RESOLUTION

No. R-18-539

CITY HALL: December 20, 2018

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

IN RE: ESTABLISHING A DOCKET AND OPENING A RULEMAKING PROCEEDING TO CONSIDER REVISING THE COUNCIL'S RULES TO ALLOW RELEASE OF WHOLE-BUILDING DATA TO BUILDING OWNERS

RESOLUTION AND ORDER

DOCKET NO. UD-18-04

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 to govern applications for the fixing and changing of rates and charges of public utilities; and

WHEREAS, Entergy New Orleans, LLC[1] ("ENO" or "Company"), effective September 1, 2015, is a public utility providing electric and natural gas service to all of New Orleans; and

Background

WHEREAS, in Council Resolution No. R-17-428, the Council expressed its support for the City's goal to reduce overall greenhouse gas emissions dramatically by 2030 and committed

[1] Pursuant to a Council-approved restructuring that was effective December 1, 2017, Entergy New Orleans, Inc. is now operating as Entergy New Orleans, LLC.

Administration's Climate Action Strategy and directed the Utility Advisors and the Council Utility and Regulatory Office ("CURO") to work with the Administration; and

WHEREAS, in that Resolution, the Council also committed that as each proposal for a specific action affected by the Climate Action Strategy that requires Council approval comes forward, the Utility, Cable, Telecommunications, and Technology Committee ("UCTTC") shall open an appropriate docket to provide a full and transparent process, open to all stakeholders, to examine the proposed action and develop a supportable regulatory strategy and administrative record upon which to base Council action; and

WHEREAS, the Council is aware of the Administration's City Energy Project, an energy efficiency project designed to encourage commercial building owners to benchmark their energy usage data in order to calculate the value of making energy efficiency improvements to their buildings; and

WHEREAS, in discussions with the Mayor's Office of Resilience and Sustainability ("ORS"), ORS indicated to the Advisors that the Council's restrictions preventing ENO from releasing whole-building data to building owners for buildings with multiple meters without first obtaining the consent of each tenant creates a time-consuming obstacle for building owners seeking such data for energy benchmarking purposes; and

WHEREAS, City Code Section 158-1045(e) states that a customer has "[t]he right to have customer information, including payment history and consumption patterns, kept confidential;"[2] and

[2] New Orleans, La., Code of Ordinances ch. 158, art. VIII, § 1045(e) (2018).

WHEREAS, the Council's Service Regulations[3] implementing Section 158-1045(e), were most recently updated through Council Resolution No. R-16-105. The Service Regulations provide at *Section 53. Customer Confidentiality* that "[u]nless specific written permission is obtained from the Customer to release the information regarding the Customer, the Company shall insure that Customer information, including payment history and consumption patterns will be kept confidential. Customer information may be provided under a protective order issued and/or confidentiality agreement executed in a legal proceeding, but in such proceedings the Company should make every effort to maintain the Customer's privacy;" and

WHEREAS, the Customer Service Regulations, as presently written, would prohibit ENO from releasing whole-building data to a landlord without first obtaining written authorization from each tenant; and

WHEREAS, in Council Resolution No. R-18-225, the Council opened this rulemaking docket to consider the issue of whether aggregated whole-building data could be released to building owners where a building has four or more meters and also sought comment on any feasibility or logistical issues associated with aggregating and releasing such data to building owners; and

WHEREAS, comments were filed in this proceeding by ENO, The Alliance for Affordable Energy ("AAE"), and the Natural Resources Defense Council ("NRDC"). Joint comments were filed by a coalition of The National Housing Trust, Stewards of Affordable Housing for the Future, and the Renaissance Neighborhood Development Corporation (collectively, the "Affordable Housing Intervenors"). AAE and the NRDC filed joint reply comments, and the Advisors

[3] A copy of the Service Regulations applicable to ENO may be found here: http://www.entergy-neworleans.com/content/price/tariffs/enoi_service_regs.pdf.

submitted their Advisors' Report[4] with revised recommendations upon review of the parties' comments; and

WHEREAS, the comments of the parties and Advisors focused on three primary areas, (1) whether and under what conditions such aggregated whole-building data could be released while continuing to protect customers' privacy; (2) matching of the meters to the correct building; and (3) the possible automation of the aggregation of data and the transmission of data to building owners; and

Whether and Under What Conditions to Allow Release of Aggregated, Whole-Building Data

WHEREAS, as the Advisors noted, most parties supported the release of aggregated whole-building energy use data under appropriate circumstances and no party opposed it.[5] The AAE supports permitting ENO to release aggregated whole-building data to owners of buildings including at least four customer meters.[6] The Affordable Housing Intervenors support the City Council's effort to assure that building owners are able to obtain energy usage information using modern systems and tools and agree that a good first step is the proposal outlined in the Resolution to clarify that customer Service Regulations allow ENO to deliver aggregated, whole-building energy usage data to owners of multi-tenant apartment buildings without the cumbersome process of obtaining permission from every tenant.[7] They state that an aggregated whole-building total for a month does not reveal any confidential information to the owner;[8] and

[4] Advisors' Report Regarding the Release of Whole-Building Data, Docket No. UD-18-04 (Oct. 19, 2018) ("Advisors' Report).
[5] Advisors Report at 8.
[6] Comments of the Alliance for Affordable Energy, Docket No. UD-18-04, at 2 (Aug. 23, 2018) ("AAE Comments").
[7] Comments of the National Housing Trust, Stewards of Affordable Housing for the Future, and Renaissance Neighborhood Development Corporation, Docket No. UD-18-04, at 3 (Aug. 23, 2018) ("NHT Comments").
[8] NHT Comments at 3.

WHEREAS, similarly the NRDC recommends that the Council clarify that ENO may provide whole-building usage information to building owners when it is aggregated of multiple customers.[9] The NRDC states that the Council's Resolution No. R-18-225 proposes a sensible first step: that the Council should clarify that ENO may provide the owner of a multi-tenant property with whole-building energy usage totals, so long as the total is aggregated of several customers' usage totals, without the owner obtaining and ENO maintaining paper-based permission forms for every included customer.[10] The NRDC states that the fact that many utilities have operated similar programs without any reports of problems validates the conclusion that aggregating multiple customers' usage information protects customer confidentiality.[11] The NRDC states that the Council is on very solid ground concluding that ENO may deliver a whole-building usage total to building owners, aggregated of several customers; information, within the terms of the current policy that designates usage information as confidential, and the NRDC supports the Council clarifying this point;[12] and

WHEREAS, several parties also argue that there are significant benefits to building owners and tenants resulting from the release of aggregated whole-building data. The Affordable Housing Intervenors argue that access to whole-building energy usage data would allow owners to monitor buildings for maintenance issues, identify opportunities and finance cost-effective energy efficiency improvements, and help keep energy costs low for residents.[13] They also state that effective energy management is particularly important to owners and residents of low-income publicly-subsidized multifamily housing.[14] The Affordable Housing Intervenors state that energy

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[9] Comments of the Natural Resources Defense Council, Docket No. UD-18-04, at 2 (Aug. 23, 2018) ("NRDC Comments").
[10] NRDC Comments at 2.
[11] NRDC Comments at 3 and 5.
[12] NRDC Comments at 3 and 5-6.
[13] NHT Comments at 2.
[14] NHT Comments at 2.

costs are the second largest variable operating cost in multifamily affordable housing, and because of affordability restrictions, rents cannot generally be increased to offset rising operational expenses.[15] They also argue that improved energy management, directly informed through whole-building energy information, and benchmarking that such data enables, is an essential path to lower operating expenses and pursue further investments in energy efficiency to maintain long-term affordability.[16] They state that the benefits of benchmarking include energy savings, access to financing, and reduced energy burden for residents;[17] and

WHEREAS, the AAE states that energy benchmarking is a valuable tool for multi-tenant buildings, even beyond the direct connection to energy efficiency programs, and that using programs like Environmental Protection Agency's ("EPA") Portfolio Manager, building owners/managers can track the performance of their buildings over time and compare them to competitors in a market and to buildings nationwide;[18] and

WHEREAS, similarly, the NRDC states that building owners need information on the energy usage in their buildings in order to manage their properties effectively and to invest in energy-related repairs and improvements.[19] In addition, energy usage information is essential for a building owner to obtain and maintain an Energy Star score.[20] The NRDC notes that there are many benefits that come when building owners have energy usage information such as: funding for energy efficiency repairs, interest rate discounts from financial institutions for more energy efficient properties, benchmarking building energy use and comparing it to other properties, the ability of prospective tenants to compare Energy Star scores;[21] and

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[15] NHT Comments at 2.
[16] NHT Comments at 2.
[17] NHT Comments at 2-3.
[18] AAE Comments at 3.
[19] NRDC Comments at 3.
[20] NRDC Comments at 3.
[21] NRDC Comments at 3-4.

WHEREAS, the parties generally acknowledge in their comments that some protections for customer privacy are necessary. The NRDC recommends two measures to protect customer confidentiality: (i) requiring the whole-building total to include three or more active customers (the NRDC notes that it would also be acceptable for the Council to err further on the side of caution by requiring four customers, but it is not necessary); and (ii) confirming the identity of the requesting entity (recipient of information) as the building's owner or owner's designated agent;[22] and

WHEREAS, ENO states that in order to protect the privacy of customers, the proposed four-meter threshold should be tied to active meters/tenants, and that the owner is best suited, and should be required to notify the utility if the number of active tenants/meters drops below the threshold or if ownership of the building is transferred in some manner.[23] ENO also argues that it would be easier to disaggregate the data if one tenant uses the vast majority of the building's electricity.[24] ENO suggests that the Council require consent from all tenants where one individual tenant accounts for more than 50% of the usage.[25] ENO suggests that the Council place reasonable limitations on the building owner's use of aggregated data, such as limiting it to purposes of benchmarking and energy efficiency and management purposes;[26] and

WHEREAS, the Advisors state that their research also indicates that release of the data under the right circumstances can protect consumer privacy.[27] The Advisors reviewed information provided by ORS, including the January 2016 U.S. Department of Energy ("DOE") Energy Data Accelerator report *Best Practices for Providing Whole-Building Energy Data: A Guide for Utilities*

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[22] NRDC Comments at 7.
[23] Entergy New Orleans, LLC's Comments Regarding Whole-Building Aggregated Data, Docket No. UD-18-04, at 5 (Aug. 27, 2018) ("ENO Comments").
[24] ENO Comments at 5.
[25] ENO Comments at 5.
[26] ENO Comments at 6.
[27] Advisors' Report at 8.

(*"Best Practices Report"*),[28] and the October 2014 U.S. DOE Pacific Northwest National Laboratories report *Commercial Building Tenant Energy Usage Data Aggregation and Privacy* (*"Data Aggregation and Privacy Report"*),[29] In particular, the Advisors note that the *Data Aggregation and Privacy Report* undertook a comprehensive study as to whether allowing the release of aggregated data raised a significant risk of violating the customer's privacy found that the results suggest that a four-meter threshold appears to provide sufficient protection against a building owner being able to deduce what any individual tenant's actual energy usage is, but increasing the threshold to a greater number of meters diminishes the number of buildings eligible to participate at a more rapid rate than the rate at which the protection of customer privacy increases (*i.e.*, more benefit is lost than gained by moving from a four-meter requirement to a five-meter requirement).[30] The Advisors also note that the owner of the building generally has access to tenant meters and other information that is not available to the general public and therefore there is less concern about increasing customer vulnerability with respect to releasing information to building owners than there is with releasing such information to the general public;[31] and

WHEREAS, the Advisors state that ENO's concern regarding the ability of the building owner to reconstruct a tenant's energy use where all four meters are not active or where one tenant uses the vast majority of the building's electricity is a recognized issue in this area.[32] They note that the *Data Aggregation and Privacy Report* considered the issue of tenant turnover and

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[28] *See Best Practices Report*, https://betterbuildingssolutioncenter.energy.gov/sites/default/files/attachments/Best%20Practices%20for%20Providing%20Whole-Building%20Energy%20Data%20-%20Guide%20for%20Utilities.pdf.

[29] *See Data Aggregation and Privacy Report*, https://www.pnnl.gov/main/publications/external/technical_reports/PNNL-23786.pdf.

[30] Advisors' Report at 8-9; *see also*, *Data Aggregation and Privacy Report* at 2, 24. The *Best Practices Report* recommends that utilities consider establishing aggregation thresholds, and report recommends a threshold between two and five meters, which is consistent with the *Data Aggregation and Privacy Report*. *See Best Practices Report* at 4.

[31] Advisors' Report at 9.

[32] Advisors' Report at 9.

recognized that when there are, for example, three tenants in a building and one moves out, the energy use of the departing tenant can be estimated by comparing the two months before and after the move, and while the unit is vacant, the probability of a building owner being able to determine the energy profile of the remaining two tenants increases.[33] The Advisors state that they agree that where a single tenant uses 50% or more of the building's energy, the whole-building data is more likely to enable the building owner to deduce that tenant's energy usage, and therefore believe that a restriction on the release of data where a single tenant uses more than 50% of the building's energy is appropriate;[34] and

WHEREAS, in addition, the Advisors note that there may be other special circumstances where the risk that a customer may be matched to his energy use is unusually high, such as when one tenant leases multiple spaces, and thus has multiple meters within the same building.[35] The Advisors therefore recommend that the rule require both four meters and four unique customers and that the 50% limitation be applied to the customer use (rather than per meter) to ensure that no single customer's use can be deduced;[36] and

WHEREAS, ENO's suggestion for addressing this problem is that the four-meter threshold be tied to the number of active tenants/meters, and that the building owner should be required to notify the utility of the number of active tenants/meters drops below the threshold or if ownership of the building is transferred in some manner.[37] The Advisors express concern, that such a standard would enable building owners who wish to match their tenants to their energy profiles to simply decide not to notify the utility, and believe that a further safeguard should be

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[33] Advisors' Report at 9, citing *Data Aggregation and Privacy Report* at 20.
[34] Advisors' Report at 9.
[35] Advisors' Report at 9.
[36] Advisors' Report at 9.
[37] ENO Comments at 5.

required.[38] The Advisors argue that once a building, the associated meters, and associated customer accounts have been identified for the provision of whole-building data, ENO should be able to identify any service requests for starting, stopping, or transferring service from any of the associated customer accounts in that building and any service changes for any of the accounts which are aggregated pursuant to a whole-building data request should trigger an automatic review by ENO to ensure that the building continues to meet or exceed any threshold requirements with regards to the provision of whole-building data.[39] The Advisors also agree that building owner should be required to notify the utility of the number of active tenants/meters drops below the threshold or if ownership of the building is transferred in some manner.[40] The Advisors argue that these two requirements in combination provide redundant protection as to when a building may fall below any threshold requirements with regards to the provision of whole-building data;[41] and

WHEREAS, the Advisors also recommend that only whole-building data be released, and that releasing data for a subgroup within a building should not be permitted, because having as many meters as possible aggregated decreases the likelihood that a building owner will be able to deduce the usage of any single tenant and because allowing a building owner to request different subsets of data for various groups within a particular building could allow the building owner to deduce the energy usage of specific tenants.[42] The Advisors argue that the least burdensome manner in which to prevent such abuses is to require that all meters on a building be included in the data aggregation, which is also generally consistent with best practices on this topic;[43] and

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[38] Advisors' Report at 9.
[39] Advisors' Report at 9-10.
[40] Advisors' Report at 10.
[41] Advisors' Report at 10.
[42] Advisors' Report at 10, *citing Data Aggregation and Privacy Report* at 14.
[43] Advisors' Report at 10, *citing Data Aggregation and Privacy Report* at 14; and *Best Practices Report* at Appendices C-F.

WHEREAS, the *Data Aggregation and Privacy Report* finds that: "[r]egardless of the aggregation threshold level, only building totals, not subgroup totals, should be reported. For example, if selected aggregation threshold is 5 and there are 10 meters in the building, the total should be reported for all 10 meters, not a subtotal for two groups of 5 meters. Otherwise, if repeated or nested querying for various groups of 5 is allowed, it enables a composition attack;"[44] and

WHEREAS, the Affordable Housing Intervenors suggest that the Council allow the data to be released at the property threshold rather than the building level to allow for participation by properties with multiple buildings on a campus, and that the definition of multifamily buildings should take into account various property types, including attached (*i.e.*, townhouses) and stacked properties.[45] The Advisors argue that aggregated building data is of the most useful when benchmarking a specific building to which energy efficiency improvements may be made, and the usefulness of multi-building data in assisting building owners in identifying what improvements would most benefit a building are less obvious, therefore, the Advisors recommend that the release of data be limited to single buildings with four or more meters.[46] The Advisors note that owners of multiple buildings on a property where there are not four or more meters on a building may still obtain the usage data for each building if they are able to obtain the specific written consent of the customers to do so;[47] and

WHEREAS, several parties commented on the potential uses of the aggregated whole-building data. ENO suggests that the Council place reasonable limits on the building owner's use of the aggregated data, such as limiting it to purposes of benchmarking, energy efficiency and

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[44] *Data Aggregation and Privacy Report* at 14.
[45] NHT Comments at 3-4.
[46] Advisors' Report at 10.
[47] Advisors' Report at 10.

energy management.[48] Meanwhile, other parties state that such data can be used to bring benefits such as energy savings, access to financing, and reduced energy burden for building residents and that energy usage information is essential for a building owner to obtain and maintain an Energy Star score.[49] The Affordable Housing Intervenors also suggest that a process should be established to allow an owner's designee, such as a property management firm or an energy auditor to obtain the information on behalf of the owner.[50] The Advisors agree that there should be limits on the use of the aggregated data, and also recognize that many building owners employ managers who are tasked with energy management for the building or may seek the assistance of an energy auditor or other expert in analyzing and addressing issues related to the energy use of the building who would be using the data for a legitimate purpose.[51] The Advisors argue that use of the data should be limited to: (1) benchmarking; (2) energy efficiency and energy management; (3) obtaining financing for energy efficiency improvements to the building in question; and (4) obtaining energy efficiency certifications or ratings for the building in question, such as, but not limited to, an Energy Star rating.[52] The Advisors also recommend that there be a complaint process that allows building tenants who are concerned that their energy usage data is being used for an improper purpose to request that the building owner's ability to receive such information be revoked.[53] The Advisors recommend that ENO be required to establish a methodology for verifying the identity of the building owner and/or the building owner's designated agent for receipt of the data;[54] and

WHEREAS, Advisors also note that there may be other special circumstances where the risk that a customer may be matched to their energy use data is higher than usual, that cannot be

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[48] ENO Comments at 6.
[49] NHT Comments at 2-3; NRDC Comments at 3.
[50] NHT Comments at 3-4.
[51] Advisors' Report at 10.
[52] Advisors' Report at 10-11.
[53] Advisors' Report at 11.
[54] Advisors' Report at 11.

anticipated at this time.[55] The Advisors recommend that in order to address the potential for such circumstances, the Council require that in the month prior to when aggregated building information is to be released, all affected customers receive a notice of the impending release of the data and be given the opportunity to petition the Council to prevent the release of the data.[56] The Advisors clarify that they do not recommend an "opt-out" provision, because that would enable a single tenant to prevent the building owner from acquiring the aggregated whole-building data that is needed to foster energy efficiency improvements expected to benefit all tenants of the building as well as the building's owner.[57] The Advisors argue that the burden in this case should be on the customer to demonstrate why his or her privacy is not sufficiently protected by the conditions imposed under the Council's rules.[58] Rather than an "opt-out" provision, the Advisors believe this mechanism would be a safety valve to allow for consideration of circumstances not contemplated under these rules;[59] and

WHEREAS, the Advisors recommend that the Council instruct ENO to amend Section 53 of its Service Regulations[60] as follows:

> Unless specific written permission is obtained from the Customer to release the information regarding the Customer, the Company shall insure that Customer information, including payment history and consumption patterns will be kept confidential. Release of aggregated whole-building data, subject to the conditions below, shall not be a violation of this provision. Customer information may also be provided under a protective order issued and/or confidentiality agreement executed in a legal proceeding, but in such proceedings the Company should make every effort to maintain the customer's privacy.
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> **Release of Aggregated Whole-Building Data**
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> The Company shall release aggregated whole-building data to the owner of a building or the owner's designated representative upon request subject to the following conditions:

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[55] Advisors' Report at 11.
[56] Advisors' Report at 11.
[57] Advisors' Report at 11.
[58] Advisors' Report at 11.
[59] Advisors' Report at 11-12.
[60] *See supra* n.2.

1. The data shall only be released subject to a Council-approved process, which includes verification of the building owner's identity, verification of the specific meters associated with the building, notification to customers whose accounts are aggregated in the whole-building data, and a process for the Customer of any account with an involved meter to challenge the appropriateness of the release of the data.

2. The data must be an aggregation of data from all meters associated with a building. There must be at least four active meters associated with the building and at least four unique Customers for which data is aggregated. For buildings with fewer than four active meters or unique Customers, specific written permission from all Customers with meters associated with the building is still required prior to the release of the data. Further, specific written permission from all Customers with meters associated with the building is also required where a single Customer constitutes more than 50% of the building's monthly energy use.

3. The use of such data by building owners and their designated representatives must be limited to energy use benchmarking, energy efficiency and energy management, obtaining financing for energy efficiency improvements to the building in question, or obtaining energy efficiency certifications or ratings for the building in question, such as, but not limited to, an Energy Star rating.

WHEREAS, the Council finds that, in light of the comments submitted by the parties and the research performed by the Advisors, it is both reasonable and protective of customer privacy to modify the Customer Service Regulations in the manner proposed by the Advisors; and

Matching of Meters to Buildings

WHEREAS, ENO states that its customer billing systems, similar to those of many other utilities, generally are not designed to track energy consumption of a specific building given that separately metered accounts are generally under separate customer names.[61] However, ENO also explains that it has consulted with its Advanced Metering Infrastructure ("AMI") deployment team and vendors, and has learned that AMI technology will, in fact, enable the ability to accurately map meters to specific geographic locations using a geographic information system ("GIS").[62] ENO states that it will not be able to use the GIS system to locate meters until the rollout of AMI

[61] ENO Comments at 1-2.
[62] ENO Comments at 2.

is complete in 2020, but that using it in combination with some form of building owner verification, where the building owner verifies the meters on the building, would meet the objective of enabling ENO to understand the specific meters attached to each building.[63] ENO believes that the cost of this method to ratepayers would be negligible.[64] ENO also states that attempting to use other methods of mapping the meters on ENO's system prior to full AMI rollout would be a costly and time-consuming process and would not benefit customers;[65] and

WHEREAS, the AAE and the NRDC stated in their reply comments that they were surprised that a substantial new system on the scale of AMI is required in order for ENO to identify the address of apartment and office buildings it serves.[66] They state that they are concerned that waiting two and a half years until after AMI is completely implemented in order to deliver whole-building data access will mean a significant loss of savings in the meantime and may not be necessary.[67] The AAE and the NRDC argue that a high value would be lost by waiting because the Downtown Energy Challenge is already underway, and the owners/managers of the participating buildings are limited by the lack of data access. They also note that the comments from the National Housing Trust and from the NRDC state that affordable housing owners and developers are substantially impaired by not having access to this data, and that in particular, they are prevented from making use of better-priced financing for energy efficiency improvements without benchmarking;[68] and

WHEREAS, the Advisors believe being able to identify which meters are attached to any specific building is a legitimate issue for ENO, and state that the *Best Practices Report* also notes

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[63] ENO Comments at 2.
[64] ENO Comments at 2.
[65] ENO Comments at 3.
[66] Reply Comments of the Alliance for Affordable Energy and of the Natural Resources Defense Council, UD-18-04, at 1 (Sept. 14, 2018) ("AAE & NRDC Reply Comments").
[67] AAE & NRDC Reply Comments at 1.
[68] AAE & NRDC Reply Comments at 2.

that this issue has presented a significant barrier for many utilities.[69] The Advisors explain that it may be difficult for ENO to identify which meters are on which building simply by the address that is billed -- the bills may be sent to a different address than the address at which the electricity is consumed, particularly for commercial customers, and that it is not uncommon for a business with several locations to have a single, centralized location to which all invoices for all addresses are sent and from which all bills are paid.[70] The *Best Practices Report* also notes that the situation frequently occurs in some jurisdictions where a single building may have multiple street addresses.[71] The Advisors, therefore, express concern that, prior to AMI deployment, ENO may not have sufficient information in its possession to accurately determine which meters are attached to which building in every instance;[72] and

WHEREAS, the Advisors believe that it will be necessary for ENO to work with building owners to verify which meters are attached to the building and for ENO to be able to verify that all meters for a building have been properly identified and that the building owner has not requested information for only a subset of the meters on a specific building.[73] Because any such process would be labor-intensive for both the building owner and ENO, the Advisors recommend that if the Council desires to make whole-building data available prior to full AMI deployment that ENO only be required to provide such data on an as-requested basis;[74] and

WHEREAS, the Advisors also note that while the AAE and NRDC assert that significant value would be lost by failing to release whole-building data to building owners prior to the implementation of AMI, they do not attempt to estimate the value lost, nor has any party presented

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[69] Advisors Report at 12-13, *citing Best Practices Report* at 2.
[70] Advisors' Report at 13.
[71] *Best Practices Report* at 3.
[72] Advisors' Report at 13.
[73] Advisors' Report at 13.
[74] Advisors' Report at 13.

information regarding approximately how many building owners might have need of such data in the interim period before AMI is implemented, such that there is insufficient data to attempt to estimate whether the benefits to ratepayers of requiring such data release prior to the full implementation of AMI would outweigh the burden imposed on ENO that ratepayers ultimately will bear;[75] and

WHEREAS, the Advisors recommend that the Council direct ENO to file within 60 days a draft process for mapping meters to buildings on an as-requested basis that puts the primary burden of identifying which meters are on the building in question on the building owner requesting the whole-building data, but allows ENO to verify with reasonable certainty that all relevant meters have been identified, and that the building owner has not identified a subset of meters.[76] The Advisors also recommend that with its filing of a draft process for manually mapping meters to buildings, ENO should be required to provide an estimate of the burden on ENO that the process would impose that other ratepayers will ultimately bear. The Advisors also recommend that both ENO and the Intervenors be asked to submit any information in their possession with respect to how many building owners are likely to seek a release of the data for their building prior to the full implementation of AMI;[77] and

WHEREAS, the Advisors note that the situation looks very different after the full deployment of AMI (anticipated in 2020), when, ENO explains, the AMI technology will enable it to accurately map meters to specific geographic locations and that using the technology in combination with some form of building owner verification would meet the objective of enabling ENO to identify specific meters attached to each building at a negligible cost to ratepayers.[78] The

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[75] Advisors' Report at 13.
[76] Advisors' Report at 13.
[77] Advisors' Report at 13.
[78] Advisors' Report at 14, *citing* ENO Comments at 2.

Advisors find this development very promising and in addition, note that no party opposes using this method to map meters to buildings once AMI has been rolled out.[79] Therefore, the Advisors recommend that the Council instruct ENO to utilize this method of meter mapping once AMI has been deployed and to develop a process for building owner verification that will produce a reasonably accurate result without putting undue burden on the building owner;[80] and

WHEREAS, for the reasons set forth by the parties, above, and noting the lack of any opposition to the proposal that ENO utilize the technology made available through the full AMI rollout to map meters to buildings on its system, the Council agrees that it is reasonable to require ENO to provide aggregated whole-building data (subject to the additional conditions set forth herein) to building owners upon request once AMI has been fully deployed in ENO's territory; and

WHEREAS, in light of the lack of availability of information necessary to properly weight the costs to ratepayers against the benefits to ratepayers to be received by requiring ENO to provide such information prior to the fully deployment of AMI, the Council finds the Advisors' proposal to request more data from the parties to be reasonable; and

Automation of Meter Identification, Aggregation of Data and Transmission of Data to Building Owners

WHEREAS, the parties also filed comments discussing the feasibility of providing whole-building data to a building owner and the extent to which automation of the process of collecting, aggregating and transmitting the data should occur; and

WHEREAS, the NRDC recommends that the Council direct ENO to evaluate and report back to the Council on the systems and process improvements needed to assure building owners

[79] Advisors' Report at 14.
[80] Advisors' Report at 14.

are able to obtain usage information in a systematic and automated manner.[81] The NRDC also states that for a building owner's "right" to obtain usage information to have value, owners must be able to obtain the information through modern systems and processes.[82] The NRDC recommends that the Council direct ENO to evaluate and report back to the Council on the systems and process improvements needed to assure building owners are able to obtain usage information in a modern, systematic, and automated manner;[83] and

WHEREAS, several parties urge ENO to develop a "landlord portal" to facilitate the transmission of data to building owners in a useful format and to consider use of the Energy Star Portfolio Manager software. The AAE encourages ENO to work with large building owners to consider what features in a landlord portal would be most useful, and notes that a streamlined system for tracking building performance in multi-family homes is particularly useful in driving energy costs lower for New Orleanians, especially as the City's residents are primarily renters.[84] The AAE also recommends that ENO work with the EPA's Portfolio Manager program to develop an automated process in order to overcome the barrier created by requiring building owners to manually enter their energy usage into the program and support greater adoption of the Portfolio Manager program.[85] The NRDC recommends that ENO consider automated integration systems such as the Energy Star Portfolio Manager, establishing a process for properties with smaller numbers of tenants to obtain customer permission to obtain usage data, and that owners of affordable housing require information on usage to satisfy federal and local requirements;[86] and

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[81] -NRDC Comments at 2.
[82] NRDC Comments at 7.
[83] NRDC Comments at 7.
[84] AAE Comments at 3.
[85] AAE Comments at 3.
[86] NRDC Comments at 7-8.

WHEREAS, in addition, the Affordable Housing Intervenors encourage the Council to consider guidance, direction, and support to ENO to implement processes and systems, like a "Landlord Portal," that delivers whole-building energy usage data in a modern, timely, and systematic manner.[87]. The Affordable Housing Intervenors suggest several design best practices: (1) that data provided to building owners should represent the sum of the electricity consumed at the property and should be provided at a high degree of resolution (*e.g.*, hourly, daily and monthly) to provide the best information for decision-making, but no less than monthly; (2) a process should be established to allow an owner's designee, such as a property management firm or an energy auditor to obtain the information on behalf of the owner; (3) the program should require four or more tenants to be both useful and ensure customer privacy is protected, and should allow the minimum threshold to be met and data to be released at the property level rather than the building level to allow for participation by properties with multiple buildings on a campus; (4) streamlined data access should be provided; (5) data transfer should be quick, convenient in a useful electronic format; (6) building usage data should be calendarized; and (7) the definition of multifamily properties should take into account various property types, including attached (*e.g.*, townhouses) and stacked properties;[88] and

WHEREAS, with respect to aggregating and transmitting energy usage data to building owners, ENO states that neither manual aggregation nor building a tool within the current billing system would be effective methods of providing aggregated data given the currently planned AMI rollout.[89] ENO states that it could utilize its plans to have the capability to aggregate data through the AMI Customer Engagement Portal ("CEP") by building internal software that automatically

[87] NHT Comments at 3.
[88] NHT Comments at 3-4.
[89] ENO Comments at 3.

aggregates the data by creating a "virtual meter" that aggregates all meters in the building.[90] Once the meters are verified, a utility employee would enter the meter numbers into the system to create a virtual meter.[91] ENO notes that other utilities, including Xcel Energy have utilized this method.[92] ENO states that with the deployment of AMI it will have the ability to build and implement a similar solution that aggregates and transmits the energy usage data to both the owner, through the CEP, and to a benchmarking service;[93] and

WHEREAS, ENO notes that the DOE offers free benchmarking software, Portfolio Manager, which other utilities currently utilize, including Commonwealth Edison, Pepco, and Puget Sound Energy.[94] ENO estimates the cost associated with building an internal software solution that can aggregate and transmit data from the post-AMI implementation billing system to EPA's Portfolio Manager to be approximately $25,000, before accounting for the labor related to any manual processes that would need to be performed and that it can be developed and implemented in 2019 before full AMI deployment.[95] By way of comparison, ENO's comments explain that building a tool that would aggregate and transmit data directly from ENO's current [pre-AMI] billing system would cost approximately $450,000 and take time to design and develop.[96] ENO states that there is another alternative, to have a third party provide a turnkey benchmarking program that would handle the benchmarking process from aggregation to transmission.[97] ENO states that these programs come at a premium, and could cost from $20,000-

[90] ENO Comments at 4.
[91] ENO Comments at 4.
[92] ENO Comments at 4.
[93] ENO Comments at 4.
[94] ENO Comments at 4.
[95] ENO Comments at 4.
[96] ENO Comments at 3.
[97] ENO Comments at 4.

$40,000 for startup and $40,000-$75,000 annually, and take up to a year to develop, but could offer additional options to building owners;[98] and

WHEREAS, the AAE and NRDC state that they concur with ENO's approach to seek cost-saving measures to reduce customer-funded costs of administration and avoid technology work that would be obviated by AMI deployment, but state that it is not clear whether ENO explored less burdensome alternatives to be able to aggregate customer accounts by address into a whole-building total, even for a limited set of large multi-tenant properties in New Orleans.[99] They believe alternatives are available and encourage ENO to explore whether it could implement a partial solution, prior to full roll-out, for a subset of large multi-tenant properties - the properties likely with the highest value to be realized.[100] The AAE and NRDC request that ENO explore the cost and level of effort for ENO to provide whole-building usage information in response to requests for whole-building data submitted by multifamily and office building owners (*e.g.*, over 30,000 square feet), and ENO providing such data using existing systems, billing systems, or in some cases, manually;[101] and

WHEREAS, the Advisors note that all parties generally support the automation of this process, the outstanding question is simply how quickly it can be automated and at what cost.[102] The Advisors also state that, given that ENO has stated that it can automate the transmission of data with the full deployment of AMI at minimal cost to ratepayers, and that AMI is anticipated to be fully deployed in 2020, the Advisors agree that it makes little sense to make large expenditures at this time to develop an automated system that will be rendered unnecessary within two years.[103]

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[98] ENO Comments at 4-5.
[99] AAE & NRDC Reply Comments at 2.
[100] AAE & NRDC Reply Comments at 2.
[101] AAE & NRDC Reply Comments at 2-3.
[102] Advisors' Report at 13.
[103] Advisors' Report at 14.

The Advisors state, however, that there may be a partial solution to allow a limited number of buildings that are currently actively pursuing energy efficiency improvements to have access to their whole-building data sooner than the date of full implementation of AMI, and recommend that the Council ask ENO to explain whether manual aggregation of data for a limited number of buildings would impose an undue cost on ratepayers relative to the benefits ratepayers would receive through the earlier deployment of energy efficiency measures for those buildings, or whether there is some other partial solution that can be applied to enable some building owners to receive the whole-building data without imposing unreasonable costs on ratepayers or unreasonable burdens upon the utility;[104] and

WHEREAS, with respect to how to implement the automation of aggregating and transmitting building energy use data to the building owners after the implementation of AMI, the Advisors prefer the option of building an internal software solution that can aggregate and transmit data to EPA's Portfolio Manager for approximately $25,000, plus labor costs.[105] They state that this is a very low cost and the EPA's Portfolio Manager software is widely used and well understood in the energy industry.[106] The Advisors note that while the second option, to have a third party provide a turnkey benchmarking program at a higher price may offer a few more options to customers, it appears from the comments that parties are generally satisfied with transmitting data in a form that works with Portfolio Manager, and there is likely little need to spend additional funds creating an alternative.[107] The Advisors recommend that the Council authorize ENO to

[104] Advisors' Report at 14.
[105] Advisors' Report at 14.
[106] Advisors' Report at 14.
[107] Advisors' Report at 15.

proceed with the option to build internal software and utilize Portfolio Manager at an anticipated cost of $25,000 (plus labor, as described);[108] and

WHEREAS, with respect to the Affordable Housing Intervenors comment that the information should be provided at a high degree of resolution (*e.g.*, hourly, daily, and monthly),[109] the Advisors recommend that whole-building data be limited to aggregated data on a monthly level.[110] They state that this level of granularity is sufficient for the purposes of an owner benchmarking a building utilizing EPA's Energy Star Portfolio Manager, to compare an owner's building with other similar buildings, and to track the performance of building efficiency improvements.[111] With the implementation of AMI, the Advisors recognize that data which is more granular than the monthly level data will be available to ENO as grid modernization continues.[112] However, the Advisors argue, the provision of more granular level data to building owners, even when aggregated, may increase the potential for customer privacy concerns.[113] For example, with hourly data, the building owner could identify when the tenants with electric cars were charging their vehicles and infer from that data the habits and location of the tenants with electric vehicles.[114] To the extent additional granularity of data is desired by building owners in the future, the Advisors state that the Council will need to establish whether the proposed safeguards of at least four active accounts with unique customers and no individual customers with an account or combination of accounts comprising more than 50% of the total annual building energy use are sufficient, or if additional safeguards will be required to protect customer privacy.[115]

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[108] Advisors' Report at 15.
[109] NHT Comments at 3-4.
[110] Advisors' Report at 15.
[111] Advisors' Report at 15.
[112] Advisors' Report at 15.
[113] Advisors' Report at 15.
[114] Advisors' Report at 15.
[115] Advisors' Report at 15.

The Advisors note that this will not prevent ENO from providing the more detailed data that it is able to provide if the building owner procures the specific written permission of the Customers to do so;[116] and

WHEREAS, the Council finds that the information submitted by the parties and the Advisors indicates that it is reasonable to authorize ENO to proceed with building out a solution compatible with its AMI that would allow it to automatically aggregate and transmit data to building owners through its planned AMI CEP and Energy Star Portfolio Manager at an anticipated cost of approximately $25,000 plus labor. The Council agrees that it is not reasonable to require ENO to develop an automated system compatible with its current billing system at a cost of approximately $450,000 where that software would become unnecessary upon the full implementation of AMI. The Council would like ENO and the parties to file additional information with the Council regarding whether there is any potential partial solution that could allow some building owners to receive data during the interim period prior to full AMI deployment at a lower cost, and what the benefits to ratepayers might be from the earlier release of such data; and

WHEREAS, the Advisors have informed the Council that since the filing of the Advisors Report, the Advisors have conducted two successful teleconferences between the parties to discuss what possible interim solutions might look like, and the parties continue to exchange information and discuss options; and

WHEREAS, the Advisors have recommended to the Council that the parties be allowed to continue such discussions regarding a potential interim solution; and

[116] Advisors' Report at 15.

WHEREAS, for the reasons set forth above, the Council wishes to proceed to authorize the release of aggregated whole-building data under circumstances that are protective of customer privacy upon the full implementation of AMI in ENO's system, and wishes to obtain further information from the parties regarding whether there might be a reasonable partial solution that would allow some building owners to obtain such data prior to the full implementation of AMI; now therefore:

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

1. Revise the Customer Service Regulations as described herein, to permit the release of aggregated whole-building data to building owners under certain, specified conditions, and require ENO to provide such data to building owners or their designated representatives upon request pursuant to a Council-approved process once AMI has been fully deployed within the ENO system.

2. Authorize ENO to proceed with the option to build internal software to aggregate the data and transmit it to the Portfolio Manager at an anticipated cost of $25,000 (plus labor, as described herein).

3. Require ENO to file, within 60 days of the adoption of this Resolution, for Council review and approval:

    a. Draft processes for the release of whole-building data, including, but not limited to, the processes for ENO's customers to request the release of the data, for verification of the building owner's identity, verification of the specific meters attached to the building, notification to customers whose accounts are aggregated in the whole-building data, and for the customer of any account to which an involved meter is attached to challenge the appropriateness of the release of the data either because there are special circumstances where they believe the Council's rules would not sufficiently protect their privacy or because they believe the building owner or building owner's designated agent is using the data for improper purposes.

    b. Further information regarding the costs and benefits anticipated to ratepayers of releasing aggregated whole-building data upon request to a limited number of building owners prior to the full implementation of AMI on the ENO system.

4. Request that Intervenors in the docket file, within 30 days of the adoption of this Resolution, any information in their possession regarding the number and size of buildings that Intervenors desire to have included in an interim solution allowing the release of whole-building data prior to the full implementation of AMI on

ENO's system, and the dollar value of the benefits to be gained by ratepayers, to assist ENO and the Council in ascertaining the potential costs and benefits of requiring ENO to respond to such requests.

5. Within 60 days of the adoption of this Resolution, the Advisors shall conduct two more teleconferences among the parties to this docket to discuss possible interim solutions.

6. Within 90 days of the adoption of this Resolution, any party may file a proposed interim solution for the Council's review and consideration. Any party may file comments on such proposal within 30 days of the filing of a proposed interim solution, and reply comments may be filed by any party within 30 days of the filing of comments.

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

YEAS: **Banks, Brossett, Giarrusso, Gisleson Palmer, Moreno, Nguyen, Williams - 7**

NAYS: **0**

ABSENT: **0**

AND THE RESOLUTION WAS ADOPTED.

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