### Energy Transformation Network of Ontario (ETNO) Meeting 4 Support Materials June 25 2020



### Welcome and Introduction Agenda Item 1

Intended outcome of this meeting:

Determine which high-level options the Working Group should explore further and develop into draft recommendations

Provide any additional guidance to the Working Group to inform recommendation development

Discuss the draft IESO Consumer Preferences Survey and provide any initial feedback on how to make the results as valuable as possible for ETNO's future work



### Member Change Request Agenda Item 2

Hydro One Inc. has requested to change their representative on ETNO from Darlene Bradley to David Lebeter

Per the ETNO Terms of Reference, approval of member change requests are contingent upon a majority decision of existing ETNO members



### High-Level Options to Address Access to Consumer Data and Data from DERs Agenda Item 3

Based on an exploration of barriers to access to consumer data and data from DERs, the Working Group has identified 8 high-level options

Options are intended to address barriers to access to data and to ensure key issues with the current approach to accessing this data are addressed (e.g. standardization, ease of access, data security)

Options are not necessarily mutually exclusive – options can be combined in a single package of recommendations



# **Research Questions for Each Option**

Agenda Item 3 Description of the option

How the option would address the identified barriers with a focus on:

Addressing customer needs and providing value for customers

Standardization of data

Efficiency of access Data security and customer privacy

Mechanism for implementing (law, regulation, market rule, LDC requirement, process, tool change etc.)

Implementation issues with a focus on:

Why the option hasn't been implemented to date

Challenges/barriers to implementation



# High-Level Options Agenda Item 3

1	Enable the Smart Metering Entity (SME) to provide identified smart meter data for residential and GS <50 kW customers third parties
2	Enable the SME to collect customer electricity usage data from GS >50 kW customers
3	Enable the SME to use smart meter data to perform in-house M&V for demand response market participants
4	Require the implementation of Green Button Download my Data and Connect my Data standards across all LDCs and natural gas distributors
5	Development of unique service agreements with LDCs for innovators with novel service offerings
6	Regulatory change to incentivise and allow for access to data as a service offering for customers and other stakeholders
7	Enforcing industry-wide policies to enforce controls within third parties around data use, retention, disclosure and disposal
8	Regulatory or code/standards changes to require operational data from DERs for LDCs and the IESO
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### Option 1: Enable the SME to provide identified smart meter data for

residential and GS <50 kW customers third parties Description

Expand the permitted functions of the SME to include making identified smart meter data available to third parties

Could provide an alternative to LDC implementation of Green Button data standard

Providing a central point of collection and access could address issues of standardization and efficiency of access as well as simplify the application of approaches to ensure data security and privacy

Implementation challenges

Not the original intent of the SME and would require legal and regulatory change to enable implementation

SME investments also required (e.g. IT infrastructure, personnel)

SME currently going through a regulatory process to enable making de-identified data available to third parties



### Option 2: Enable the SME to collect customer electricity usage data from

GS >50 kW customers Description - Expand the types of customers for which the SME is responsible for collecting meter data, and make this data available in a fashion similar to Option 1

Could provide an alternative to LDC implementation of Green Button data standard

Providing a central point of collection and access could address issues of standardization and efficiency of access as well as simplify the application of approaches to ensure data security and privacy

Implementation challenges

Not the original intent of the SME and would require legal and regulatory change to enable implementation

SME investments also required (e.g. IT infrastructure, personnel)

LDCs have made past investments to perform meter data collection and billing for these customer classes

SME currently going through a regulatory process to enable making de-identified data available to third parties



### Option 3: Enable the SME to use smart meter data to perform in-house

M&V for demand response market participants Description

Use smart meter data to perform Measurement & Verification on dispatch responses for demand response aggregations of residential and small commercial customers Addresses barriers to accessing smart meter data for the purposes of participating in the wholesale market by avoiding the need to submit meter data to the IESO Could allow customers to make use of existing technology to generate a revenue stream, as well as lowering the cost of capacity from demand response Does not solve all access to data issues - specific to DR in wholesale market Implementation challenges

Clarity on ability to use smart meter data for this purpose is required – may require legal and regulatory change

Would not allow the SME to share identified data with DR market participants – would have to "take the IESO at it's word"



#### **Option 4: Require the implementation of Green Button Download my Data and Connect my**

#### **Data standards across all LDCs and natural gas distributors** Description

Pass regulations to require LDCs and natural gas distributors to adopt the Green Button Download my Data and Connect my Data standards for sharing customer data with customers and approved third parties

Standardizes what data is made available and in what format, allows for customer choice for methods to access and third parties to engage

Long pedigree in the US, several LDCs in Ontario have also tested or adopted (e.g. London Hydro, Hydro One)

Cost benefit analysis for Ontario was completed by Ministry of Energy, and Ministry of Environment committed to "increase the availability and accessibility of information on energy consumption". Enabling legislation already passed (OEB Act)

Implementation challenges

Requires regulatory change

Costs to implement for LDCs could be untenable in budget constrained environment



#### **Option 5: Development of unique service agreements with LDCs for innovators**

#### with novel service offerings

#### Description

Develop standardizes service agreements for access to customer data for third parties that would establish key constituent aspects of all contracting. Could involve a digital platform administrated by a steward to ensure data standards and security are maintained

Addresses access to data but not necessarily standardization of data Data not shared publically and only with customer consent Customers could be given the option to opt-in or out of sharing their data with – but would require more active engagement by customers Implementation challenges

Development of a standard online service agreement platform

Changing LDC data collection, storage and dissemination practices

Customer concerns with privacy



**Option 6: Regulatory change to incentivise and allow for access to data as a service offering** 

#### for customers and other stakeholders

Description

Create an incentive framework that would allow LDCs to monetize customer data offerings and access to customers and other stakeholders

Standardization could be built-in requirement

LDCs could expand service offerings based on customer data

Could address LDC barriers related to cost of implementation present with other options

Not necessarily the highest net value to customers due to monetization (i.e. there is a cost to access)

Implementation challenges

Longer term and would require changes to LDC remuneration framework

Potential overlap with current Third Party Access process with the SME



### **Option 7: Enforcing industry-wide policies to enforce controls within third**

### parties around data use, retention, disclosure and disposal

Description

Create industry-wide policy or standards for third party use, retention, disclosure and disposal of customer data once it has been accessed/provided by the LDC Would help to ensure that third parties accessing customer data are essentially held to the same standard as LDCs re: use, retention, disclosure and disposal Does not address the standardization or efficiency of access of data Implementation challenges

Service agreements or access agreements between LDCs and third parties accessing customer data already exist—different from LDC to LDC. Ensuring standardization could be difficult

Could be an accessory approach to whatever option is adopted to support standardization and efficiency of access (e.g. Green Button or expanded SME options)



#### **Option 8: Regulatory or code/standards changes to require operational data from**

### **DERs for LDCs and the IESO**

Description

Require DERs to provide operational data (e.g. change of status, real/reactive power) to LDCs and/or the IESO to provide visibility (and potentially control in the future) Would provide standard operational data of high-value to LDCs and the IESO to monitor system conditions and respond, as well as perform load forecasting and system planning Implementation

Interconnection requirements could be revised to provide for this option (e.g. along the lines of Hydro One's Technical Interconnection Requirements)

OEB's codes and standards for generators could also be used

Costs would likely be incurred by DER owners

LDCs and IESO may require infrastructure investments to accept and use the data



# **Discussion Questions**

Agenda Item 3

Which option(s) should the working group explore further and develop recommendations to implement?

Which of the options has biggest bang for buck? Ease of the pathway to implementation vs value created for customers

Are there other options the working group should consider?

Are there other specific questions or areas of research that the working group should examine related to each option?

What broader sector-level considerations should the working group consider while developing recommendations (e.g. LDC liquidity due to COVID-19)?



### IESO Consumer Preferences Survey Recap Agenda Item 4 IESO conducting consumer surveying to support the development of a white paper

Consumer surveying will target all of residential, small business, commercial and industrial electricity consumers

White paper that will examine electricity consumer preferences and behaviors that are likely to impact the supply and demand of electricity in Ontario. This includes preferences related to:

Supply mix

New electricity products and services, including DERs

Alternative electricity service providers

Rate design



# **Consumer Preferences Survey Feedback**

Agenda Item 4

Feedback is being requested from ETNO to help ensure the survey can inform ETNO's understanding of what consumers want from the energy industry, and how to remove barriers to meeting those demands

Is the survey asking the right questions? Are there additional areas of questioning that should be included?

Are there areas of questioning that should be removed (i.e. provide less value)?

Should the survey change the level of focus put on specific areas (e.g. DERs vs rate design)?

When should the survey be administered (considering COVID-19 impacts)

### Next Steps and Adjourn

Agenda Item 5 IESO to distribute meeting summary notes with discussion outcomes

ETNO Members to review meeting summary notes/propose any suggested changes

ETNO members to provide any additional feedback on the IESO Consumer Preferences Survey by July 3<sup>rd</sup>

Working Group will further develop the chosen high-level options into draft recommendations for ETNO consideration at next meeting

