



THE MENDOTA GROUP, LLC
— the power of bright ideas —

Energy Conservation and Optimization Act Implementation Process

Load Management Guidelines
Working Group

November 30, 2021

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 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.

Introductions

Organizations Registered		
Applied Energy Group (MERC)	GDS Associates	MN Dept. of Commerce
Cadmus	Great River Energy	Otter Tail Power
CEE	Lake Country Power	Slipstream
CenterPoint Energy	Marty Kushler	Southern Minnesota Municipal Power Agency (SMMPA)
Center for Sustainable Research (CSBR)	Michaels Energy	Stearns Electric Association
Dakota Electric	Midwest Energy Efficiency Alliance (MEEA)	The Mendota Group, LLC
Electrical Association	MN Municipal Utilities Assoc. (MMUA)	U.S. Green Building Council (USGBC)
Elk River Municipal Utilities	Minnesota Power	Willdan
Franklin Energy	Minnkota Power Cooperative	Wright-Hennepin Cooperative Electric Association
Fresh Energy	Missouri River Energy Services (MRES)	Xcel Energy

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.

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.

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.

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).

Load Management Guidelines – Questions to Consider

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)).*

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.*

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”?

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."*

10-Minute Break

Back at: **xx:xx** CST

Guidelines Development

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	

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.

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.

Next Steps

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.

The End (of this presentation)

- Thank you for your participation and contributions to this effort.
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