



Making the Most of Michigan's Energy Future

New Technologies and Business Models

Stakeholder Meeting 9:

Summary, Discussion, & Closing

The meeting will begin promptly at 1:00 pm.

June 16, 2021

1PM – 5 PM



MPSC

Michigan Public Service Commission



Making the Most of Michigan's Energy Future

New Technologies and Business Models: Welcome and Overview



Joy Wang

WangJ3@Michigan.gov

Smart Grid Section

Michigan Public Service Commission



MPSC

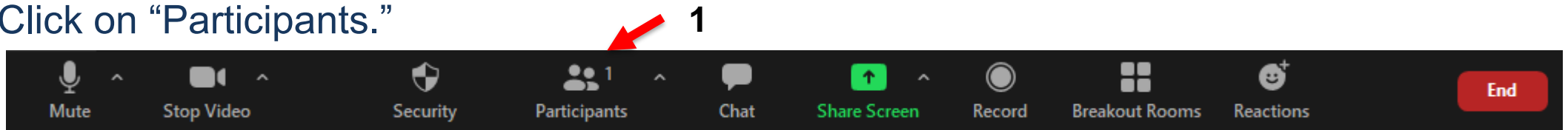
Michigan Public Service Commission

Agenda: Summary, Discussion, and Closing

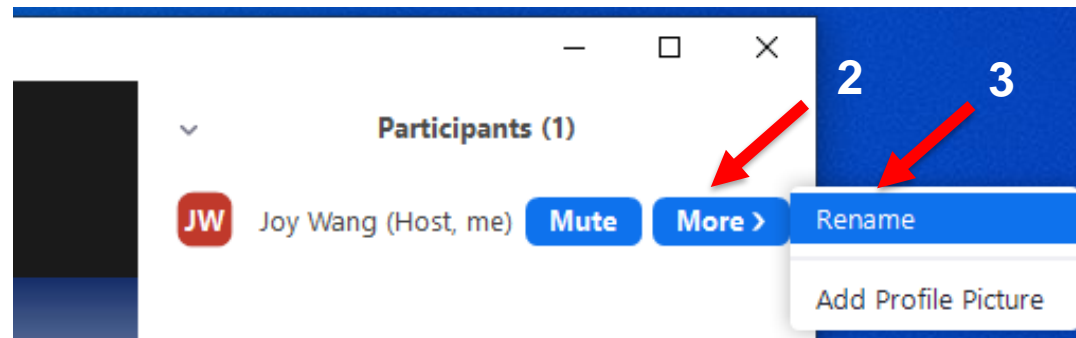
1:00 pm	Welcome & Opening Comments	Joy Wang, MPSC Staff, and Katherine Peretick, Commissioner, MPSC
1:05 pm	Summary of Workgroup & Learnings	Joy Wang, MPSC Staff
1:25 pm	<p style="text-align: center;">Breakout Rooms Discussions of Staff Outlines of Barriers, Solutions, and Alternative Business & Ownership Models by Technology</p> <p style="text-align: center;">Breakout Rooms: <i>Combined Heat and Power</i> <i>Electric Vehicles</i> <i>Heat Pumps</i> <i>Microgrids</i> <i>Solar</i> <i>Storage</i></p>	<p style="text-align: center;">Moderated by MPSC Staff</p> <p style="text-align: center;"><i>Note: Participants can select their breakout room.</i></p>
1:55 pm	Break	
2:10 pm	<p style="text-align: center;">Breakout Debriefs & Discussion: <i>Combined Heat and Power</i> <i>Electric Vehicles</i> <i>Heat Pumps</i> <i>Microgrids</i> <i>Solar</i> <i>Storage</i></p>	<p style="text-align: center;">Moderated by MPSC Staff</p> <p style="text-align: center;"><i>Note: There will be a 15 minute break after the heat pumps debrief and discussion.</i></p>
4:55 pm	Closing Statements, Timeline, & Next Steps	Pat Hudson, Manager, Smart Grid Section, MPSC Joy Wang, MPSC Staff
5:00 pm	Adjourn	

Housekeeping

- This meeting is being recorded.
 - Full meeting will be recorded.
 - Breakout sessions will not be recorded.
- Slides available and recording will be posted on [workgroup website](#) within a week barring technical difficulties
- Please change your display name to “first and last name, organization.”
 - Click on “Participants.”



- Find your name, click on “More,” and then “Rename” to change.



Housekeeping, cont.

- All audience members will be muted when joining.
- Please mute yourself during presentations.
- During Q&A and discussion, please mute yourself after your contributions to limit extraneous audio noise.
- Please share your thoughts on the meeting with us by filling out the [survey](#).



Making the Most of Michigan's Energy Future

Opening Remarks



**Katherine Peretick
Commissioner
Michigan Public Service Commission**

Stakeholder Meeting 9: Summary, Discussion, Closing
June 16, 2021



MPSC

Michigan Public Service Commission



Making the Most of Michigan's Energy Future

New Technologies and Business Models: Summary, Tasks, & Timeline



Joy Wang

Smart Grid Section

Michigan Public Service Commission

June 16, 2021



MPSC

Michigan Public Service Commission

- Focused, multi-year stakeholder initiative to maximize benefits of transition to clean, distributed energy resources for Michigan residents and businesses.
- Engages utility customers and other stakeholders to help integrate new clean energy technologies and optimize grid investments for reliable, affordable electricity service
- Includes outreach, education, and regulatory reforms



- **Customer Engagement**
- **Integrating Emerging Technologies**
 - Interconnection Standards and Worker Safety
 - Data Access and Privacy
 - Competitive Procurement
 - **New Technologies and Business Models**
- **Optimizing Grid Performance and Investments**



U-20898: New Technologies & Business Models

- Launched New Technologies & Business Models workgroup
 - On October 29, 2020
 - Phase II of MI Power Grid
- Provides Commission's objectives and expectations
- Problem Statement
 - ***There are regulatory and business model barriers to the deployment and full utilization of clean, distributed energy resources in Michigan. Stated differently, there is the need to adapt the regulatory framework to allow for different applications of DER and to define the appropriate roles of utilities and other entities in supporting a more decentralized energy system that is clean, affordable, reliable, and accessible.***

Workgroup Objectives

- Prepare for opportunities and challenges associated with commercialization of new technologies and business models at customer and utility scale.
- Create shared understanding of different technologies and potential applications
- Identify barriers and potential solutions for Commission consideration
 - Barriers should focus on issues and solutions that the Commission can address

Workgroup Products

- September 1, 2021 Final report due
- Technology specific write-ups covering workgroup learnings for:
 - Behind-the-meter & community solar
 - Combined heat and power
 - Electric vehicles
 - Heat pumps for space & water heating
 - Microgrids
 - Storage

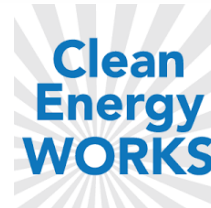
Workgroup Topics and Timeline

- Focus on clean distributed energy resources (customer and utility-scale), not emerging technologies.
- January 27, 2021 Meeting 1 – Kickoff
- February 10, 2021 Meeting 2 – Electric Vehicles
- February 24, 2021 Meeting 3 – Space & Water Heating using Heat Pumps
- March 10, 2021 Meeting 4 – Behind the Meter & Community Solar
- March 24, 2021 Meeting 5 – Storage
- April 7, 2021 Meeting 6 – Combined Heat and Power
- April 21, 2021 Meeting 7 – Microgrids
- May 19, 2021 Meeting 8 – Alternative Business and Ownership Models
- June 16, 2021 Meeting 9 – Summary, Discussion, Closing
- August 2021 Draft Staff report distributed to stakeholders for review
- September 1, 2021 Final report due

Workgroup Speakers



Upper Peninsula Power Company



Workgroup Speakers



MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY



GLREA GREAT LAKES RENEWABLE ENERGY ASSOCIATION



michigan EIBC



RIVENOAK CONSULTING



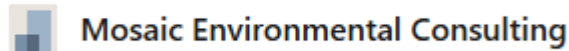
New Power Tour, Inc.



THERMAL ENERGY CORPORATION



Energy Storage Association

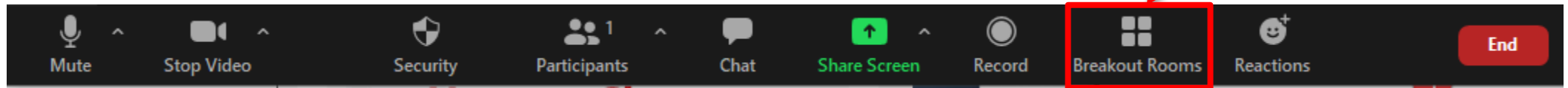


Draft Technology Tables

- Staff created tables to capture barriers, solutions, and alternative business and ownership models for the six examined technologies:
 - [Electric vehicles](#)
 - [Combined heat and power](#)
 - [Community and behind-the meter solar](#)
 - [Heat pumps for space and water heating](#)
 - [Microgrids](#)
 - [Storage](#)
- Distributed to stakeholders on Wednesday, June 9, by listserv message for discussion today.
- Comments on the drafts can be shared with Staff in discussion today or by email to wangj3@michigan.gov.

Technology Breakout Rooms

- Please select a technology breakout room.
- Click on the “breakout room” button on the Zoom bar.



- If you do not see the breakout room button, please type which breakout room you'd like into the chat.
 - Staff will manually place you into the breakout room.
- Breakout rooms will be held under Chatham House Rules
 - Participants are free to use the information received, but neither the identity nor the affiliation of the speaker(s), nor that of any other participant, may be revealed
 - Breakout rooms will not be recorded.
- Though you should be able to jump from room to room, please select one breakout room and stay for the entirety of the discussion.
- Breakout room debriefs will occur in the main meeting afterward, with more opportunities for discussion.

Questions?

Email:

Joy Wang (staff lead) at
WangJ3@Michigan.gov



Making the Most of Michigan's Energy Future

New Technologies and Business Models

Break: 1:55 – 2:10 PM

Stakeholder Meeting 9: Summary, Discussion, & Closing

June 16, 2021



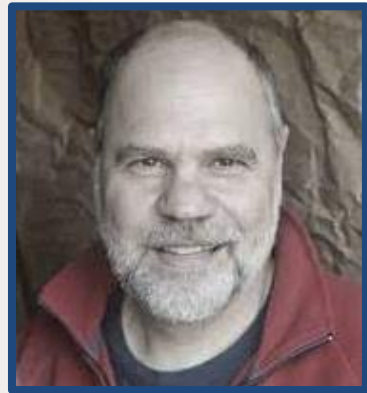
MPSC

Michigan Public Service Commission



Making the Most of Michigan's Energy Future

Closing Statements



Pat Hudson
Manager, Smart Grid Section
Michigan Public Service Commission

Stakeholder Meeting 9: Summary, Discussion, Closing
June 16, 2021



MPSC

Michigan Public Service Commission



Making the Most of Michigan's Energy Future

New Technologies and Business Models Timeline & Next Steps



Joy Wang

Smart Grid Section

Michigan Public Service Commission

Stakeholder Meeting 9: Summary, Discussion, & Closing
June 16, 2021



Michigan Public Service Commission

Timeline & Next Steps

- Next week: Listserv message
 - Recording posted
- August 2021: Draft Staff report posted on workgroup website
 - Listserv message notifying stakeholders
- About two weeks for stakeholder review
 - Send comments on draft report to Joy Wang (WangJ3@Michigan.gov)
 - Comments will be posted on workgroup website and included in appendix of final Staff report (likely summaries).
- September 1: Current deadline for final report to be posted to docket
 - Case No. U-20898

Thank You and Please Stay Engaged!

- Thank you for your participation
 - Share your thoughts through:
 - Meeting survey
 - Stakeholder comment section of workgroup website
 - Send a document to be posted to the comment section via email to Joy Wang at WangJ3@Michigan.gov
 - Edits/suggestions regarding technology summaries via email to WangJ3@Michigan.gov by Friday, June 18.
- Please stay engaged
 - Sign up for the listserv if you have not already
 - Go to MI Power Grid [New Technologies and Business Models workgroup](#) page
 - Scroll to bottom to add email
 - Comment on Staff's technology summary outlines & draft report
 - Technology summary draft outline comments due Friday, June 18.
 - Comments on both by email to wangj3@michigan.gov

Thank you!