



AUC

Alberta Utilities Commission



TVR & Other DSM Enablement

Consumer / Advocacy Forum

The materials provided in this presentation are confidential and are for discussion purposes with participants of the TVR & Other DSM engagement and are not to be shared beyond the intended recipient. Presenters and the materials in this presentation do not speak on behalf of AUC Commission members. Commission members' views are expressed on the public record through AUC decisions.



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Ground Rules



Think outside the box

Consider different approaches & all ideas.



Avoid ownership of ideas

Ideas belong to the group not the individual (assigning an idea owner is useful to follow the idea through).



Don't trash any ideas

Initially consider all ideas as good ideas and build on ideas.



Keep microphones on mute when not speaking

Ensure that our microphones are muted when we are not actively speaking to allow others to speak uninterrupted.



Evaluate ideas after idea generation

Ensure that idea generation is separated from idea evaluation.



Be present

Please minimize distractions to support active listening and participation.

Engagement Objectives



1. Our **broader goal** is to investigate and pursue the approach to enable TVR and DSM that best supports **innovation, affordability, efficient operations, and customer benefits** as Alberta's electricity system evolves.
2. One of our first critical steps, and the focus of this engagement, is to **inform a recommendation on which meter data management (MDM) structure will best support TVR and DSM enablement** for all customers and stakeholders.

Walkthrough of the session today



Why we are we hosting this forum?

- We are coming together to engage customer and other advocacy groups to **discuss key topics** that matter to you and **understand priorities and important considerations** for residential and small commercial customers.
- We are focused on **capturing high-level considerations, feedback and questions**
- This forum is not meant to be an **exhaustive** discussion of each topic, but to better understand your **perspectives** and gather **information** for **future phases**.



To ensure we cover all topics:

- We'll give a **brief overview** of the key topic
- Then, we'll **open the floor for questions and discussion**.
- Participants are encouraged to **raise any new topics or questions**.
- We'll spend about **10 minutes on each topic**, with extra time at the end for additional discussion.
- Please be respectful and **give everyone a chance to speak (1-2 minutes each)**.



To ensure that all feedback is captured:

- We'll have a team member **recording "parking lot" items and feedback** for future follow-up.
- Participants are **encouraged to share feedback and topics in the chat** for our team to address or add to the "parking lot."
- Additional feedback can be **sent via email after the forum ends**.

As a reminder, Customer / Advocacy Groups are the requested attendees for this workshop, so we kindly ask **other participants to save additional clarifications, questions, or comments for the end or through the chat function**

Focused Topics Overview

01

Customer
Impacts

02

Customer
Concerns

03

AMI & MDM
Capabilities

04

Time
Varying
Rates

05

Billing
Changes &
Clarity

06

Meter Data
Collection &
Usage

07

Customer
Data Access

08

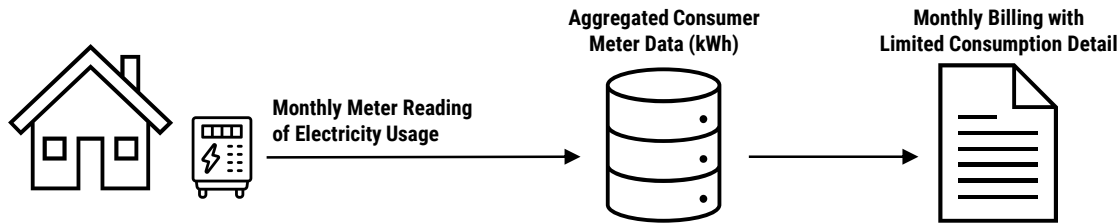
Data Privacy
& Access

09

Additional
Topics and
Q&A

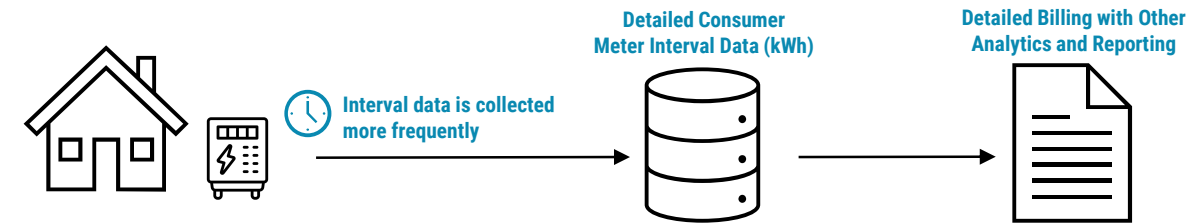
How could customer experience change?

Current Albertan energy customer experience



- Limited rate offerings
- Monthly consumption metrics
- Limited data availability
- Limited reporting

How TVR enablement & other DSM could change their experience



- Enhanced reporting of usage to support customers in managing their usage
- Bill Forecasting
- Increased tailored Rate Offerings
- Usage Recommendations
- Improved Data transparency
- Increased ability to leverage demand side management programs and demand response

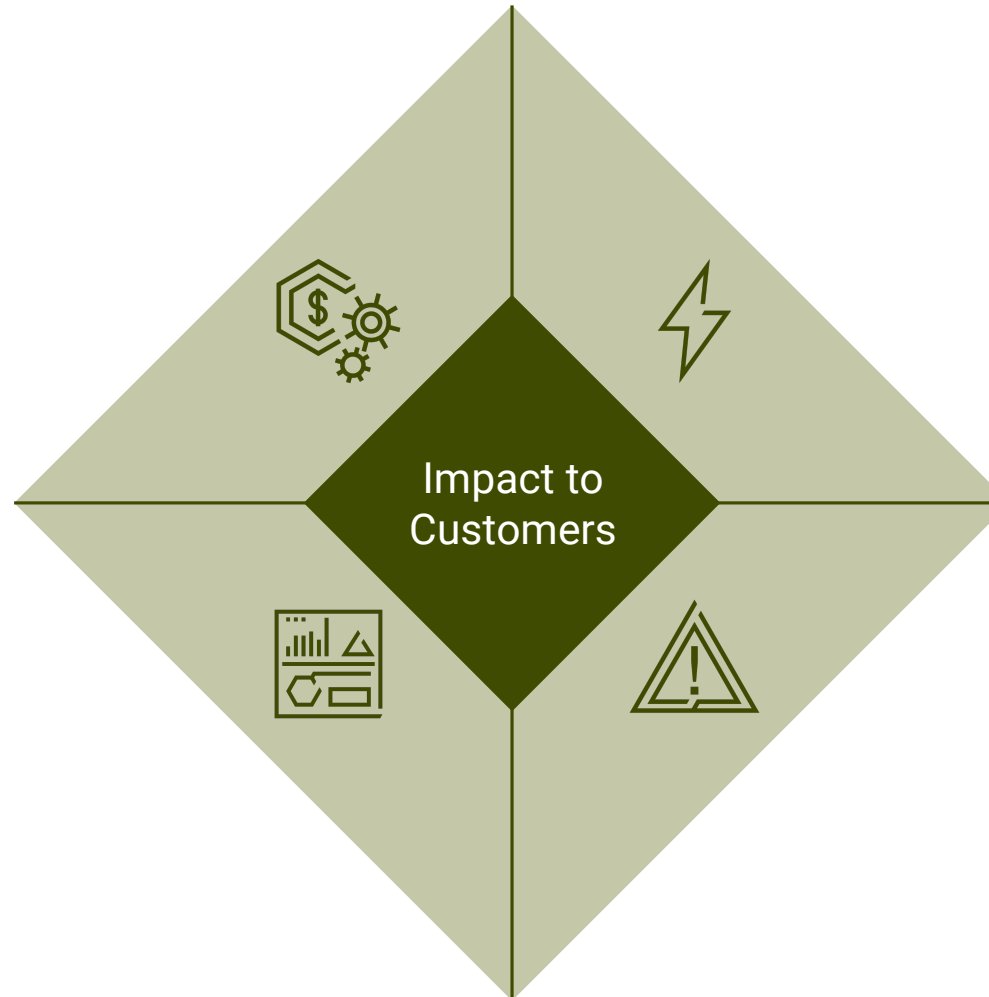
What this means for Customers

Long-term cost increases can be reduced for customers

Implementing TVR can result in delayed investment and system upgrades by reducing system demand peaks, and in the long run save customers money.

Customers can have improved information and options

TVR & Other DSM enablement can provide customers with improved tools to manage electricity usage and additional rate offerings from retailers.



Customers can shift their usage to avoid costs and reduce charges

Time-varying rates (TVR) and other DSM enablement can offer ways to shift usage to lower-priced times, improve energy efficiency, and ultimately reduce peak generation and infrastructure costs.

Customer data privacy and protections are critical considerations

Protections, privacy, and accessible support need to be considered as part of the design.



What are other impacts for customers (outside of previous topics) that need to be considered?

Customer Concerns

Exploring how best to support customers in addressing concerns and managing costs is an ongoing conversation. Customers must be assured that they will have ways to resolve concerns and support if needed.

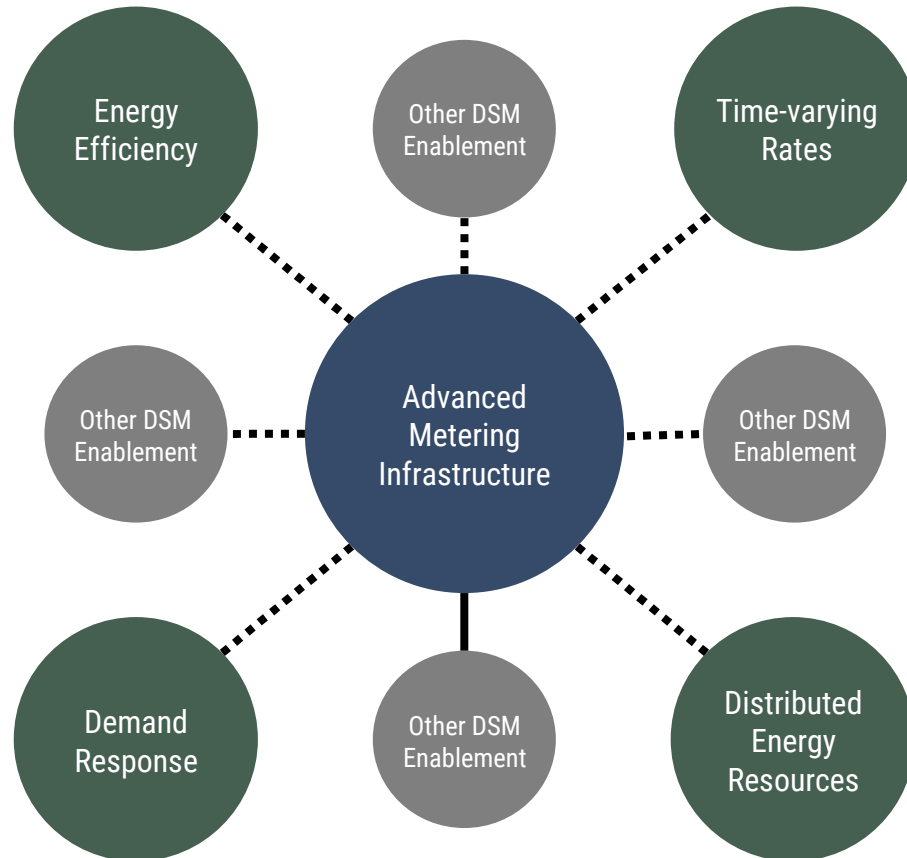


- Processes for handling billing questions and disputes, including collaboration with the Office of the Utilities Consumer Advocate, are important considerations
- Affordability supports and protections are potential areas of focus as options evolve in further phases
- Understanding diverse customer situations will inform program inclusiveness

● ● ● ● ***What are other major customer concerns that you think need to be considered (outside of previous topics)?***

Advanced Metering Infrastructure (AMI) and how the MDM data can be leveraged to empower innovation

Exploring how advanced metering infrastructure and MDM data can enable utilities/retailers/others to deliver targeted programs, optimize renewable integration, and give customers greater control over their energy use.



- Advanced Metering Infrastructure (AMI) enables many new DSM and TVR programs.
- MDM collects, validates, stores, and shares meter data for billing and grid management.
- Accurate and frequently-collected meter data enables targeted demand response, where customers reduce consumption when the grid is stressed.
- It can also support integration of solar panels and batteries to ensure their use is optimized.
- Without good data, it's hard to verify whether programs are effective or to tailor offerings to different customers.

What other capabilities could AMI & MDM enable?

Advanced Metering Infrastructure (AMI) with improved Meter Data Management (MDM) can enable a range of impactful capabilities for utilities, consumers, and the grid.

Here are some of the key capabilities enabled:



1. Better Demand Forecasting



2. Flexible Pricing and Demand



3. Improved Customer Tools



4. Integrating Distributed Energy (DER)



5. Automated Demand Response



6. Faster Outage Response



7. Improvements to Predictive Maintenance



8. Better Reporting and Compliance



9. Enables new technologies

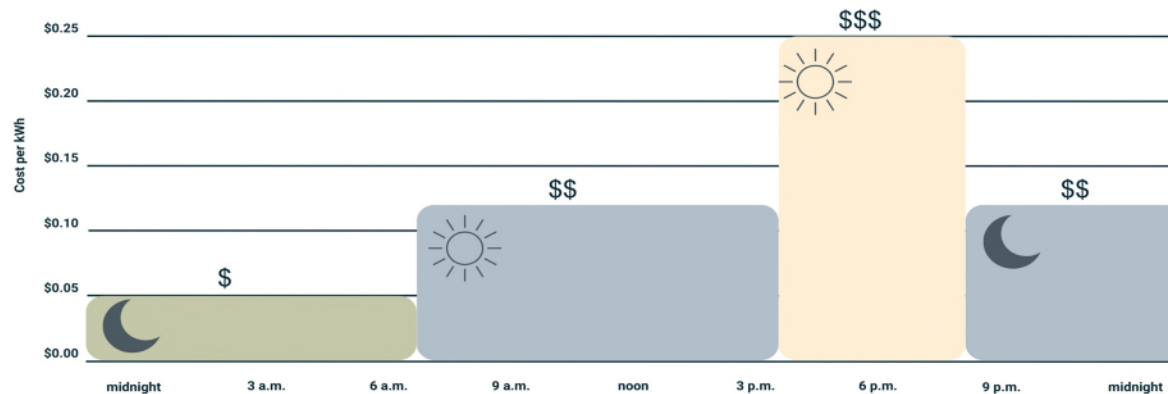


What capabilities are the most important for customers and are there others to explore in the future?

Exploring Time-Varying Rates

TVR sends price signals that encourage customers to use energy during off-peak times, helping lower system costs and reduce bills. It uses market-based pricing instead of rules, making it effective for many customers.

Time-of-use rates are an example of a TVR



- TVR encourages shifting energy use from peak times to reduce costs
- Current technology and rules support quick implementation
- Acts as a gateway for other DSM and grid improvements
- Builds customer awareness and helps them adapt gradually
- Reflects actual costs more accurately and improves efficiency
- Helps lower overall system costs and supports renewables
- Often the first step for building data and customer engagement

What do you see as key opportunities or challenges for time-varying rates?

Considerations Around Billing Changes & Clarity

We recognize billing changes can cause confusion. Clear, user-friendly bills and real-time usage tools will help customers monitor their consumption and avoid surprises.



- Bills may reflect electricity use at varying prices throughout the day
- Providing customers with simplified breakdowns of charges and improved explanations of the charges on their bills could improve understanding
- Tools or platforms that enable customers to track and understand usage could help identify opportunities for customers to improve how they consume electricity
 - Some utilities will leverage customers historical data to calculate and advise which rate would be best for them, assisting in the data analysis and selection of rate offerings
- Informative supports and education would assist customer awareness



What features or supports related to billing and usage information would be particularly helpful?

Let's discuss data

Over the next section we will cover 3 topics core to customer data

06



Meter Data Collection & Usage

How is data collected & used in potential offerings?

07



Customer Data Access

How can customers access and leverage new data offerings?

08



Data Privacy & Protections

How can we make sure that data is properly protected and privacy legislation is front of mind?

Meter Data Collection & Usage

Customer meter data is key to enabling TVR & other DSM, but privacy and security are paramount. We aim to explore how data collection and usage might evolve to support these initiatives responsibly.



- Electricity consumption data would be collected at intervals to support pricing and system management
- Data use might include billing, system planning, and enabling demand response
- Access to data is should be controlled with considerations for security and privacy



What considerations do you have about how meter data might be collected and shared?

Customer Data Access

Transparency allows you to understand and trust your energy usage data and charges. We want to learn how transparency and data access can best serve customers and build trust.



- Customers could be provided access to their usage data through portals or apps
- Transparency around bills, pricing, and their electricity usage is an important consideration
- Educational materials would support greater understanding and engagement
- Feedback loops might help evolve how data and information are shared



What ways of accessing or understanding your energy data would you find most valuable?

Data Privacy & Protections

Your data helps the system run efficiently, but privacy and security are paramount. Ensuring data privacy is a critical area we intend to explore further with stakeholder input.



- Privacy protections could be governed by existing laws and best practices
- Potential use of encryption and anonymization to safeguard data
- Customers may have options to access their own consumption information and control sharing
- Ongoing oversight may ensure standards are met

What additional privacy or transparency measures should be considered?

Additional topics & discussion



- What topics did we not cover today that would be important to you moving forward?
- What customer or advocacy priorities would you most like to see reflected as these initiatives develop?

Next Steps



To ensure success your participation is critical

Primary Workshops	 Innovation Forum	 Utilities Specialists Workshop	 Technical Planning Workshop	 Outcomes & Learnings
Date	Thursday, October 30, 2025 1:00-3:00PM Virtual Attendance	Tuesday, November 4, 2025 8:30-4:30PM In-person Attendance Only – Calgary, AB	Tuesday, November 5, 2025 8:30-4:30PM In-person Attendance Only – Calgary, AB	Thursday, November 27, 2025 1:00 - 3:30PM Virtual Attendance
Overview	Explore and discuss feasible, future-proof capabilities	Establish the operational, regulatory, and commercial considerations affecting MDM design alternatives and TVR roll-out	Define technical requirements and architectures for each option, identify gaps and outline roadmap	Share preliminary findings and engagement outcomes
Attendees	Requested Participants: <i>All respondents are requested to join and participate in the Innovation Forum</i> Optional Participants: N/A	Requested Participants: DFOs, Retailers, Market Bodies, Transmission and IPP respondents are requested to actively participate in the Utilities Specialist Workshop. Additionally, we request manager/director roles in the following areas: - MDMS/AMI - Settlement & Retail Operations - DFO/Retailer Representatives - Commercial Strategy/Regulatory - Financial Planning - Data Governance /IT Managers - PM/Implementation Lead Optional Participants: Other respondents are invited to join and listen to the topics as well as participate in the open discussion at the end	Requested Participants: DFOs, Retailers, Market Bodies, Transmission and IPP respondents are requested to actively participate in the Technical Planning Workshop. Additionally, we request technical lead roles in the following areas: - MDM/AMI Architecture - Settlement Systems - IT/Data Architecture - DER/Net Metering - Data Governance/Quality - DFO/Retailer Representatives - Trans./Independent Power Providers - Cybersecurity/Information Security - Implementation / Systems Integ. Optional Participants: Other respondents are invited to join and listen to the topics as well as participate in the open discussion at the end	Requested Participants: All respondents are requested to join and participate in the Outcomes & Learnings Optional Participants: N/A

- If you have any questions regarding this engagement, please visit:
 - <https://engage.auc.ab.ca/consultations/engagement-on-enabling-time-varying-rates-for-residential-and-other-electricity-customers-in-alberta/>
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