June 5, 2025

Via Electronic Filing

Will Seuffert
Executive Secretary
Minnesota Public Utilities Commission
121 7th Place East, Suite 350
St. Paul, MN 55101-2147

Re: Supplemental Comments
In the Matter of a Commission Investigation into a Fuel Life-Cycle Analysis Framework for Utility Compliance with Minnesota's Carbon Free Standard
Docket No: E999/CI-24-352

Dear Mr. Seuffert:

Central Minnesota Municipal Power Agency, d/b/a Central Municipal Power Agency/Services (CMPAS) submits these enclosed Initial Comments responding to the Public Utilities Commission's Notice of Comment issued on January 22, 2025, regarding a fuel life-cycle analysis framework and related issues for utility compliance with Minnesota's Carbon Free Standard.

We have electronically filed this document with the Minnesota Public Utilities Commission, and copies have been served on the parties on the attached service list. Please contact me at (763) 710-3932 or jaya@CMPAS.org with any questions.

Sincerely,

Jay D Anderson
Chief Executive Officer
Central Minnesota Municipal Power Agency/Services

Enc. Reply Comments of CMPAS
cc: Service List

STATE OF MINNESOTA
BEFORE THE
MINNESOTA PUBLIC UTILITIES COMMISSION

Katie J. Sieben	Chair
Joseph Sullivan	Vice Chair
Hwikwon Ham	Commissioner
John A. Tuma	Commissioner
Audrey Partridge	Commissioner

IN THE MATTER OF A COMMISSION INVESTIGATION INTO A FUEL LIFE-CYCLE ANALYSIS FRAMEWORK FOR UTILITY COMPLIANCE WITH MINNESOTA'S CARBON-FREE STANDARD
Docket No. E-999/CI-24-392

Initial Comments of Central Municipal Power Agency/Services

Introduction

Central Minnesota Municipal Power Agency, d/b/a Central Municipal Power Agency/Services (CMPAS) submits these enclosed Initial Comments responding to the Public Utilities Commission's ("Commission") Notice of Comment issued on January 22, 2025, regarding a fuel life-cycle analysis framework and other related questions regarding Minnesota's Carbon Free Standard. CMPAS appreciates the chance to submit these comments and looks forward to future opportunities for input.

Additionally, CMPAS notes that its members include the City of Blue Earth, City of Fairfax, City of Glencoe, City of Granite Falls, City of Janesville, City of Kasson, City of Kenyon, City of Mountain Lake, City of Sleepy Eye, City of Springfield, City of Windom and/or their affiliated utilities.

Topic(s) Open for Comment:

1. What actions, if any, should the Commission take regarding the issues stated on pages 5-7 of the Commission's November 7, 2024 Order in Docket No. E-999/CI-23-151:

- *Definitions of the sources of and requirements for a life-cycle analysis when interpreting the statutory definition of "carbon free" for combusted fuel generation resources without carbon capture that are considered carbon free or receiving partial credit consistent with the November 7, 2024 Order.*

  #1) CMPAS would first ask for a requirement of consistency. Some stakeholders have

called for a plain language interpretation of the statutory definition of "carbon-free", but then have made exceptions for certain fuels, such as hydrogen, asking for consideration of fuel life-cycle analyses and/or consideration of indirect emissions. CMPAS asks that if one fuel is allowed to conduct life-cycle analyses, then all combusted fuel generation resources without carbon capture be allowed the possibility of compliance with CFS, contingent upon a satisfactory life-cycle analysis. It is contradictory to indicate that there is no statutory support for life-cycle analyses, but then still insist on these analyses in certain circumstances.

#2) In the event that combusted fuel generation resources without carbon capture are allowed to attempt life-cycle analyses, at this time, CMPAS does not have specific technical requirements or sources to suggest for a life-cycle analysis (LCA) or results. If applicable, CMPAS will use any software designated by the Commission, such as Argonne GREET or open LCA, for a required LCA. CMPAS may provide or respond to other suggestions in later rounds of comments.

While it does not have technical requirements or sources to initially recommend, CMPAS has multiple suggestions regarding their implementation and operationalization for utilities:

- Consider the development of common model inputs, reference case/baseline life-cycle analyses, analysis boundaries, or other ways to streamline the life-cycle analysis requirements.

- If life-cycle analyses are streamlined, as per the previous recommendation, establish a process for allowing parties to periodically review any common assumptions or requirements.

- Do not require the life-cycle analyses to be conducted annually.

  CMPAS would need to hire external parties, at additional cost to its members' customers, to conduct life-cycle analyses for its affected facilities, due to their specialized nature.[1] Since these studies can include the entire life-cycle of a facility, it's not clear that conducting these annually would result in demonstrably different results (unless there are major changes at a given facility). Finally, it is CMPAS's understanding that life-cycle analyses are not required to be conducted annually in the Natural Gas Innovation Act (NGIA) docket.

- Requirements should be agnostic to whether a utility owns a facility or has a Power Purchase Agreement with a facility.

[1] CMPAS currently receives power from at least one facility that is a combusted fuel generation resource without carbon capture that may possibly be considered carbon free or receiving partial credit consistent with the November 7, 2024 Order.

CMPAS does have a concern that utilities who have a Power Purchase Agreement ("PPA") for these types of generation facilities may not have access to all types of details requested in very granular, long-term, site- specific study studies.[2] CMPAS is also concerned that requiring a utility to conduct a highly detailed analysis of facilities not directly owned by the utility has the potential to cause contractual issues with the actual facility owners. As such, any sources or requirements identified by the Commission should offer pathways for utilities whether they directly own the generation facilities or whether they have PPA's with generation facilities.

- Utilities should ultimately be responsible for completing life-cycle analyses, not an independent third-party or state regulatory agency or department.

  This allows utilities to decide whether they actually want to initiate life-cycle analyses for affected facilities, or if they want to pursue other strategies for CFS compliance. It will also allow utilities to decide whether to engage key partners, such as some other parties in this docket, affected PPA counterparties, technical third-party consultants, or other entities based on the specifics of each facility.

- *Definitions of the sources of and requirements for a fuel to qualify as sustainable and waste biomass.*

  CMPAS believes that since biomass is formally defined in Minn. Statute § 216B.1691, subd. 1, it is appropriate to consider that waste biomass is any type of biomass established in the definition, that originates from a waste stream or product, provided it complies with the remainder of Minn. Statute § 216B.1691, subd. 1.

  CMPAS does not have suggestions on the definition of and requirements for sustainable biomass.

- *The Partnership on Waste and Energy's recommendations regarding the scope of the instant docket.*

  CMPAS does not have full clarity on the Partnership on Waste and Energy's (Partnership) recommendation to develop a lifecycle framework and greenhouse gas accounting (GHG) approach that "covers all resources, whether fully non-emitting or partially non-emitting of CO2."

  If this Partnership recommendation intends to have utilities submit separate life-cycle analyses for all of their generation resources, including resources like wind, solar, hydropower, CMPAS opposes this recommendation. Such a recommendation will add

[2] This includes several things, such as historic constructions details for a facility constructed prior to the start of the utility's PPA, proprietary details about waste content or management practices, and more.

substantially more cost for utility customers, as many utilities will need to hire external parties to complete these analyses; furthermore, such analyses will almost certainly not be possible for any resources that provide unbundled EACs used by utilities for CFS compliance. CMPAS currently believes life-cycle analyses for specific generation facilities should only even be considered as a possibility for emitting resource types, such as those specifically mentioned by the Partnership at the bottom of page 2 and top of page 3 of their Reply Comments.[3] CMPAS does not believe the intent of the CFS is to create lists of qualifying and non-qualifying CFS generation.

Once more information is available on the scale of the life-cycle framework proposed by the Partnership for all resources, CMPAS may have Reply or Supplemental Comments on it or Partnership requests, such as covering all direct and indirect GHG emissions, using a consistent approach for framing or creating boundaries of analysis.

- *Development of an accounting methodology to consider energy withdrawn from short-, medium-, and long-duration storage assets.*

  Under the annual compliance requirement in Minn. Statute § 216B.1691, CMPAS does not believe it is necessary to develop a methodology to account for energy withdrawn from short-, medium-, and long-duration storage assets. EACs from actual qualifying renewable and carbon-free generation are to be used for CFS compliance and are already being tracked. Attempts to quantify impacts from storage, which is not a generator, would be difficult to quantify and have the potential to double-count impacts from carbon-free generators.

  As stated in its comments in Docket No. CI-23-151, CMPAS believes that enacting hourly matching under the CFS may be legally impermissible since it would have the effect of substantially altering the annual compliance regime expressly required by the current statute (see *Hubbard,* 778 N.W.2d 313 (Minn. 2010). That said, if hourly matching was considered or discussed further, the treatment of storage, including accounting methodology would likely require further investigation or opportunities for input.

[3] *In the Matter of an Investigation into Implementing Changes to the Renewable Energy Standard and the Newly Created Carbon Free Standard under Minn. Stat. § 216B.1691.* Docket No: E999/CI-23-151. Reply Comments submitted July 24, 2024. Partnership on Waste & Energy. Pages 2 and 3. "Wood waste and woody biomass from continuously emerging insect and disease damage to trees, trees damaged in storms, tree maintenance, fire prevention activities, land clearing for development and wood product residuals, and MSW processed in resource recovery facilities through mass-burn or refuse-derived fuel technologies, organic materials separated from MSW and processed to create renewable natural gas that is used to create electricity, and other biofuels derived from MSW and used to generate electricity."

- *Calculating partial compliance based on the net annual generation defined as "carbon-free".*

  CMPAS takes no position on this in these Initial Comments.

- *Calculating partial compliance for fossil fuel generation with carbon capture and sequestration/storage (CCS) by estimating the total direct carbon dioxide emissions per megawatt-hour (MWh) reduced by the CCS to determine its carbon-free generation*.

  CMPAS takes no position on this at this time but does ask for an operational definition of what constitutes carbon capture and sequestration with regards to the CFS. The reason for this is that a definition of "carbon capture" appears elsewhere in Minnesota Statute; Minnesota Statute § 216B.2422, where it is defined as "the capture of greenhouse gas emissions that would otherwise be released into atmosphere". This definition would appear to include as carbon capture a type of generation resource in CMPAS' current resource mix, which uses captured landfill gas (including methane, a greenhouse gas) as fuel for Reciprocating Internal Combustion Engines, thereby making it eligible for partial compliance. CMPAS would thus suggest providing an operational definition to ensure there is no ambiguity.

- *Whether biomass, renewable natural gas, and solid waste should be eligible as fully or partially carbon-free generation resources based on a fuel life-cycle analysis.*

  #1) CMPAS is answering this question from the perspective of its resource mix, which, as indicated above, currently includes captured landfill gas used as fuel for Reciprocating Internal Combustion Engines. From this perspective, CMPAS requests clarity in the final Order for the exact definitions of biomass, renewable natural gas, and solid waste, so that all parties will have the same operational definitions.

  CMPAS considers its application of landfill gas as biomass, since it is explicitly mentioned in Minn. Statute § 216B.1691, subdivision 1, under the definition of biomass. However, landfill gas can alternatively be used to create renewable natural gas. CMPAS is unclear what the definition of renewable natural gas is for the purposes of this comment topic. Renewable natural gas is not explicitly mentioned in Minn. Statute § 216B.1691, but it is defined elsewhere, such as in Minn. Statute § 216B.2427. Because of this, CMPAS is concerned that some parties may think of landfill gas as renewable natural gas instead of biomass.

  Because of this, CMPAS asks that if the Commission decides to use a fuel life-cycle analysis to determine whether biomass and renewable gas are eligible, that it provide operational definitions of these different fuel types.

#2) Regarding CMPAS's position on the question of eligibility, CMPAS believes that whether or not it is determined that these fuels are eligible, either scenario may result in actions that are not explicitly authorized in this Minnesota statute. Since the phrase "life-cycle emissions" is not referenced in Minn. Statute § 216B.1691, allowing eligibility for a resource by means of a life-cycle analysis for a particular generation type – be it biomass, hydrogen or something else – may possibly go beyond the statutory intent, even if there are already precedents for the use of life-cycle analyses for carbon emissions in other matters, such as NGIA.

Conversely, if combustible fuels like biomass, renewable natural gas, and solid waste are not allowed to be fully or partially eligible through life-cycle analyses or other means, due to concerns about statutory intent, those with these facilities may find other paths for these fuels.[4] For example, renewable natural gas could be used to create and sell Renewable Thermal Credits (RTCs), to fund the purchase of EACs that would qualify for the CFS. In that sense, use of the fuel in this manner would be analogous to using fossil fuels to produce hydrogen that is "carbon free" at the point of its combustion in that an otherwise "ineligible" resource like renewable natural gas would still contribute to CFS compliance, albeit indirectly through funding. If anyone attempted to create rules preventing this, such restrictions would not be supported by the statute in its current form.

As such, whichever way the Commission decides, CMPAS just asks for consistency: i.e., if one combustible fuel is allowed to use life-cycle analyses, others be allowed to do so; or, vice versa, if one combustible fuel is prohibited from using life-cycle analyses to determine its eligibility for the CFS, than no combustible fuels should be required to use life-cycle analyses.

#3) At least one commenter in Docket CI-23-151 indicated that facilities that are eligible under the eligible energy technology standard (EETS), but that would not be eligible under a plain language interpretation of the CFS, only make up two percent of Minnesota electricity generation,[5] meaning there is no need to re-write the carbon-free definition to ensure "continuity" or a "smooth transition" between the EETS and the CFS. CMPAS believes that use of a statewide average in this reasoning ignores that some utilities in Minnesota may be disproportionately impacted as they may have over 10 percent of their energy from such facilities. For those utilities, this question at the very least becomes a more material issue for them and their ratepayers.

- *Calculating partial compliance by generators burning waste materials based on a fuel cumulative life-cycle basis considering greenhouse gas benefits relative to alternative waste management methods.*

[4] Perhaps most so in the cases where a facility using one of these fuels is a FERC Qualifying Facility. Under PURPA, the utility will take such power as long as the third party continues operating the facility.

[5] *In the Matter of an Investigation into Implementing Changes to the Renewable Energy Standard and the Newly Created Carbon Free Standard under Minn. Stat. § 216B.1691.* Docket No: E999/CI-23-151. Briefing papers submitted September 12, 2024. MN Public Utilities Commission staff. Page 28.

CMPAS initially interprets this comment topic as applying to direct burning of municipal solid waste (MSW) to produce electricity, as opposed to capturing landfill gas from a waste facility and using that gas to fuel a Reciprocating Internal Combustion Engine. Since no CMPAS members have MSW facilities, CMPAS does not have Initial Comments. However, if comments begin to regard other forms of generation besides MSW, CMPAS may submit Reply or Supplemental Comments, particularly because this topic appears to consider broader greenhouse gas benefits beyond carbon.

- *The definition and calculation of net market purchases.*

  CMPAS interprets this topic to mean: how to arrive at the amount of MWH that are considered "net market purchases", **not** whether systemwide or subregional fuel mixes are applied to those MWH, or whether any other methods, such as marginal emissions, additional REC purchases, etc, are used for quantifying impacts from those MWH for CFS compliance.

  Regarding how to arrive at the actual MWH value, CMPAS suggests that the Commission create very clear directions that can be followed by utilities of all types and sizes. CMPAS suggests the following operational definition, on an annual level of granularity:

  Net Market Purchases = Amount of MWH purchased in MISO S55 statements during year – Amount of MWH sold in MISO in S55* statements during year.*

  *S55 refers to 55-day MISO Energy Market Settlements.

  In its comments in Docket No. CI-23-151, CMPAS agreed with the Department's suggestion to move questions about net market purchases to Docket No. CI-24-352.[6] Now that CMPAS is able to consider and submit a suggested definition for net market purchases, CMPAS does not feel it necessary to submit comments on how net market purchases are counted for compliance at this time (but may do so in later rounds of comments). Furthermore, any comments CMPAS has made about how net market purchases are used for compliance in Docket No. CI-23-151 are retracted at this time; the definition CMPAS proposes above resolves its issues about how net market purchases are used for CFS compliance.

[6] *In the Matter of an Investigation into Implementing Changes to the Renewable Energy Standard and the Newly Created Carbon Free Standard under Minn. Stat. § 216B.1691.* Docket No: E999/CI-23-151. Initial Comments submitted January 29, 2025. MN Department of Commerce. Page 23.

2. Are there any other issues or concerns related to this matter?

Yes, there are two issues and one note of appreciation.

CMPAS has participated in the stakeholder group organized by the Great Plains Institute for many topics in this docket. CMPAS thanks the Great Plains Institute for providing the forum and opportunity to constructively discuss and learn about many of the topics for comment in this docket.

#1) The first issue concerns a question that the Department recommended be moved to this docket: what modifications should be made to existing REC tracking systems to enable CFS compliance.[7]

CMPAS understand that M-RETS does not issue EACs in partial MWH (i.e., EACs are in units of 1 MWH, not 1.5 MWH, for example). As stated above, CMPAS continues to believe that hourly matching may be legally impermissible under the CFS as currently defined in the statute. Nonetheless CMPAS believes this issue could be re-evaluated for M-RETS if hourly matching is still being discussed notwithstanding its questionable legality. Such a change would affect some resources that seek partial compliance and also very small behind-the-meter resources (most notably resources under 2 MW that do not offer into MISO's daily markets but do produce energy that would qualify for the Carbon Free Standard, especially for some of Minnesota's smallest utilities). These sorts of resources may produce qualifying EACs at a magnitude of less than one MWH during a time period as granular as one hour.

CMPAS also notes that RECs and EACs that are from Behind the Meter Generators (those located within the MISO footprint but not participating in daily MISO Energy Markets) are not automatically loaded into M-RETS. If hourly matching is still being discussed, notwithstanding its questionable legality, CMPAS also recommends investigating how to make it faster to import EACs from these assets to the M-RETS tracking system (as there would be a far greater number of EACs to manually import into M-RETS under an hourly tracking paradigm).

#2) The second issue regards the comment process for the Carbon Free Standard and the interdependency of this docket and Docket No. CI-23-151. Multiple questions the Commission has put forth in this docket concern issues that would be drastically impacted if hourly matching or some of the other proposals in Docket No. CI-23-151 were enacted or seriously considered. In addition, other parties have continued to file supplemental comments about modeling in Docket No. CI-23-151 even after the deadline for such comments has passed.

In CMPAS's case, because of the intertwined and continuing nature of these dockets, it will respond in part to comments made by the Department in Docket CI-23-151 about CMPAS's citation of an analysis of hourly matching. The Department disputed CMPAS' characterization

[7] *In the Matter of an Investigation into Implementing Changes to the Renewable Energy Standard and the Newly Created Carbon Free Standard under Minn. Stat. § 216B.1691.* Docket No: E999/CI-23-151. Initial Comments submitted January 29, 2025. MN Department of Commerce. Page 5.

of the analysis as being inclusive of capacity expansion plan modeling because one software footnoted in the article is not capacity expansion plan software.

This is simply not the case. CMPAS indicated the report included capacity expansion modeling. CMPAS personnel confirmed that the capacity amounts used in modeling had been optimized during their full analysis process (i.e., the objective of capacity expansion modeling).