



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

Energy Conservation and Optimization Act Implementation Process

Load Management Guidelines
Working Group

January 28, 2022

Agenda

- 1:00 p.m. Welcome and Introductions
- 1:10 p.m. Load Management Guidelines Context
- 1:20 p.m. LM Working Group Activities to Date
- 1:30 p.m. ECO Act Statutory Requirements and Challenges
- 1:45 p.m. Plan
- 2:20 p.m. Next Steps
- 2:30 p.m. Adjourn

Meeting Information

- All participants can speak, use video, and chat. Please mute your line.
- Questions and observations can be placed in the chat.
 - Chat works fine as someone will monitor; 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 be open to different points of view.

Introductions

Organizations Registered		
Applied Energy Group (MERC)	Fresh Energy	Minnesota Department of Commerce
Cadmus	GDS Associates	Oracle
CEE	Great River Energy	Otter Tail Power
CenterPoint Energy	Lake Country Power	Slipstream
Connexus Energy	Marty Kushler	The Mendota Group, LLC
Dakota Electric	Minnesota Municipal Utilities Assoc. (MMUA)	University of Minnesota – Clean Energy Teams
Electrical Association	Minnesota Rural Electric Association (MREA)	U.S. Green Building Council (USGBC)
Elk River Municipal Utilities	Minnkota Power Cooperative	Willdan
Franklin Energy	Missouri River Energy Services (MRES)	Xcel Energy

ECO Act 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.
- 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.

ECO Act 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.

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Working Group Activities to Date

- 11/10/21 - Coordinating Committee meeting posed three questions for LM Working Group members to consider.
- 11/30/21 – Load Management Working Group met to discuss guidelines development, developed preliminary answers to questions and asked WG members to provide input on test considerations.
 - Received comments during meeting and written comments from Otter Tail, GDS, Xcel, MERC, Oracle, USGBC, Marty Kushler, and Slipstream.
- 12/20/21 – The Mendota Group produced a memo that showed issues considered resolved and other open issues, along with side-by-side of stakeholder comments.

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Working Group Activities to Date (Side-by-Side)

#	Question/Observation	Short Answer	Additional Information
1	Is there an opportunity to include load management benefits within efficient fuel switching? For example, a heat pump (not controlled for LM) installed on a propane system v. a heat pump installed on a load management utility rate? Or thermal storage of an electric resistant heating?	Yes	
3	If just load shifting (and not energy saving), would not be counted towards utility's ECO Act energy savings goals, correct?	Yes	
4	Is the CE evaluation going to be focused on a utility's cost effectiveness (exclusively), or will be the 4 cost-effectiveness tests?	No	Law applies traditional MN four tests (RIM, Utility, Participant, Societal) to load management programs filed in CIP.
5	Can emissions benefits be included in load management cost effectiveness evaluations?	Yes	Xcel: Emissions should be included in LM cost-effectiveness evaluations (WG may want to consider future utility build plans related to emissions); MERC: For gas, can be a benefit and/or a cost depending on fuel avoided; Oracle: Believes should be based on marginal avoided costs using 8,760 load shapes; USGBC: can use EPA's Avoided Emissions and Generation Tool (AVERT) to calculate baseline and buildings performance (uses hourly emissions factors). LEED provides option of using AVERT to estimate GHG savings.
6	Will this group deal with the detail of rate schedules that utilities will file per 216B.241, subd. 13(c)?	No	
7	Will this group deal with "incentive plan(s) to encourage investments in load management programs" per 216B.241, subd. 13(d)?	No	
9	Need to clarify? Statute says: "A utility is encouraged to design and offer to customers load management programs that enable: (1) customers to maximize the economic value gained from the energy purchased from the customer's utility service provider; and (2) utilities to optimize the infrastructure and generation capacity needed to effectively serve customers and facilitate the integration of renewable energy into the energy system."	No	Will leave this up to utilities as it is not a requirement for LM program approval.
10	Do we need to clarify what qualifies as load management? Statute refers to - 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."	No	Will leave this up to utilities as it is not a requirement for LM program approval.

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Statutory Requirements

- Unlike other aspects of the ECO Act (EV Sales, Efficient Fuel-Switching, Preweatherization measures), the development of Load Management guidelines do not have a statutory deadline.
- However, utilities will need guidance, particularly related to cost-effectiveness evaluations, to propose programs.
- This most immediately will apply to consumer-owned utilities, which will file CIP plans by June 1, 2022.
- It is assumed that public utilities, too, may want to propose modifications to their CIPs related to load management programs.

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Challenges

- The primary challenge related to developing guidance related to load management program cost effectiveness is the expectation that the Department will later this year revise guidelines related to the way utilities estimate cost effectiveness.
- Therefore, any guidance emanating from the current effort would need to be preliminary and subject to change.
- The most immediate need is for COUs (and public utilities) to know how to estimate cost-effectiveness for newly proposed programs.

Plan

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Plan

- The report that the Coordinating Committee provides to the Department related to Efficient Fuel-Switching will also include discussion of load management program cost effectiveness.
 - The discussion will recommend that, until the Department issues formal cost-effectiveness for load management programs:
 - Consumer-Owned Utilities will evaluate the cost-effectiveness of 6/1/22 proposed load management programs on a custom basis.
 - IOUs wishing to propose new or revised load management programs may do so on a custom basis.
 - Custom basis in this context means that the COUs and IOUs can propose to the Department for review and approval their proposed load management programs and associated methods of estimating cost effectiveness.

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Plan

- The Department's Cost Effectiveness Advisory Committee will reconvene after March 15, 2022.
- The Advisory Committee will explore changes to Minnesota's current methods of estimating cost-effectiveness for energy efficiency and load management programs.
 - The Department is targeting January 2023 for a final decision on cost-effectiveness updates.
- The Department anticipates that the Advisory Committee will follow the National Standard Practice Manual's 5-step process for developing a primary test.

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Plan

NSPM Table 5-2. Developing a Jurisdiction's Primary Test: A 5-Step Process

STEP 1: Articulate Applicable Policy Goals

Articulate the jurisdiction's applicable policy goals related to DERs

STEP 2: Include All Utility System Impacts

Identify and include the full range of utility system impacts in the primary test, and all BCA tests.

STEP 3: Decide Which Non-Utility System Impacts to Include

Identify those non-utility system impacts to include in the primary test based on applicable policy goals identified in Step 1:

- Determine whether to include host customer impacts, low-income impacts, other fuel and water impacts, and/or societal impacts.

STEP 4: Ensure that Benefits and Costs are Properly Addressed

Ensure that the impacts identified in Steps 2 and 3 are properly addressed, where:

- Benefits and costs are treated symmetrically.
- Relevant and material impacts are included, even if hard to quantify.
- Benefits and costs are not double-counted.
- Benefits and costs are treated consistently across DER types.

STEP 5: Establish Comprehensive, Transparent Documentation

Establish comprehensive, transparent documentation and reporting, whereby:

- The process used to determine the primary test is fully documented.
- Reporting requirements and/or use of templates for presenting assumptions and results are developed.

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Plan

- We ask that participants review the NSPM 5-step process.
- We further request that those who are interested add information to the side-by-side on SharePoint, whether as additional items or in response to questions posed or comments from others.
- In addition, we request that participants provide their response to Step 1 of the 5-step process: *Articulate the jurisdiction's applicable policy goals related to DERs.*
 - Recommend that stakeholders review Chapter 6 of the Synapse study - *Updating the Energy Efficiency Cost-Effectiveness Framework in Minnesota*

ECO Act Load Management Guidelines

Plan

- We would like these comments by April 1, 2022, recognizing that participants may not have an opportunity to provide this additional information prior to March 15.
- We are anticipating a first meeting of the Cost Effectiveness Advisory Meeting will likely occur in early April.
- We very much appreciate Working Group members' contributions to date and anticipate that much of the collected information will flow into the Cost Effectiveness Advisory Committee's efforts.

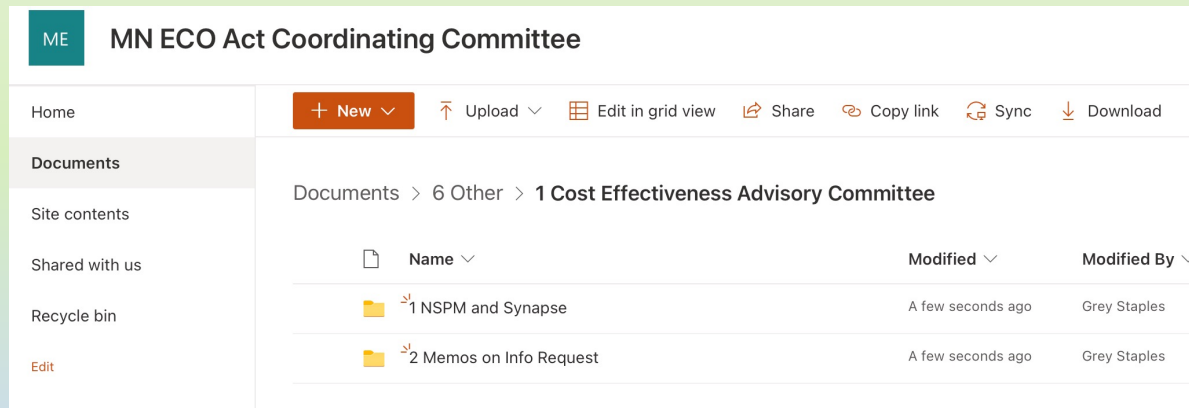
Next Steps

Next Steps

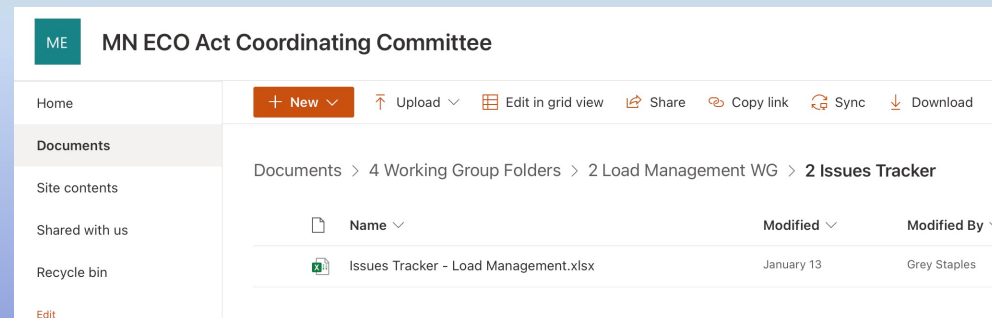
- Load Management Working Group information will be incorporated into the information that is sent to the Coordinating Committee from both the LM and Efficient Fuel-Switching Working Groups.
- CC and Working Group members will have an opportunity to comment on the draft information.
 - Targeting the week after next week for draft document sent to Coordinating Committee.
- Target date for receipt of any additions to the side-by-side and responses to Step 1 of the 5-step process is April 1.

Next Steps

- We have created an “Other” folder on SharePoint and a “Cost Effectiveness Advisory Committee” folder for receipt of information.



- The Side-by-Side is here:



The End (of this presentation)

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