

MN Department of Commerce ECO Act Implementation Load Management Working Group Meeting 1

November 30, 2021

10:00 a.m. – 12:00 p.m.

Type of Meeting: Microsoft Teams Webinar

Meeting Facilitator: Grey Staples

Attendees: 48

Name	Organization	Name	Organization	Name	Organization
Adam Zoet	MN Dept. of Commerce	Grey Staples	The Mendota Group, LLC	Laura Silver	MN Dept. of Commerce
Adway De	MN Dept. of Commerce	Isabel Ricker	Fresh Energy	Lisa Beckner	Minnesota Power
Amalia Hicks	Cadmus	Jamie Stallman	Great River Energy	Lisa Fischer	Missouri River Energy Services
Angela Smelser	Xcel Energy	Jason Grenier	Otter Tail Power Company	Lisa Lancaster	Slipstream
Anna Roberts	Otter Tail Power Company	Jeffrey Haase	Great River Energy	Lisa Rafferty	Applied Energy Group
Anthony Fryer	MN Dept. of Commerce	Jeremy Petersen	Xcel Energy	Maddie Wazowicz	Midwest Energy Efficiency Alliance
Ashly McFarlane	Xcel Energy	Jessica Burdette	MN Dept. of Commerce	Martin Kushler	ACEEE, CEE
Audrey Partridge	Center for Energy and Environment (CEE)	Jessica Peterson	Xcel Energy	Matt Gluesenkamp	Cadmus
Barbara Schmit	Lake Country Power	Jill Eide	Great River Energy	Patrick Mathwig	Dakota Electric Association
Brent Suski	U.S. Green Building Council	John O'Neil	Southern Minnesota Municipal Power	Rachel Sours-Page	The Mendota Group, LLC
Bridget Dockter	Xcel Energy	John Pantzke	Stearns Electric Association	Rebecca Price	U.S. Green Building Council
Bryce Dvorak	Michaels Energy	Jon Sullivan	Minnesota Power	Rebekah Billings	CenterPoint Energy
Chris Baker	Willdan	Joseph Reilly	Ameresco	Robert Jagusch	MMUA
Dave Reinke	Dakota Electric Association	Josh Quinnell	CEE	Scott Hackel	Slipstream
David Sagara	The Mendota Group, LLC	Katie Frye	Minnesota Power	Tom Sagstetter	Elk River Municipal Utilities
Glen Fisher	Franklin Energy	Kent Sulem	Minnesota Municipal Utilities Association (MMUA)	Travis Hinck	GDS Associates

AGENDA

10:00 a.m.	Welcome and Introductions
10:10 a.m.	Load Management Guidelines Context and Resources
10:25 a.m.	LM Guidelines – Discussion
11:00 a.m.	Break
11:10 a.m.	Guidelines Development Process
11:40 a.m.	Next Steps
12:00 p.m.	Adjourn

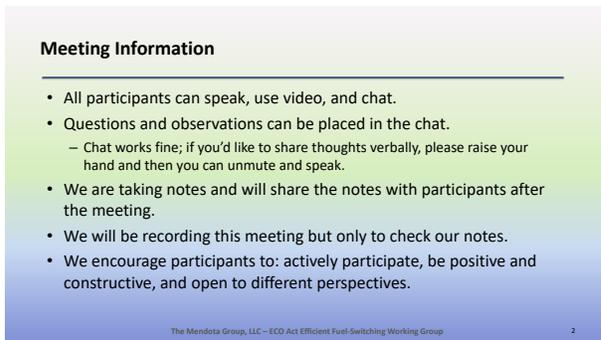
Meeting being recorded.

NOTES

Meeting Began: Tuesday, November 30, 2021, 10:00 a.m.

- Grey Staples begins meeting.
- Anthony Fryer - This marks the point where we are now in a bit of a sprint from now until the end of the year.
- The load management guidelines, the efficient fuel switching guidelines and of course, the EV sales methodology, which is which is due at the end of the year. We certainly appreciate everyone's flexibility in in prioritizing these meetings.
- Helping shape what load management is going to look like for the years to come.

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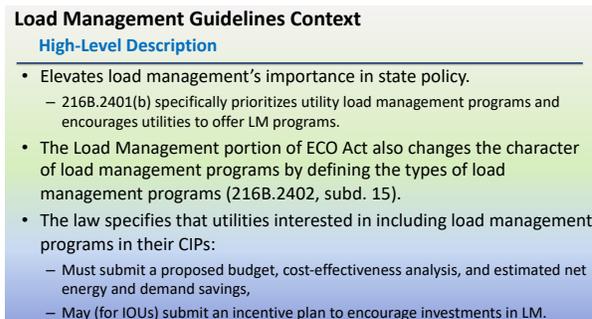


Meeting Information

- All participants can speak, use video, and chat.
- Questions and observations can be placed in the chat.
 - Chat works fine; if you'd like to share thoughts verbally, please raise your hand and then you can unmute and speak.
- We are taking notes and will share the notes with participants after the meeting.
- We will be recording this meeting but only to check our notes.
- We encourage participants to: actively participate, be positive and constructive, and open to different perspectives.

The Mendota Group, LLC – ECO Act Efficient Fuel-Switching Working Group 2

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Load Management Guidelines Context

High-Level Description

- Elevates load management's importance in state policy.
 - 216B.2401(b) specifically prioritizes utility load management programs and encourages utilities to offer LM programs.
- The Load Management portion of ECO Act also changes the character of load management programs by defining the types of load management programs (216B.2402, subd. 15).
- The law specifies that utilities interested in including load management programs in their CIPs:
 - Must submit a proposed budget, cost-effectiveness analysis, and estimated net energy and demand savings,
 - May (for IOUs) submit an incentive plan to encourage investments in LM.

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Load Management Guidelines Context

Statutory Language (excerpts)

216B.2402 Subd. 15: **Load management.** "Load management" means an activity, service, or technology that changes the timing or the efficiency of a customer's use of energy that allows a utility or a customer to: (1) respond to local and regional energy system conditions; or (2) reduce peak demand for electricity or natural gas. Load management that reduces a customer's net annual energy consumption is also energy conservation.

216B.241 Subd. 13 (a) A public utility may include in the utility's plan . . . programs to implement load management activities, or combinations of energy conservation improvements, fuel-switching improvements, and load management activities. For each program the public utility must provide a proposed budget, cost-effectiveness analysis, and estimated net energy and demand savings.

(b) The commissioner may approve a proposed program if the commissioner determines the program is cost-effective, considering the costs and benefits to ratepayers, the utility, participants, and society.

- Grey – This is but one excerpt from the law related to efficient fuel-switching (EFS). There are other aspects, six or seven, sprinkled throughout the law related EFS.

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Load Management Guidelines

Resources

- The Working Group will develop materials to send to the Department of Commerce for consideration in crafting proposed guidelines that can be reviewed by the public and considered by the DOC Deputy Commissioner for adoption.
- Working Group members are encouraged to upload to the site other information that can help inform the Working Group's efforts.
- For those interested in learning more about the process can review information from a similar DOC proceeding, related to utilities including Electric Utility Infrastructure (EUI) projects in their CIPs.
 - This info is in the Resources folder on the ECO Act Coordinating Committee SharePoint.

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Load Management Guidelines Working Group Timeline

Reminder

- The LM Guidelines Working Group has a tight timeline – for the Deputy Commissioner to issue a Decision by **3/15/22**, this group will need to submit draft advisory language to Department by mid to late January 2022.
- We will have meetings to follow this meeting, although much work can be done online (and we encourage this).

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Questions to Consider

Mendota Group-Developed Draft Responses

- If the LM program is just load shifting (and does not save energy), would it be counted towards utility's ECO Act energy savings goals?
 - *No. ECO Act places establishes "annual energy-savings goals" for utilities (216B.241, subd. 1c(b) for IOUs, 216B.2403, subd. 2(a) for COUs) and, therefore, load management that does not save energy would not count toward these goals.*
- Will the cost effectiveness (CE) evaluation focus on a utility's cost effectiveness (exclusively), or will we apply the 4 CE tests?
 - *Cost-effectiveness will be focused on costs and benefits to ratepayers, the utility, participants, and society (216B.241, subd. 1c(e) and 216B.2403, subd. 3(f).*

- Grey: We have invited participants to submit memos to respond to questions or address issues. Are also populating a tracker with comments, suggestions from WG members. Is available on SharePoint.
- Grey: The questions on these slides were posed by members of the Coordinating Committee.
- Anthony: Typically for IOUs, the cost effectiveness (CE) requirement for CIP portfolios is done at the segment level, above measure and program level. If a particular measure or program doesn't meet the CE requirements, doesn't mean it's excluded from CIP.
- Marty notes that there is a Cost Effectiveness Advisory Committee that the Department has convened and will be restarted in 2022. Will discuss higher-level changes to the CE model that utilities use to evaluate EE and LM programs. Information from these WGs can inform the AC's work.

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Questions to Consider

Mendota Group-Developed Draft Responses

- Can emissions benefits be included in load management cost effectiveness evaluations?
 - *Yes. It is assumed that, like CE evaluations for EE programs, load management programs would include GHG impacts. It will be important to factor in measure load shapes and hourly system impacts.*
- Will this group deal with the detail of rate schedules that utilities will file per 216B.241, subd. 13(c)?
 - *No.*
- Will this group deal with "incentive plan(s) to encourage investments in load management programs" per 216B.241, subd. 13(d)?
 - *No.*

- Q: Can emissions benefits be included in LM cost effectiveness evaluations? A: Yes, would expect that GHGs will be part of LM programs.
- Q: Will this WG deal with the rate schedules that utilities will submit per 216B.241, 13c? A: No. Utilities can submit rates schedules for recovery of costs.
- Q: Will this group deal with the rate schedules that utilities need to file?
- A: No.

- Marty comment: Seems like this group would be appropriate place to discuss incentives.
- Anthony: On financial incentive, there's the opportunity for fin incentive for LM and for efficient FS programs. After March 15 guidance issued, DOC will meet with rates and planning to talk about when it makes sense to introduce a proposal or conversation with IOUs in terms of structure of incentive and how to engage the PUC, whether on triennial timeline or more accelerated. Chris Davis will lead that charge. This will be an important next step.
- Amalia: Doesn't look as though Minnesota has a statewide (SW) defined peak period. Is it the intention to have each utility define their own peak period or create a SW peak period. Add to TRM? Load profiles end up in TRM. Would be helpful to have a clearly defined peak period.
- Grey: Not aware of these conversations. Good question. Each of the utilities use their own peak period. There are parts of the state that are winter peaking. And, as the system electrifies, may see more areas of the state shift to winter peaking. Curious about Department's response.
- Anthony: Conversation hasn't been raised. But, need to raise it in the technical guidance.

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Additional Questions to Consider

- Do gas utilities plan to offer gas load management programs and, if so, can BENCOST be adapted for this purpose?
 - *The 216B.2402, subd. 15 definition of load management includes gas.*
- Do we need to clarify how load management can enable:
 - “customers to maximize the economic value gained from the energy purchased from the customer's utility service provider” or
 - “utilities to optimize the infrastructure and generation capacity needed to effectively serve customers and facilitate the integration of renewable energy into the energy system”?

- Grey: BENCOST is the cost-effectiveness model gas utilities use. It's provided by the Department. Has demand savings, but may need more sophisticated model to incorporate gas load management.
- How LM can enable customers to maximize ...
- Anthony: Legislature is hoping will be the end-result of LM programs. Doesn't see anything in statute that would require utilities to demonstrate these two things. Focus is on CE and including that in filings. These are aspirational rather than requiring specifics from the utility. Would be interested in hearing thoughts on that.
- Grey: Also gas load management programs ... have interruptible rates for gas customers. Curious if gas utilities plan to offer LM programs.

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Additional Questions to Consider

- Do we need to clarify what qualifies as load management?
 - Means an "activity, service, or technology that changes the timing or the efficiency of a customer's use of energy that allows a utility or a customer to: (1) respond to local and regional energy system conditions; or (2) reduce peak demand for electricity or natural gas. Load management that reduces a customer's net annual energy consumption is also energy conservation."

- Grey: Open forum for questions. Invite questions and comments from folks about load management aspects of statute that need clarification. Anyone who wants to share?
- Audrey: Add that, as we see plans, difficult to think about this theoretically. Could be overlap between LM and efficient fuel-switching (EFS). Because a technology can change the timing and efficiency. May be discussion later when we see proposals.
- Grey: Good point. Question raised in efficient fuel-switching group ... degree to which technologies and projects will have legs in LM and EFS areas. Someone who installs a heat pump and a heat pump water heater, can have control. Measures can double dip. How the utility files for approval of that project.
- Patrick: Seems there would be overlap. Quick clarification regarding the emissions benefits for LM. If LM is included with EFS, would impact the overall GHGs for that measure also?
- Anthony: Good question. Impact on emissions would come in the Societal CE test.
- Grey: If it's load management, if not connected to EFS, would have to calculate GHG impacts. Gets tricky. May have programs that are load shaping. Lower CO₂ on the system and want to shift customers to that period. Different type of load management program other than simply reducing peak load. Could see these benefits.
- Scott: My primary consideration here would be to keep the LM definition broad enough to cover a large number of different grid and customer services that are both known now AND those that will be developed in the future as grid conditions change. It seems to me that #1 on this slide gives everyone maximum latitude, which is positive.
- Anthony: Agrees with that. From a regulatory standpoint, is usually fairly clear what can be LM. Key question is whether there are attributable energy savings to a LM program (previously required for LM to be in CIP). Now, that's no longer required.
- Glen: One clarification for customers to maximize value from LM, it could be more transparent and defined. Buying electricity for that customer, the rate class of which that customer is a part or the purchase that utility would make without load management.

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Load Management Guidelines - Cost Effectiveness

Four Tests

Factors	Tests				
	Societal	Utility	Participant	Ratepayer Impact	Total Resource
EE Benefits:					
Avoided Energy Costs	x	x		x	x
Avoided Generation Capacity Costs	x	x		x	x
Avoided T&D Capacity Costs	x	x		x	x
Avoided T&D Losses	x	x		x	x
Customer Bill Savings			x		
Participant Resource Savings (fuel, water)	x		x		x
Environmental Benefits	x				
EE Costs:					
Load Management Program Costs	x	x		x	x
Load Management Portfolio Costs	x	x		x	x
Financial Incentives Provided to Participants	x	x		x	x
Participant Financial Cost of Load Management	x		x		x
Participant Increased Resource Consumption	x		x		x
Societal costs (environmental)	x				
Lost Revenues				x	

- Includes TRC for reference even though operative test in MN is Societal, which is a variant of the TRC test.
- Grey: There's a CE Advisory committee that will be reconvened in 2022 to discuss CE issues and considerations of changes to CE model utilities use to evaluate programs. Will likely change these factors and modify how they are defined. Expectation is work here will inform that group.

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Load Management Guidelines – Cost Effectiveness

Test Considerations

- Different avoided costs may apply to load management programs vs. energy efficiency programs.
 - Utilities will need to determine how to model cost effectiveness for different types of load management programs – shape, shed, shift, shimmy.
 - Utilities may be interested in proposing measures that can combine multiple features – EE, Efficient Fuel-Switching and Load Management: should this be modeled separately or in combination?
 - Advanced metering could also change the way LM cost effectiveness is handled and the type of LM programs.
- MN doesn't have a defined peak period? Maybe this would be place to recommend. Might be helpful to have central definition of peak.
 - Basically saying that LM programs can be used in a variety of different ways. Will model LM based on these applications.

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Load Management Guidelines – Cost Effectiveness

Test Considerations

Ask that participants:

- provide input regarding what needs to be clarified / identified for utilities to evaluate load management program cost effectiveness;
- identify specifics regarding what will be needed to evaluate load management program cost effectiveness;
- Identify potential program types (to include gas demand response) that may need to be considered, and
- Explain how this may change over time (due to advanced metering) and for what types of programs cost-effectiveness clarifications are required.

- Anthony: Marty and others who work in multiple states, would be good to hear about the different approaches that states use to estimate LM cost effectiveness. Would be good to hear about those.
- Interested to hear from participants about programs they are contemplating so the information can be provided to the Department for their consideration.
- Amalia: If there was a SW peak definition. Could be revisited every year or every few years. In WI, just did a study to see if the peak had changed. It did change. Shifted to later in the afternoon. Some more demand shifting to winter as well.
- Grey: Did WI have different peak periods across the state?
- Amalia: In WI, each utility doesn't run their own programs. Everyone pays into the fund, so it's easier to do on a SW basis.
- Grey: Folks in the northern parts of the state have had winter load management programs, such as reducing resistant heating loads.
- Amalia: Don't have a defined winter gas peak. With polar vortex, now more concern about winter peaks.
- Jeff: Wholesale capacity costs ... which also may change over time. MISO current capacity is focused on summer. Within resource adequacy subcommittee, expanding to dual or four-season capacity. Would provide additional benefits for LM programs.
- Grey: A utility submitting LM program for capacity credits ... is now summer.
- Jeff: Now, GRE's winter load management programs don't get credit but might get credit with MISO peak changes.
- Grey: LSEs have to submit loads and resources to be sure they have sufficient capacity to cover load. Certain reserve requirements imposed by MISO. Those may be changing to not just focus on summer peak.
- Josh Q: Incentive utilities that have overlapping EFS and LM measures. Some EFS measures can also have LM strategies and qualify in both realms.
- Lisa R: Natural gas supply constraints due to peak heating demands. Can also affect electricity prices. Should we be thinking about natural gas load management programs, both in terms of gas and electric system benefits?
 - Marty: Yes.
- Anthony: Interested to hear from Josh about incentivization and Marty's around financial incentive.
- Glen: Clarifying statement. Economic value. Customers within a rate class, have different reliability needs. Would affect how they look at economic value. Would

have more ability to do load management activities. Look at individual customer situations.

10-minute Break

- Anthony question to Josh Q: Interested to hear about incentivizing utilities on LM.
- Josh: Broader than financial incentives. More thinking that utilities should be encouraged to offer different programs. In the weeds of efficient fuel-switching and the challenges in getting some of the programs to pass the tests. May depend on decisions we make on the rules.
- Marty [chat]: I think we've seen clearly from experience around the nation that financial incentives to utilities (both policy targeted as well as 'naturally existing' under traditional regulation) have a major impact on utility behavior. This is particularly true for anything that affects customer energy use and resulting utility revenues. It will be very important to have well-designed policy-driven incentive structure to help ensure that utilities provide and promote programs that truly deliver benefits to customers and the state (society)...and truly meet the policy objectives of the ECO act. It seems like the LM workgroup (and the EFS workgroup) are appropriate forums to discuss the incentive issue. But if not, hopefully there will be another forum for stakeholder input.
- Anthony: The design, adoption and implementation of the CIP Financial Incentive is the purview of the MN PUC. That would be the forum for what Marty is talking about. Will be an open docket at some point for financial incentives associated with each. This is where it would be discussed.
- Marty: These WGs have a lot of expertise and knowledge and could discuss the relevant issues. Can help provide information to the PUC. Hoping we can have some recommendations, fleshing out the issues to provide to the PUC. Reasonable?
- Anthony: Want to be careful don't pre-empt the PUC and the Department's own internal process. Folks involved here will be involved there.
- Anthony: If the WG came to some type of determinations regarding the financial incentive, that's fair. But, caution that workload in developing the technical guidance is already significant. Adding financial incentive into discussion will be tough.

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Next Steps

- By December 14, Working Group members add items to ECO Act Implementation Issues Tracker (Load Management WG tab) and/or provide memos (in Memos folder within Load Management WG folder) that discuss the topics raised on the previous slide.
- By December 17, DOC and Mendota Group will summarize the results and suggest next steps.
- This may include an additional meeting after 12/17.
- Goal is to have sufficient information by end of 2021 to develop draft guidelines for Working Group review in early 2022.

- Anthony: Additional question. ECO language speaks directly to the IOUs in terms of load management. For COUs, LM isn't mentioned in that part of the statute. LM that reduces energy is also energy conservation. Goal that COU must meet through energy conservation improvements. Identifying load management energy savings included in the .95%. Interested to hear from stakeholders whether that seems logical pathway for including LM in CIPs.
- Robert: COUs won't agree or disagree with the financial incentives discussion. Won't agree with any type of consensus document. Beyond the scope.

End at: 11:36 a.m.