

## 4. Data Access and Privacy Recommendations

### 4.1 Customer Data Privacy Framework

On June 28, 2013, in Case No. U-17102, the Commission adopted a foundational framework for data access and privacy.<sup>1</sup> Coinciding with the recent deployment of AMI in Michigan, this framework was intended to “balance(s) the interests of the company in providing reliable utility services with the interests of customers in assuring that their information is collected, used, and disclosed appropriately.” In recognizing this need, the Commission also acknowledged that data protection standards, practices, and procedures are constantly evolving and are being updated at the national and state level.<sup>2</sup>

“an acceptable data privacy policy should limit collection, use, or disclosure of any customer information to accomplishing primary utility purposes only. Primary utility purposes should encompass not only traditional utility service but should also include all other regulated programs including energy efficiency, demand management, renewable energy, and low-income programs. Should a utility wish to collect, use, or disclose customer information for a secondary (i.e., non-utility) purpose, the utility must obtain informed consent from the customer in advance.”<sup>3</sup>

Throughout this current MPG Customer Education and Participation workgroup process addressing data access and privacy, Staff researched national recommendations, rules from other states, and utility best practices. This investigation revealed that Michigan’s current policies should be updated to meet the needs of the evolving consumer and energy landscape. Since the issuance of the October 17, 2013 Order, there has been significant learnings across the industry and improved research and guidance from the federal government on how to properly design and implement effective data access and privacy policies. While the existing policy of limiting data access to primary purposes and regulated programs has led to a significant expansion in utility program offerings, the limited accessibility of this data to non-utility service providers has hindered the development and effectiveness of third-party energy services in Michigan. Subject matter experts acknowledged this during the stakeholder sessions and recognized that customers have voluntarily compromised their privacy and security through the sharing of personal logins to obtain energy services in Michigan. Although this is the customer’s choice to do so, utility customers should not be in a situation that compromises their own privacy and security to facilitate their access to the third-party energy services. Aside from providing streamlined access to customer usage and billing data by authorized third-parties, Staff proposes the following updates to the Commission guidance on data access and privacy for investor-owned utilities:

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<sup>1</sup> <https://mi-psc.force.com/s/filing/a00t0000005pQrBAAU/u171020014>

<sup>2</sup> <https://mi-psc.force.com/s/filing/a00t0000005pQrNAAU/u171020026>

<sup>3</sup> <https://mi-psc.force.com/s/filing/a00t0000005pQrNAAU/u171020026>

1. Adoption of the foundation principles outlined in the Fair Information Practice Principles (FIPPs) outlined by the Department of Homeland Security.
  - a. Transparency
  - b. Individual Participation
  - c. Purpose Specification
  - d. Data Minimization
  - e. Use Limitation
  - f. Data Quality and Integrity
  - g. Security
  - h. Accountability and Auditing
2. Requiring greater transparency of the personal information the utility collects, maintains, purchases, and shares with its contractors and agents and its associated primary purpose through annual disclosure to customers and regulators
3. Updating the existing definition of "primary purpose" to increase the protection of customer personal information and support an equal playing field in the competitive energy services market.
4. Adopting a definition of un-shareable personal information, to ensure that highly sensitive information is available only from the customer at their discretion rather than available from the utility.
5. Adoption of data aggregation standards for market research, local government benchmarking, building benchmarking, academic research, and regulatory policy analysis and development.
6. Adopting a definition and standard for sharing of anonymized customer data for academic research purposes.
7. Adoption of data sharing dispute resolution process that mitigates the need for complaint cases before the Commission.
8. Approval of deferred accounting treatment to better understand the costs associated with the proposed expansion of data sharing and the impact on utility operations.
9. Adoption of nationally recognized standards and protocols that provide customers and their chosen third parties with easy, secure, and portable access to energy usage information to further empower them in monitoring and managing their energy usage.
10. Consideration of enabling home area network technology for low-income and vulnerable populations, improving the ease of access to AMI meter and billing information and the subsequent benefits without the need for at home internet connectivity.

Staff believes this updated guidance will align the practices of Michigan IOUs with national best practices and help foster and accelerate Michigan's clean energy transition, including the achievement of State carbon reduction goals.

**Recommendation: Staff recommends that the Commission issue updated guidance (referenced as "framework" throughout the Staff report) regarding customer privacy and**

**data access, referencing the “Customer Data Privacy (Exhibit A)” used in U-17102 as a template for this framework.**

#### 4.1.1 Fair Information Practice Principles (FIPPS)

In 1974, as part of the Privacy Act, the federal government developed FIPPs to serve as the foundation of privacy law in the United States. Aimed at ensuring fairness, privacy, and security in a technology-based society, these principles could be widely adopted in data-based organizations to instill trust in consumers wishing to participate in the digital economy. Since their inception, FIPPs have evolved over time to meet the needs of the developing economy. In 2013, The Organization for Economic Cooperation and Development (OECD)<sup>4</sup> set out to update privacy guidelines:

“Over the last three decades, personal data have come to play an increasingly important role in our economies, societies, and everyday lives. Innovations, particularly in information and communication technologies, have impacted business operation, government administration, and the personal activities of individuals. New technologies and responsible data uses are yielding great societal and economic benefits. The volume of personal data being collected, used, and stored is vast and continues to grow. Modern communications networks support global accessibility and continuous, multipoint data flows. The potential uses of personal data have increased tremendously as a result of the wide range of analytics that can provide comprehensive insights into individuals’ movements, interests, and activities. At the same time, the abundance and persistence of personal data have elevated the risks to individuals’ privacy. Personal data is increasingly used in ways not anticipated at the time of collection. Almost every human activity leaves behind some form of digital data trail, rendering it increasingly easy to monitor individuals’ behavior. Personal data security breaches are common. These increased risks signal the need for more effective safeguards in order to protect privacy.”

With these details in mind, the OECD provided revised FIPPs guidance for consideration by both public and private sector entities with the responsibility of collecting and maintaining private citizen data. Based upon a common interest in promoting and protecting the fundamental values of privacy, individual liberties, and the global free flow of information, these guidelines provide a common foundational understanding of fair, reasonable, and prudent treatment of personal data.

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<sup>4</sup> The OECD is a unique forum where governments work together to address the economic, social and environmental challenges of globalization. The OECD is also at the forefront of efforts to understand and to help governments respond to new developments and concerns, such as corporate governance, the information economy and the challenges of an ageing population. The Organization provides a setting where governments can compare policy experiences, seek answers to common problems, identify good practice and work to co-ordinate domestic and international policies. The OECD member countries are: Australia, Austria, Belgium, Canada, Chile, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Korea, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, the Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States. The European Union takes part in the work of the OECD. [Microsoft Word - Modernising\\_priv\\_framework.docx \(oecd.org\)](#)

- **Collection Limitation Principle**
  - There should be limits to the collection of personal data and any such data should be obtained by lawful and fair means and, where appropriate, with the knowledge or consent of the data subject.
- **Data Quality Principle**
  - Personal data should be relevant to the purposes for which they are to be used, and, to the extent necessary for those purposes, should be accurate, complete, and kept up to date.
- **Purpose Specification Principle**
  - The purposes for which personal data are collected should be specified not later than at the time of data collection and the subsequent use limited to the fulfilment of those purposes or such others as are not incompatible with those purposes and as are specified on each occasion of change of purpose.
- **Use Limitation Principle**
  - Personal data should not be disclosed, made available or otherwise used for purposes other than those specified in accordance except:
    - with the consent of the data subject.
    - by the authority of law.
- **Security Safeguards Principle**
  - Personal data should be protected by reasonable security safeguards against such risks as loss or unauthorized access, destruction, use, modification, or disclosure of data.
- **Openness Principle**
  - There should be a general policy of openness about developments, practices, and policies with respect to personal data. Means should be readily available of establishing the existence and nature of personal data, and the main purposes of their use, as well as the identity and usual residence of the data controller.
- **Individual Participation Principle**
  - Individuals should have the right:
    - to obtain from a data controller, or otherwise, confirmation of whether or not the data controller has data relating to them;
    - to have communicated to them, data relating to them;
      - within a reasonable time;
      - at a charge, if any, that is not excessive;
      - in a reasonable manner; and
      - in a form that is readily intelligible to them;
    - to be given reasons if a request made under the above points are denied, and to be able to challenge such denial; and
    - to challenge data relating to them and, if the challenge is successful to have the data erased, rectified, completed or amended

- **Accountability Principle**

- o A data controller should be accountable for complying with measures which give effect to the principles stated above.

While this guidance is not directed at utilities or any specific industry, it is intended to set minimum standards and values which can be built upon by any entity to meet individual needs or policy. In the years since the Commission's last guidance on data privacy policy, the integration of FIPPs into utility privacy policies has become common practice across both private and public sectors. As recognized in the stakeholder presentations and comments, FIPP principles are foundational to the utility data privacy and sharing policies in place in California, Arkansas, and North Carolina. While many of these core privacy principles are mentioned in the existing guidance and current Michigan utility data privacy tariffs, the MI guidance and corresponding tariff language generally falls short of honoring all the core concepts outlined by the FIPPs. The following section outlines suggested updates to the Commission guidance regarding the collection, use, disclosure, and protection of personally identifying information of the utility's customers. These recommendations seek to better align existing guidance with the FIPPs principles while empowering customers and third parties to participate in Michigan's clean energy transition.

**Recommendation: Staff recommends the adoption of the FIPPs foundation principles outlined by the Department of Homeland Security including, transparency, individual participation, purpose specification, data minimization, use limitation, data quality and integrity, security, and accountability and auditing.**

#### 4.1.2 Increased Transparency and Regulatory Oversight Recommendations

Under the current guidance issued in U-17102, Utilities are limited to collecting Customer Account Information, Customer Usage Data, and Personal Data as necessary to accomplish Primary Purposes. Primary purposes are defined as.

*"Primary Purpose" means the collection, use, or disclosure of information collected by the company or supplied by the customer in order to: (1) provide, bill, or collect for, regulated electric or natural gas service; (2) provide for system, grid, or operational needs; (3) provide services as required by state or federal law or as specifically authorized by an order of the Commission, or; (4) plan, implement, or evaluate, energy assistance, demand response, energy management, energy efficiency, or renewable energy programs by the Company or under contract with the Company, under contract with the Commission, or as part of a Commission-authorized program conducted by an entity under the supervision of the Commission, or pursuant to state or federal statutes governing energy assistance. [The definition of "primary purpose" is intentionally broad to cover all regulated utility activities including programs under 2008 PA 295 and energy assistance programs.]"*

The intentionally broad characterization of primary purposes in the Commission's original guidance, along with a lack of consistent reporting, has created a situation where both regulators

and customers are not fully aware of the personal data a regulated utility maintains or what programs, offerings, or studies are considered primary purposes based on each IOU's interpretation of the previous guidance. Since 2013, the number of voluntary offerings, services and programs from Michigan's IOUs have grown significantly. From mobile apps to smart thermostats, new offerings present utilities with access to a whole new pool of personal identifiable data that was not prominent when the Commission issued its previous guidance. In recognition that this abundant data trend is likely to continue as the energy service market evolves to meet the needs of the clean energy economy, Staff recommends instituting annual reporting by IOUs on personal data collection necessary to support primary purposes. These annual filings would also benefit from the inclusion of the internal policies and procedures of the IOU regarding data privacy and security as well as a disclosure of contractors and agents receiving personal data, the personal data being shared, and safeguards in place to protect its release by these entities. (non-disclosure agreements, confidentiality agreement, use limitation, etc.). This type of filing appears to have been envisioned by the Commission in their 2013 Order,

"Commission recognizes that utility customers are generally unaware of, or do not have access to, internal utility policies and practices, thus, transparency about what a provider's privacy policy actually entails is an essential part of the process of implementing a reasonable and enforceable privacy framework."<sup>5</sup>

The Commission has yet to establish a formal requirement for public reporting of this information.

**Recommendation: The Commission should direct utilities to file a disclosure with the Commission outlining the personal data collected and stored by the IOUs and the primary purpose associated with the data field (i.e., account set-up, payment, etc.). This disclosure should also outline personal information shared with contractors and agents (without customer consent) in order to perform primary purposes on behalf of the utility any customer safeguards (non-disclosure agreement, confidentiality agreements, etc) associated with this sharing. Transparency regarding the amount of personal information collected, who it has been shared with, and the terms and conditions of that sharing is necessary in assessing the reasonableness of a utility's internal data sharing policies and existent safeguards in place to protect this information. Based on the quality and content of these disclosures, the Commission can determine the need to pursue formal information gathering regarding personal information collection and sharing in the form of a show cause Order.**

## 4.2 Primary Purpose Definition and Energy Services

Under existing privacy guidance, primary purposes include an IOU or its contractors or agents to perform market research for energy services utilizing personal customer data without prior customer consent. While this personal information often has a legitimate primary purpose

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<sup>5</sup> <https://mi-psc.force.com/s/filing/a00t0000005pQrBAAU/u171020014>

associated with its collection (account set-up, billing, etc.) the IOUs ability to re-purpose that data to market voluntary programs and energy services to individual customers warrants reconsideration given the evolving energy landscape. Of greatest concern is utility-offered energy services such as demand response, load management, and energy efficiency all competing in a competitive market. IOU supported programs operating in these markets have a major advantage due to their ability to access personal customer data for the planning, implementation, and evaluation of their energy services programs without customer consent. This arrangement not only skews the competitive market's effectiveness but also promotes unnecessary risks to a customer's private data for the development of voluntary programs and services that *may* be available to the customer in the future. Given the elective nature of these programs and the recognition that market research is not an essential part of providing customers safe and reliable utility service, Staff recommends the Commission remove the following portion from the existing primary purpose definition;

*"(4) plan, implement, or evaluate, energy assistance, demand response, energy management, energy efficiency, or renewable energy programs by the Company or under contract with the Company, under contract with the Commission, or as part of a Commission-authorized program conducted by an entity under the supervision of the Commission, or pursuant to state or federal statutes governing energy assistance."*

Staff recommends that these activities be classified as secondary purposes and subject to customer consent prior to being afforded access to personal customer data. For instance, a customer signing up for a voluntary energy service offering from the IOU could also authorize the Company to use their data for tailoring of future voluntary offerings. However, a customer who has never provided consent to participate in a Company voluntary energy service offering would not be subject to any tailoring of services or market research based on their personal data. Given the captive nature of the IOU ratepayers, removing the ability of the IOU and its contractors and agents to perform market research using personal data as a term of service to accepting monopoly services is appropriate.

The Commission should also consider the removal of subsection four in order to address the market advantages provided to Company contractors operating regulated energy service programs within competitive markets. The current data asymmetry allowed by providing only utility selected contractors and agents access to personal information without customer consent creates an unlevel playing field in the competitive market for energy services. Currently, utility affiliated providers of EWR, distributed generation, and DR can provide targeted and tailored programs unique to customers and based on their "actual" data during the first interaction with a potential customer. Non-affiliated providers are required to learn and explain the unique process for requesting third-party access to usage data in the customer jurisdiction (if it exists), wait for the potential customer to submit the request, wait for the data to be compiled, and wait for delivery of the data in a non-standardized presentation it must then adapt for its own use. Only then could the provider begin to develop an offering of a similar product. Staff believes that

regardless of affiliation with the utility, energy service providers should have equal opportunity to offer equivalent services in a functional market. Staff believes that prudent policies should avoid preferential treatment for data access between regulated program offerings and their non-regulated competitors. This is especially important in programs such as EWR where the regulated offerings are legislatively (or by Commission order) limited in funding or participation. In these instances, regulated programs may fall short of meeting the public and rate-payer demand for the services and thereby limiting customer access and choice.

**Recommendation: Staff recommends updating the existing definition of “primary purpose” to increase the protection of customer personal information and support an equal playing field in the competitive energy services market.**

#### 4.2.1 Personal Data Sharing with Contractors, Agents, Third Parties

The current definition of personal data or personally identifiable information (PII) is specific pieces of information collected or known by the Company that merit special protection including the standard types of positive identification information used to establish an account. PII held by utilities varies significantly from a social security number to energy usage data, all of which fall under this classification. While the classification itself is accurate, the existing policy of allowing a utility to share all personal data with unregulated contractors and agents without consent is not appropriate. While personal data such as energy consumption and customer list may be necessary in the implementation and evaluation of legitimate third-party operated utility offerings, other highly sensitive PII required for customer account setup and service procurement should not be shared by the utility under any circumstances. While the Commission recognized the incremental need to protect some data in its initial guidance subsection (f); “[Note that this provision does not include the release of Personal Data or Personally Identifiable Information; as the Michigan Energy Providers point out, in the case of disclosure to a third party, the customer should always be the source of this information.]”<sup>6</sup>

The current guidance continues to allow the Company to provide personal data and personally identifiable data to their contractors and agents without customer knowledge or consent. This process is in direct conflict with the Commission’s previous conclusion that customers should “always” be the source of this information. To address this concern, Staff recommends developing a specific category of personal data that would be un-shareable once legitimately obtained by the Company for a reasonable primary purpose. Un-shareable personal information would include birth date, social security number, location, biometrics, bank and credit card account numbers, driver's license number, credit reporting information, bankruptcy or probate information, health information, security questions, ground position satellite (GPS) location, electronic device identifier, or network or internet protocol address. Explicitly safeguarding this information from sharing with all agents, contractors, or third parties outside its original purpose for collecting is warranted given the high individual impact of a breach of these data fields.

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6 <https://mi-psc.force.com/s/filing/a00t0000005pQrBAAU/u171020014>



**Recommendation: Staff recommends adopting a definition of un-shareable personal information, to ensure that highly sensitive information is available only from the customer at their discretion rather than available from the utility.**

### 4.3 Data Sharing for Secondary Purposes

With the recommendation to move energy services market research and product development to a secondary purpose, Staff realizes this could influence innovative utility-led offerings in Michigan. To minimize the impact of these new regulatory requirements, Staff recommends simultaneously adopting more prescriptive statewide data aggregation standards and lifting the existing ban on data sharing for purposes other than primary purposes. With proper standards governing aggregated data sets, potential customer insights can be derived and utilized in business/product development without the need to invade individual privacy. While the previous Commission guidance defined the concept of aggregated data, an enforceable standard or discussion of pathways to obtain aggregated data for non-utility energy stakeholders was not included. As outlined in the stakeholder process by several subject matter experts, promotion and accessibility to aggregated datasets are key components to fostering the growing clean energy economy in Michigan, all while obtaining greater private contribution to Michigan's decarbonization goals. In order to facilitate this change, Staff proposes updating the definition of secondary purposes to explicitly identify public interest use cases where a utility shall provide aggregated data to a requestor or contractor or agent.

In the current guidance, the Commission recognizes the 15/15 standard for aggregation but does not explicitly adopt it as an aggregation standard. Staff proposes to formally adopt the 15/15 aggregation standard as a minimum standard for aggregated datasets for residential and commercial customers. Under this standard, there must be at least fifteen customers to generate the aggregated data report; and within any customer class, no single customer's data or premise associated with a single customer's data may comprise 15 percent or more of the total data aggregated per customer class. For industrial customers, given the significantly fewer number of customers that make up this class, Staff proposes a minimum standard of 4/50. The 4/50 standard would ensure that aggregation of this customer class contained a minimum of four accounts in which no individual account makes up more than 50% of the overall dataset.

**Recommendation: Staff recommends the formal adoption of the 15/15 aggregation standard as a minimum standard for aggregated datasets for residential and commercial customers. Staff recommends the formal adoption of the 4/50 aggregation standard as a minimum standard for aggregated datasets for industrial customers.**

#### 4.3.1 Aggregated Data for Market Research and Product Development in Competitive Energy Services Markets

As stated earlier in this report, Staff no longer believes that individuals' personal data sets should be made available to utility contractors and agents for the purpose of market research and product development in competitive markets. However, Staff continues to recognize the valuable

role that relevant data plays in the innovation and development of growing markets such as the energy services market. To strike a balance between customer privacy and market support, Staff proposes that a utility only be able to provide contractors and agents performing services in regulated markets with aggregated data for the purposes of market research and product development. Given the anonymous nature of these datasets, the information provided to contractors and agents should also be posted publicly to ensure all service providers are competing on a level playing field. Staff notes that this would not require contractors and agents of the IOU to obtain customer consent to use for the purposes of *1) provide, bill, or collect for, regulated electric or natural gas service; (2) provide for system, grid, or operational needs; (3) provide services as required by state or federal law or as specifically authorized by an order of the Commission*. The requirement would only eliminate the IOUs' ability to share personal data collected in the process of operating their regulated service with their agents and contractors for the purpose of *planning, implementing, or evaluating demand response, energy management, energy efficiency, or renewable energy programs* that will be voluntary in nature, and offered in competitive markets, without the consent of the customer. In order to minimize the customer privacy risks associated with this type of sharing and continue to foster market development and innovation in the fields of energy services, Staff proposes aggregate data be provided for market research purposes at the zip code level in monthly intervals subject to the minimum standards stated above.

<b>Aggregation Standards</b>	
<u>Customer Type</u>	<u>Granularity</u>
Residential and Commercial	Zip Code (Minimum aggregation of 15/15)
Industrial	Zip Code (Minimum aggregation 4/50)
* Aggregable Datasets: (Monthly) KWh, Demand, Peak Demand	

**Recommendation: Staff recommends the adoption of the above data aggregation standards for market research and product development in competitive energy service markets.**

### 4.3.2 Aggregated Data Availability – Local Government Benchmarking

With a growing number of local governments considering adoption of their own internal goals and mandates around environmental justice and clean energy, it is important to recognize the power of data in the benchmarking process, and verification and accountability of these processes. Empowering these stakeholders with the necessary data to make cost effective decisions and measure and verify internal goals with aggregate data that protects customer privacy should be considered at this time by the Commission. Providing explicit regulatory pathways to obtaining this information in a clear, concise, and timely process is key to supporting these stakeholders on their individual energy journeys. Effective public policy in this area should seek to promote greater collaboration between these non-customer groups and their IOUs to meet and exceed the EWR and renewable energy goals of the utilities beyond what is currently mandated by statute and

funded through customer rates. Staff believes that these data access policy reforms are needed to increase energy efficiency deployment within the State while better targeting building shell improvements as recommended in the Michigan Council on Climate Solutions: Building and Housing Workgroup Recommendations.<sup>7</sup> Staff proposes that aggregated data sets provided to local governments for this purpose be held to the following standards.

<b>Aggregation Standards</b>	
<i>Customer Type</i>	<i>Granularity</i>
Single Unit Residential and Commercial	Minimum aggregation of 15/15
Industrial	Minimum aggregation 4/50
Multi-Unit Buildings	Minimum aggregation 4/50
* Aggregable Datasets: KWh, Demand, Peak Demand	

**Recommendation: Staff recommends the adoption of the above data aggregation standards for local government benchmarking.**

### 4.3.3 Building Owners and Multi-Unit Dwellings

Over the last decade, an increasing number of building owners have taken an interest in benchmarking and improving their building energy usage and reducing their carbon footprint. Based on information provided in the stakeholder sessions; this process has been challenging for buildings in which tenants have their own individual meters from which they are billed. Current guidance provides pathways for building owners to obtain this information by having each individual account owner in the building provide formal consent for the utility provider to share the information with the building owner, or to obtain their own information and share it with the building owner. This process has proven unduly burdensome in practice, and unnecessary given the utility’s ability to aggregate the data in a manner that provides sufficient privacy protection for tenants. Providing these stakeholders with energy usage data in aggregate form can increase the ease of assessing investments in improving the building envelopes of Michigan’s currently available residential housing stock and multi-unit commercial buildings. As outlined in the Michigan Council on Climate Solutions: Building and Housing Workgroup Recommendations, multi-family buildings and low-income housing are the most difficult structures for integration of energy waste reduction. Simplified access to data can better inform the value proposition and benefits of EWR investments by these stakeholders and will likely improve the ease of integration. The availability of this data to building owners may also provide access to new resources for financing and Staff believes there is a large untapped potential for EWR within multi-tenant buildings that could significantly contribute to achieving the States long term decarbonization goals. Staff also believe that investments by this demographic will provide much needed relief from unnecessary costs associated with energy waste, which is currently borne by the tenants, who lack incentive or ability to partake in energy waste reduction measures. Staff also notes that

<sup>7</sup>[https://www.michigan.gov/documents/egle/Workgroup-Recommendations-Buildings-Housing\\_739165\\_7.pdf](https://www.michigan.gov/documents/egle/Workgroup-Recommendations-Buildings-Housing_739165_7.pdf)

without access to accurate building energy consumption data, landlords and therefore prospective tenants, have little information about the energy burden they inherit with the signing of a rental agreement. As the MPSC looks for pathways to reducing the number of households in Michigan with unsustainable energy burdens as stated in the February 18, 2021 Order in U-20757, building owner data access should be considered a critical component of a cost-effective solution to this problem.

In order to derive the greatest value from the availability of building level data, Staff believes it is important to align data access policies with existing national standards and program offerings. Throughout the stakeholder process, the Energy Star Portfolio Manager<sup>8</sup> was referenced as the current best practice for building energy tracking and assessment which ensures whole building information is provided with data portability and interoperability with Energy Star Portfolio Manager. Building owners whose tenants do not meet the aggregation thresholds, should also have the ability to request information from their utility in this Energy Star Portfolio friendly format after obtaining consent from all tenants.

<b>Aggregation Standards</b>	
<i>Customer Type</i>	<i>Granularity</i>
Multi-Unit Buildings	Minimum aggregation 4/50
* Aggregable Datasets: KWh, Demand, Peak Demand	

**Recommendation: Staff recommends the adoption of the above data aggregation standard for building owners and multi-unit dwellings. Staff recommends whole building data is interoperable with Energy Star Portfolio Manager as it is the current national standard for energy tracking and assessment. Building owners whose tenants do not meet the aggregation thresholds, should also be able to request information in the Energy Star Portfolio Manager friendly format after obtaining consent from all tenants.**

#### 4.3.4 Aggregated Data Availability for Regulatory Policy Considerations

As recognized in the Commission’s COVID-19 and Storm Response dockets and most recently in the Energy Affordability and Accessibility Collaborative, there needs to be an emphasis on the importance of data collection, transparency, and analysis to inform future regulated program design and policy changes. In order to ensure a transparent, inclusive, and data driven regulatory process, the Commission should consider making pertinent aggregated datasets available publicly on its website. These datasets should be aggregated to protect individual customer privacy while still informing policy makers to ensure all IOU customers have non-discriminatory access to safe, affordable, reliable, and equitable energy service. For nearly two decades the Commission has used a similar practice regarding system reliability (SAIFI, SAIDI, CAIDI (Customer Average Interruption Duration Index)) whereas the aggregation size was the entire customer population. Staff and intervenors’ analysis of these reliability datapoints have helped guide Commission

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<sup>8</sup> [Portfolio Manager | ENERGY STAR](#)

policies around tree trimming and storm response and has been invaluable in the regulatory process. Staff therefore recommends the Commission consider expanding these publicly available aggregated data sets to facilitate improved regulatory analysis and subsequent policy. Given the ever-evolving energy policy landscape and customer needs, Staff also recommends these datasets be developed with input from interested stakeholders and revisited regularly to ensure they are meeting the public need.

Potential data sets: aggregated to zip code with a 15/15 minimum aggregation standard when utilizing customer data for the aggregated dataset.

<i><u>Interest Areas</u></i>	<i><u>Use Cases</u></i> <i><u>(Aggregated to Zip Code)</u></i>
System Performance	Reliability (SAIFI, SAIDI, CAIDI), Equipment Failures, Wire Downs, Shut-offs, Restoration Costs
Investment Equity	Average Age of Infrastructure, Capital Investment, Energy Efficiency Rebates, DR Participants, Customers on EV Rates
Affordability	Arrearages, Late Fees, Customers on Payment Plans

**Recommendation: Staff recommends the adoption of the above data aggregation standards for regulatory policy analysis and development.**

#### 4.3.5 Data Access for Research Institutions (Academia)

Within the State of Michigan there are multiple research universities that are actively working on expanding the existing body of knowledge in the numerous energy public policy fields including vehicle electrification, rate design, and energy efficiency. However, currently the relevancy of this research has been hindered by the lack of Michigan specific datasets available for analysis and evaluation. In recognition of the currently untapped potential to leverage academia in the Michigan energy policy discussion, Staff recommends that future data access tariffs allow for sharing of aggregated data sets with academic institutions to facilitate research intended to inform and support the development of energy policies in Michigan. In instances where levels of personal information are reasonably required to perform the intended research, IOUs should be authorized to share this personal data as anonymized data. Staff recommends that the Commission adopt the following definition of anonymous data,

Anonymous data - A data set containing individual sets of information where all identifiable characteristics and information, such as, but not limited to, name, address, account number, or social security number, are removed (or scrubbed) so that one cannot reasonably re-identify an individual customer based on, for example, usage, rate class, or location.

Given the increased ability to reidentify customers in anonymous data sets, Staff proposes that such data sets be subject to a higher customer threshold than aggregated data sets and be protected by non-disclosure agreements that ensure any published materials do not contain individual customer information.

<i>Anonymous Data Standards</i>	
Residential Customer	100/10
Commercial Customer	100/10
Industrial	100/10

**Recommendation: Staff recommends the adoption of the above definition and standards for anonymized customer data used for academic research purposes.**

#### 4.4 Data Access Dispute Resolution: Company and Third-Party

Under current guidance, IOUs are provided full discretion on the fulfillment of special data requests that are deemed to be outside of normal utility service and result in expenses that would not otherwise be incurred. Staff no longer feels this level of discretion is appropriate given the potential uses of datasets in rate cases and other proceedings before the Commission. The IOUs' ability to unilaterally block access to data that may not be in their business interest without adequate oversight is not appropriate. Ensuring that these denials of requested data are appealable to an unbiased third party is key to good public policy. Staff recommends the appeals be subject to review and decision by Commission Staff prior to proceeding along the typical complaint process. This will ensure the timely provision of data for decision making while avoiding the significant staff burden and time associated with a fully litigated complaint case.

**Recommendation: Staff recommends the adoption of a data sharing dispute resolution process that mitigates the need for complaint cases before the Commission.**

#### 4.5 Data Access Cost Recovery Regulatory Treatment

Staff recognizes that the expansion of the availability of aggregated energy usage data will come at a cost that will be likely front-loaded. As outlined throughout the recommendations section of this report, Staff believes that the potential benefits for ratepayers (especially vulnerable populations) that can be obtained through this expansion will likely exceed these costs. Therefore, Staff proposes that initially the cost associated with providing this data be booked by the Company and recovered in base rates rather than from the requestor. However, tracking the costs of compliance with the data privacy tariffs will be key to examining this policy moving forward. Therefore, Staff recommends the IOUs separately track the cost of compliance and supporting documentation for review as part of future general rate cases. Based on this review, the Commission can make informed determinations if recovery through general rates is appropriate for third-party data access.

**Recommendation: Staff recommends the approval of deferred accounting treatment to better understand the costs associated with the proposed expansion of data sharing and the impact on utility operations.**

## 4.6 Customer Access and Sharing of Customer Energy Usage Data

While the existing guidance provides customers a path to obtaining and sharing their own customer energy usage data, the format and process remain highly unstandardized nearly a decade later. This is despite the existence of a nationally recognized and government supported energy usage data format and process called the Green Button, including Green Button Connect. The Green Button standard is based on the Energy Services Provider Interface (ESPI) data standard released by the North American Energy Standards Board (NAESB) and currently represents the industry standard for the sharing of energy usage between customers and third parties. Staff recommends Green Button Connect as appropriate foundations for easy and secure access to customers' energy usage information in a consumer-friendly and computer-friendly format.

Green Button Connect can provide third-party data access, which is important to achieve clean energy goals, enable new technologies, and build the grid of the future as third parties can reach more customers and in different ways than traditional utility programs. Green Button Connect can also lower end use customer costs by utilizing existing utility infrastructure rather than building redundant third-party metering capabilities to meet customer needs. For example, with substantial AMI investment throughout the state, customers would benefit from a robust utility data sharing system to meet the needs of various applications such as solar and battery installations and reducing barriers for DR and DER aggregation. Ensuring customer privacy is paramount when discussing data access. Customer privacy can be achieved through Green Button Connect. Staff is aware of instances where the absence of robust data sharing has resulted in inaccurate or old data, which is currently causing problems with third-party DR aggregation and will only worsen as DR and DER aggregation expands. Green Button Connect would prepare for the grid of the future where there are increases in DER penetration, and there is potential for additional market products or other services provided by third parties. Staff recommends that Green Button Connect be the preferred solution as it would provide secure, continuous data access with shortened data intervals, which will be key to the success or failure of FERC Order 2222, as well as resolve current issues with data access.

Green Button Connect should be supplying data that includes account number, whether the account includes multiple properties or sites, billing line items, and rate structure. This information is necessary for new services from the private sector, which include demand response software, efficiency recommendations, smart meter data analysis, and cost minimization services.

While utility proprietary solutions can be functional, such solutions can significantly limit customer access to a growing offering of third-party energy services and education that have been built or are being developed from the Green Button Standard. Adoption of a consensus industry standard serves the public interest and Michigan's goal of becoming carbon neutral by 2050 as it enables and incentivizes software developers and other entrepreneurs, not just utilities and their contractors, to build innovative applications, products and energy services. Interoperability enables market development and fosters competition within Michigan to return the best products for Michigan rate payers.

The Commission should recognize Green Button Connect as the preferred approach to customer data access, and place increased scrutiny on future investments that utilize proprietary approaches in lieu of these industry standards. Staff believes the Commission's support of a standardized approach, which supports interoperability, are crucial to the development and availability of a robust energy services marketplace for Michigan's rate payers.

Regarding the timeframes and intervals of the Green Button Connect datasets, Staff recommends increasing the historical data available to customers and third parties from the current 13-month availability to 24-months. As customers attempt to make educated and informed decisions regarding their energy production and consumption, the ability to view year over year comparisons serves as a useful tool not currently afforded to customers. Staff recommends this information be available at the smallest interval available to the utility providing service, ideally 15-minute intervals provided by most AMI systems. Longer usage history and shorter interval data are likely to be needed to enable future applications such as DER aggregation under FERC Order 2222. The shorter interval time allows more products to be provided and allows resources to value stack more easily, which make resources more valuable to the utility, aggregator, and customer. In a wholesale market context, interval data requirements increase with the complexity of the market product.

**Recommendation: Staff recommends the Commission recognize Green Button Connect as the appropriate foundation for easy and secure access to energy usage information in a consumer-friendly and computer-friendly format.**

#### **4.7 Data Access and Equity Concerns – Use of Home Area Network (HAN)**

In the decade since the deployment of the first AMI meters in Michigan, the Commission has reviewed and approved numerous pilot programs that have shown that access to timely customer energy usage and billing information leads to energy waste reduction. Current utility offerings require a customer to have access to the internet, cellular service, and a certain level of computer literacy to achieve these outcomes. While these commodities are commonplace in many households, they are often luxuries for Michigan's most vulnerable populations with the highest energy burdens. In order to further empower this segment of the population to understand and control their energy burden, the Staff recommends the Commission require investor-owned utilities who have fully deployed AMI pilot HAN and in-home displays for low-income, pre-pay, and senior customers to access customer billing data.

**Recommendation: Staff recommends consideration of enabling home area network technology for low-income and vulnerable populations, improving the ease of access to AMI meter and billing information and the subsequent benefits without the need for at home internet connectivity.**