 2021 IRP at 68.

⁵³ Final 2021 IRP at 67.

⁵⁴ Advisors' Report at 20.

⁵⁵ Advisors' Report at 20.

WHEREAS, ENO argued that the process to optimize Union deactivation dates could not be accommodated within the 2021 IRP schedule because of the time required to perform the analysis, ⁵⁶ and no analysis was performed on the merits of retiring Union in any of the years between 2025 and 2033. ⁵⁷ While the Advisors agreed with ENO that the results of the Total Relevant Supply Cost ("TRSC") analysis of the Scenario 1, Strategy 1 portfolio compared to that of Manual Portfolio 1a demonstrated that it is more beneficial to customers for ENO to operate Union until 2033 than to retire it in 2025, the Advisors note that the difference in modeled TRSC was relatively minor and that future developments could still cause an IRP analysis to show it to be beneficial to customers to retire Union some time before 2033. ⁵⁸⁵⁹ The Advisors recommend that the Council require ENO to continue to evaluate the possible retirement of Union prior to 2033 in future IRP proceedings; ⁶⁰ and

WHEREAS, the Council directed ENO to include in the measures to be evaluated in the study a customer DER program whereby customers would receive an incentive to install energy storage facilities on their property controlled by the utility such that the utility could direct when the storage units dispatch stored electricity onto the distribution grid.⁶¹ Both DSM Potential Study Consultants modeled such a program where ENO shared in the cost of installing the battery storage and provided customers with a \$/kW basis for dispatched kW capacity, and both DSM consultants found that such a program would not be cost effective.⁶² The Advisors, however, argue that

⁵⁶ Advisors' Report at 21, citing ENO response to CNO 2-1.

⁵⁷ Advisors' Report at 22.

⁵⁸ Advisors' Report at 22.

⁵⁹ Section 10.F of the IRP Rules state that the Council's approval 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. IRP results related to Union PB1 deactivation would have to be confirmed through the development of a detailed retirement study.

⁶⁰ Advisors' Report at 22.

⁶¹ R-20-157 at Directive 9.

⁶² Advisors' Report at 23, citing City Council of New Orleans 2021 DSM Potential Study, prepared by GDS Associates, Section 3.2.4.

applying the current tariffs, which are not time-differentiated, in this analysis did not reflect the time-differentiated nature of the costs related to the battery storage program and could have significantly changed the cost-benefit analysis.⁶³ The Advisors recommend that any DSM DER measure involving storage should be evaluated with rates that reflect time-differentiated periods of high and low energy costs, and that the battery storage program be modeled again in the DSM Potential Study of the next IRP proceeding;⁶⁴ and

Comments of the Parties

WHEREAS, AAE argued that the IRP does not include portfolios with any DSM, which is a departure from prior IRPs.⁶⁵ AAE also argued that the Council could open a new docket to consider a DSM rule, which would include both an energy savings target as well as a peak demand reduction target, include new programs directing more support to parts of the city that suffer both extreme energy burdens and severe heat island impacts and could generate models using a more appropriate discount rate, rather than the high 8% discount rate used in both IRP DSM Potential Studies;⁶⁶ and

WHEREAS, AAE criticized the IRP's projections of the cost of natural gas, as too conservative and likely to unreasonably extend reliance on existing fossil resources and delay further deployment of DSM and large-scale renewable energy. Specifically, AAE noted that the Henry Hub spot price for natural gas was currently around \$8/MMBtu, a price that even the IRP high cost scenario does not anticipate until after 2040.⁶⁷ AAE recommended the Council direct ENO to model an additional sensitivity analysis to better understand the impacts of volatile natural

⁶³ Advisors' Report at 23.

⁶⁴ Advisors' Report at 23.

⁶⁵ Comments of the Alliance For Affordable Energy, May 9, 2022, Page 2.

⁶⁶ IA

⁶⁷ Comments of the Alliance For Affordable Energy, May 9, 2022, Page 4.

gas prices on the portfolios, using an average of the last six months of Henry Hub spot prices to create a new cost-curve for future gas costs. AAE argued that the Council must exercise its extraordinary power to ensure that the IRP process produces results in line with the Council's goals for climate and resilience, such as the Renewable and Clean Portfolio Standard (Docket No. UD-19-01) and Resolution No. R-21-401 initiating the storm hardening and resilience docket; and

WHEREAS, 350 New Orleans' comments expressed disappointment regarding the exclusion of battery storage from Stakeholder Strategy 4 and advocated that Union be shut down in 2025, not 2033, for reasons of devastating climate effects. 350 New Orleans noted that Manual Portfolios 1a and 4a do not show an equivalent 1,980 MW being substituted with renewables. 350 New Orleans concluded with the recommendation that the EV charging station infrastructure, approved in 2018, needs to be given a high priority to get many more, if not hundreds, around the city within a year or two;⁶⁸ and

WHEREAS, regarding 350 New Orleans' comments related to the exclusion of battery storage in Strategy 4, ENO noted the agreement among the Stakeholders, ENO, and the Advisors to include the three manual portfolios in the total relevant supply cost analysis, and that this approach would produce a suitable range of results for Council consideration within the time allowed by the procedural schedule, and without the need for re-running the capacity optimization with another Stakeholder input set that included battery storage;⁶⁹ and

WHEREAS, regarding 350 New Orleans' comments related to Manual Portfolios 1a and 4a not showing an equivalent 1,980 MW being substituted with renewables, ENO noted that 350 New Orleans seems to be suggesting that the analysis should have considered not just the early deactivation of Union Power Block 1, but also the other three Union units as well, which combined

⁶⁸ 350 New Orleans Comments re: 2021 IRP Final Report. May 9, 2022.

⁶⁹ ENO Reply Comments, Page 2

with Power Block 1 would represent an overall capacity amount of approximately 1,980 MW, which is not a valid consideration since the other three Union units are not owned by ENO.⁷⁰ The Advisors note that of the 1,980 MW of total capacity at the Union site, ENO owns only Power Block 1, representing 500 MW, and that the remaining 1,480 MW of Union capacity is committed to customers of other utilities.⁷¹ Therefore, the Advisors agree that it is only appropriate to include ENO's 500 MW of Union capacity in the IRP analysis;⁷² and

WHEREAS, regarding 350 New Orleans' comments related to the EV charging station infrastructure public charging pilot, ENO referenced its June 2, 2022 presentation to the Council's Climate and Sustainability Committee and its expectation to complete installation of at least a portion of the chargers under the pilot program this year and the remainder in 2023.⁷³ ENO also referenced its filing with the Council in January 2022 in Docket No. UD-18-07 seeking regulatory changes that would encourage the expansion of electric vehicle charging infrastructure in New Orleans, and stated that it will seek to develop other proposals to the Council that would expand public access to Direct Current fast chargers and Level 2 chargers and foster greater adoption of EVs in the city;⁷⁴ and

WHEREAS, regarding AAE's comment regarding the lack of DSM in the IRP portfolios, ENO replied that all of the portfolios developed for the 2021 IRP included significant amounts of DSM, with avoided capacity values ranging from 245 MW to 474 MW,⁷⁵ and that the effects of DSM on the total relevant supply costs are explained in detail on pp. 46-53 and pp. 69-74 of the IRP Report. ENO included a chart in its Reply Comments which shows the amounts of DSM

⁷⁰ Id.

⁷¹ Advisors' Report at 25-26.

⁷² Advisors' Report at 26.

⁷³ ENO Reply Comments, Page 3.

⁷⁴ ENO Reply Comments, Page 4.

⁷⁵ Id.

included in each of the five portfolios downselected for inclusion in the full total relevant supply cost analysis and stated that a similar chart could be included in future IRP reports; and

WHEREAS, the Advisors concur that such chart should be so included;⁷⁶ and

WHEREAS, regarding AAE's recommendation that the Council direct ENO to model an additional sensitivity analysis to better understand the impacts of volatile natural gas prices, ENO argues that any such additional analysis is not appropriate or necessary as part of the 2021 IRP, since the IRP is by definition a 20-year planning study that draws on NYMEX Henry Hub forward prices as well as other third-party forecasts. ENO added: "If the high gas prices seen recently in the market persist and drive forecasts of higher prices over the long term, those trends will be captured as appropriate in the input cases developed for the 2024 IRP;" and

WHEREAS, the Advisors concur with that conclusion.⁷⁷ The Advisors note that the Council requires a new IRP to be developed every three years to update the long-term point of view based on recent assumptions, such as those related to natural gas prices.⁷⁸ The Advisors state that current high gas prices are driven in part by geopolitical conflict which may or may not have a long-term impact on natural gas prices over the 20-year planning period.⁷⁹ The Advisors explain that the IRP inputs for the next planning cycle should be finalized by early- to mid-2024, which will provide all parties with a better ability to project the long-term impacts of the current geopolitical conflict;⁸⁰ and

WHEREAS, the Council concurs that it would be premature at this time to require a new 20-year analysis to be performed based on the last six months of natural gas prices when that time

⁷⁶ Advisors' Report at 26.

⁷⁷ Advisors' Report at 27.

⁷⁸ Advisors' Report at 27.

⁷⁹ Advisors' Report at 27.

⁸⁰ Advisors' Report at 27.

period includes a significant geopolitical conflict, and that the next IRP proceeding will necessarily incorporate the long term impacts of the recent increase in gas prices in the determination of the natural gas price inputs for the portfolio optimization and total relevant supply cost analysis; and

WHEREAS, related to AAE's suggestion for a new rulemaking to consider a "DSM Rule," ENO pointed out that the Energy Smart program is in its 12th year, and the Council's standing 2% energy savings goal has been in place for several years, and was modeled in both the 2018 and 2021 IRPs. 81 ENO also referred to the increasing participation in demand response programs among ENO's customers and the recent completion of the AMI implementation, and stated that it would be appropriate for the Council to consider adding a demand reduction goal in connection with demand response programs to the next three years of Energy Smart, 2023-2025; 82 and

WHEREAS, ENO also argued that there is no merit to AAE's suggestion that a new DSM docket is necessary to create programs to support low income customers or neighborhoods since such programs already exist and are well documented in Energy Smart; any additions or modifications could be considered under the existing plan review process. ⁸³ In its final Reply Comments, ENO argued against AAE's belief that a 2-3% discount rate is "more appropriate," and AAE's conclusion that "a high discount rate tends to disfavor DSM options such as battery storage because of their up-front costs," adding that a new DSM docket would serve only to slow down the implementation of Energy Smart and add additional regulatory costs for customers; and

WHEREAS, the Advisors observe that the DSM potential studies indicate that the Council's 2% energy efficiency goal could be achieved as early as 2025, and may decline thereafter, as savings decrease over time.⁸⁴ The Advisors explain that incremental annual savings

⁸¹ ENO Reply Comments, Page 6.

⁸² Id

⁸³ Id.

⁸⁴ Advisors' Report at 27.

would be expected to decline over time, in part due to the success of the program and in part due to increasing governmental efficiency standards. As the base level of technology in New Orleans becomes more efficient due to measures previously implemented and improved efficiency standards, such as the phasing out of incandescent light bulbs, the amount of savings from switching to a new technology is likely to be smaller. The Advisors also explain that the 2% goal is relevant only to the incremental (*i.e.*, new) energy savings added by the Energy Smart Program every year and point out that the cumulative savings of the program are much greater than 2% of energy sales every year. The independent DSM consultant, GDS, found in its potential study that over the 20-year time frame studied, the cumulative result of the energy efficiency programs could range from 21-29% of total energy sales; and

WHEREAS, the Advisors recommend that the Council open a new rulemaking proceeding to consider what goal should be set to replace the 2% goal for Program Years 16 and beyond, and state that such a rulemaking could consider a broad range of issues beyond simply what an appropriate energy efficiency goal would be – it could also consider issues such as whether a peak demand reduction goal should be included as well as an energy sales goal, ⁸⁸ as suggested by the AAE in its comments. ⁸⁹ The Advisors recommend that it could also consider other aspects of energy efficiency program design, such as whether new programs should target specific geographic areas of the city to address heat islands or towards customers facing particularly severe energy burdens, as also suggested by the AAE, ⁹⁰ as well as the impact of the programs on customer bills and whether customer incentives funded through energy bills are the most appropriate way to

85 Advisors' Report at 27.

⁸⁶ Advisors' Report at 27.

⁸⁷ Final 2021 IRP at Appendix E, GDS 2021 Potential Study at 20, Figure 2-5.

⁸⁸ Advisors' Report at 28.

⁸⁹ AAE Comments at 3.

⁹⁰ AAE Comments at 3.

achieve all forms of energy efficiency or whether it might be more cost effective to achieve energy efficiency through regulatory measures such as improved building efficiency standards;⁹¹ and

WHEREAS the Council finds the suggestion that it open a new rulemaking docket to evaluate the Council's current energy efficiency and DSM policies and how they might be best modified to meet the needs of New Orleans customers to be reasonable; and

Advisor Recommendations Regarding the Next IRP Process

WHEREAS, the Advisors find that while the Final 2021 IRP Result is in compliance with the Council's requirements, the Advisors do recommend the following changes that can be implemented in the Initiating Resolution for the next IRP cycle that the Advisors believe would improve the resulting analyses:⁹²

- 1. 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 instructions to ENO and the independent consultant as to how to make portfolios produced using inputs from different studies more directly comparable, such as the use of survey techniques to improve the estimation of saturation and adoption rates for specific DSM measures and the use of comparable references regarding the technology available for projected DSM measures;
- 2. Future IRP final reports should include more detail regarding how specific distributed energy resources, such as growth in community solar and electric vehicles, impact the load forecast, with potential ranges of projected estimates;
- 3. ENO should be directed to utilize AURORA's modeling capability for an economic analysis which optimizes retirement dates for ENO's existing assets rather than utilizing fixed retirement dates and to continue modeling an early retirement date for Union Power Station PB1;
- 4. The issue of incorporating early retirements of existing resources simultaneously with optimizing an energy-based model solution should be considered by the Council before a procedural schedule is included in the Initiating Resolution of the next triennial IRP; and

⁹¹ Advisors' Report at 28.

⁹² Advisors; Report at 29.

WHEREAS, the Council finds that all parties should have the opportunity to comment upon the Advisors' recommendations in advance of the next IRP cycle; and

WHEREAS, the Advisors find that ENO's 2021 IRP Action Plan appears reasonable, ⁹³ and no party challenges the Action Plan. The Advisors recommend that the Council approve ENO's 2021 IRP Action Plan subject to the following modifications: (1) consistent with Section 1.D of the IRP Rules, approval of the Action Plan does not constitute Council approval of any specific asset or resource acquisition, any such acquisition must still be submitted for Council approval consistent with the Council's rules and regulations; and (2) Council approval of the 2021 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 Final 2021 IRP shall have no precedential impact upon the Council's considerations in the Renewable Portfolio Standard rulemaking docket (UD-19-01) or any other related docket; ⁹⁴ and

WHEREAS, the Council finds that ENO's Final 2021 IRP should be approved as consistent with the Council's IRP Rules and general policies and goals, and that the Action Plan should be approved subject to the modifications set forth by the Advisors; NOW THEREFORE

BE IT RESOLVED BY THE COUNCIL OF THE CITY OF NEW ORLEANS THAT:

1. The Final 2021 IRP is accepted as in compliance with the substantive and procedural requirements of the Council's IRP Rules and its Initiating Resolution.

2. The Final 2021 IRP and its Action Plan is approved, noting that (a) consistent with Section 1.D of the IRP Rules, approval of the Action Plan does not constitute Council approval of any specific asset or resource acquisition, any such acquisition must still be submitted for Council approval consistent with the Council's rules and regulations; and (b) the Council approval of the 2021 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 Final 2021 IRP shall have no precedential impact upon the Council's considerations

⁹³ Advisors' Report at 29.

⁹⁴ Advisors' Report at 30.

in the Renewable Portfolio Standard rulemaking docket (UD-19-01) or any other related or future docket.

3. Parties who wish to comment on the recommendations made by the Advisors for future IRP proceedings may file such comments within 90 days of the adoption of this Resolution, and the Council will take such comments into consideration when issuing its Initiating Resolution for the next IRP cycle.

THE FOREGOING RESOLUTION WAS READ IN FULL, THE ROLL WAS

THE FOREGOING IS CERTIFIED

TO BE A TRUE AND CORRECT COPY

YEAS:

Giarrusso, Green, Harris, King, Moreno, Morrell - 6

CALLED ON THE ADOPTION THEREOF, AND RESULTED AS FOLLOWS:

NAYS:

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ABSENT:

Thomas - 1

AND THE RESOLUTION WAS ADOPTED.

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