MINNESOTA
PUBLIC UTILITIES COMMISSION

March 13, 2026

Ms. Sasha Bergman

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

RE: Vegetation Management Plan
Lake Charlotte Solar Project
PUC Docket Numbers: IP-7159/GS-25-206 (Solar Facility) IP-7159/ESS-25-205 (Storage Facility)
CAH Docket Number: 23-2500-41194

Ms. Bergman:

PUC EIP staff, on behalf of the interagency Vegetation Management Planning Working Group (VMPWG), respectfully submits comments on the Vegetation Management Plan (VMP) proposed by Lake Charlotte Solar, LLC (Lake Charlotte Solar).

The VMPWG has reviewed the draft VMP for the proposed Lake Charlotte Solar Project (project) included as Appendix C of the Site Permit Application filed June 3, 2025.[1] The VMPWG does not recommend any action by the Minnesota Public Utilities Commission (Commission) at this time but is providing comments to facilitate transparency in the record as the VMPWG works with Lake Charlotte Solar to arrive at a VMP that is adequate to meet pre-construction compliance filing requirements.

Overall, the plan for site restoration and implementation appears to be achievable to meet the anticipated permit conditions and the applicant's objectives to:

- Establish a sustainable, diverse, perennial grassland community, appropriate to site conditions and safe operation, maintenance, and inspection that complies with all permits and regulations, and
- Implement adaptive management of vegetation cover, guided by strategic integration of site-specific environmental conditions to maintain a perennial grassland community that keeps the soils on the site stabilized, improves soil conditions, and preserves the site for agricultural use in the future

The VMPWG is committed to working with applicants and permittees to ensure that site restoration is successful and meets the goals laid out in the management plan. The VMPWG provides these specific

[1] Lake Charlotte Solar, *Site Permit Application: Lake Charlotte Solar Project. Appendix C: Vegetation Management Plan*. June 3, 2025, eDocket No. 20256-219557-05.

comments on the plan and recommends that Lake Charlotte Solar address these comments in its pre-construction VMP submittal:

Management Areas

- The applicant has identified management areas that will include different seed mixes, the solar array mix, the perimeter mix, and the wet mix. The VMPWG recommends the applicant further split up the other sections of the VMP into management areas to describe strategies for each seed mix based on the differing establishment and management strategies and requirements, such as for site prep and long-term management of wet seed mixes vs. prairie seed mixes.

- The applicant is advised to include detail on how areas such as those adjacent to or within wetlands, stormwater ponds and vegetated swales, will be managed in comparison to upland areas that will be more disturbed.

Site Preparation

- The different vegetation management areas and seed mixes may require different site preparation methods due to characteristics such as soil properties or temporary saturation. The applicant should clarify specific site preparation techniques and/or equipment that may be required in each management area or under certain circumstances.

- The VMPWG recommends that the applicant conduct soil testing to assess the presence of pesticide and herbicide residue. In addition to soil testing, the applicant is advised to verify the chemical application history of the site, using both assessments to determine if special methods will be necessary to allow for successful native vegetation establishment. If chemical carryover is likely and native seeding cannot be delayed due to construction schedules, supplemental seeding may play an important role in subsequent years in areas with poor establishment.

- Include information about drain tile at the site, including how drain tile is currently managed, future drainage plans at the site, and how the vegetation management will interact with drain tile to reduce impacts on soil moisture throughout the life of the project.

Seed Installation

- Additional information is needed about the potential use of cover crops, including a description of if and/or when temporary covers would need to be clipped to decrease height and seeding. Cover crops are often used to stabilize soils and reduce weeds during site restoration. In addition to suppressing weeds, cover crops also can suppress and reduce germination of desired species. The applicant is advised to consult with the VMPWG when integrating cover crops with seed mixes, and upon final selection of a temporary seed mix choice.

- Clarify if hydroseeding is to be used. In the case that hydroseeding is used, native seed should be applied in water first before a tackifier. Native seed should not be mixed in the tackifier, as this can inhibit seed to soil contact.

- Describe the mulch intended to be applied after seeding. It is generally advised to avoid the use of mulch or erosion control materials that contain plastic netting and/or malachite green dye, including within hydroseed mulch. The applicant is recommended to use straw mulch to cover topsoil as a wildlife friendly choice.

Seed Mixes

- The project site contains areas of soils classified as very poorly drained or somewhat poorly drained, creating a likelihood that these soils will retain moisture. The areas of the site with poorly drained soils would benefit from the addition (or substitution for dry habitat species) of additional moist soil species to the mix such as Canada Blue-joint grass, fowl manna grass, and fowl bluegrass to help ensure successful establishment. BWSR's Solar Moist Soils seed mix is an example that contains species that can be used in the site, or as a model to develop a seed mix.

- The applicant should consider having two array mixes, one for hydric soils that may remain relatively moist (or increase in moisture if drain tile becomes less effective over time), and a separate mix for the rest of the array areas. This would solve the challenge of having dry prairie and wet meadow mixes combined in one mix.

- I also didn't see any information about drain tile at the site. I would assume that the entire site is currently drained, and the future effectiveness of the drain tile will have a significant influence on the soil moisture in the future

- Several species in the proposed seed mix could be potentially problematic for the area due to the selection of species that have incompatibility with soils, are non-native , or are uncommon and may not be commercially available. The applicant is advised to meet with the VMPWG to further discuss seed mix and species choices, as well as to explore BWSR's State Seed Mixes for diverse options that will better suit the project.

- The applicant has indicated that it will complete any seed mix substitutions in order to remain consistent with the short- or long-term goals and objectives of the VMP. The applicant is advised to use substitutions from BWSR and MnDOT substitution lists. The applicant is also advised to select and provide a list of seed mix substitutions ahead of time to the VMPWG for review, in order to ensure that original vegetation management objectives will be met. This will allow for the VMP to continue as planned in the case that there are shortages of individual species. In the event that substitutions are to be used, EIP staff and partner agencies request that the applicant provide the list of final substitutions to the VMPWG to review prior to seeding. The goal is to ensure that the ecological niche and guild of a plant species is retained when substitutions are necessary.

- The VMPWG recommends the applicant use seed mixes that meet the DNR's high-diversity standards, as high diversity plantings have a better chance at long-term health and self-sustainability compared to mid-diversity plantings. In addition, high-diversity seed mixes provide maximal ecosystem benefits.

Visual Screening

- The applicant should update the landscape screening section of this plan in the case that vegetative screening plans are modified through the development of a visual screening plan. The visual screening plan should provide a complete list of the species to be planted and the size of plant material, summarize the planned planting methods for all trees and shrubs, and include guidance for ensuring that plants are installed using best practices. Native species should be used for vegetative screening. The visual screening plan can be referenced in the VMP or included as an appendix to the plan.

Mowing and Haying

- The applicant indicates that mowing will be done periodically based on site conditions. Ideally, mowing should be done in response to shading needs rather than on a consistent schedule. This allows plants to flower for pollinators and allows for the overwintering of some pollinators in plant stems. The applicant should consider leaving a percentage of dormant plants intact for overwintering pollinators.

- Mowing height requirements should take into account the successful establishment of seeded native plants. If the mowing regimen is too aggressive, the planting is less likely to be established successfully.

- Mowing should be timed to avoid impacts to wildlife, such as ground-nesting birds and butterflies. The applicant should indicate any restrictions for mowing and haying in compliance with listed species requirements or special conditions. Measures can be taken to avoid destroying ground-nesting bird nests during the nesting season (May 15 – August 1). If haying is utilized, it should occur after the nesting season for grassland birds (May 15 – August 1) and should be done at a raised height.

- For mechanical mowing and haying, hayed/mowed vegetation should be bagged and removed off site to prevent smothering new growth.

Grazing

- The applicant included a description of grazing management strategies in the case that grazing is used as a long-term management strategies in areas of the project occupied by the solar array or areas surrounding arrays. The applicant is advised to include this grazing plan as a stand-alone document that can be updated and referenced in the future. The plan should summarize the goals of grazing, the type and number of animals to be used, plans for fencing, the time and duration of grazing, and the decision-making process for ensuring that vegetation is not over-grazed. The grazing plan should include adequate rest after defoliation of at least 30 calendar days and should influence refugia, so the entire site is not defoliated at one time. Drought contingency plans should be developed to avoid overgrazing during extreme conditions.

Herbicide Use and Weed Control

- Mowing can increase the presence of noxious weeds, and the mower can spread these species throughout the site. The use of mowing to prevent the development of noxious, invasive, and woody plants should be approached with caution. Consider referencing the DNR's Prairie Establishment and Maintenance Technical Guidance to better align mowing and chemical use with project goals.

- The applicant has provided information about herbicide type. The VMP must also provide additional information about anticipated herbicide use, including surfactant rate, and frequency.

- Managing weeds is important in establishing native vegetation. Weed control through herbicide management should only include spot treatments, not broadcast spray, and it is recommended that spot treatments be required, not preferred, as a management technique. Widespread application of herbicides may act as a pre-emergent and reduce germination of desired vegetation. In this VMP, the applicant largely describes the control of noxious weeds to be through spot-treatment, and spot-mowing. In addition, the applicant intends to use a temporary cover crop. This can be beneficial by reducing the need for herbicide application and therefore reducing the potential for spray drift to impact neighboring plant communities.

- The applicant has indicated that no tree removal or woody vegetation removal is planned. In the case that tree removal should occur, the applicant should provide additional information about the method of control for trees and shrubs, including the anticipated use of both mechanical and chemical techniques and the conditions in which said techniques are appropriate. Include details on how woody materials, brush, and stumps will be removed from the site. Describe the disposal method of removed woody vegetation.

Management

- Management strategies are provided for the general plan. Management strategies should be tailored to each management unit, including any specific requirements or restrictions in sensitive and unique areas (array mix, border areas, wet mix etc.).

- Some species listed in the perennial weed list are known to be native to the area and desirable in this type of landscape. The applicant should clarify if species such as Common Yarrow, or Yellow Wood Sorrel will be treated as perennial weeds, as these can be beneficial host plants for pollinators, and should not be treated.

Monitoring and Reporting

- The applicant indicates that an annual monitoring report will be created documenting the status of the established vegetation and the hazards encountered. The report will also include the results of inspection and monitoring activities during the previous year and report how the vegetation is meeting the goals and objectives in the VMP. The applicant is advised to submit their annual reports to the Commission along with its yearly compliance filings. An annual

monitoring report allows for VMP revisions based on any shortcomings or challenges faced during the reporting period. The annual report will be key to keeping the VMP "alive" and on track for successful implementation and long-term success. Annual monitoring reports for each growing season should be filed with the Commission on a yearly basis.

Habitat Friendly Solar Program

- The VMPWG encourages the applicant to enroll this project in the state's Habitat Friendly Solar Program, as the applicant describes meeting the eligibility criteria in the project VMP. Enrollment in the program will highlight the habitat establishment at the project and make the site eligible for MRETs credits. Further consultation with VMPWG regarding seed mix selections would benefit the applicant as it determines eligibility under the habitat friendly solar requirements, such as through selecting diverse seed mixes with flowering species across the seasons.

Updates to the Vegetation Management Plan

- The VMPWG understands that Lake Charlotte Solar is still finalizing aspects of the VMP and requests that Lake Charlotte Solar continue to coordinate with EIP staff and other state agencies as the VMP is finalized prior to construction.

In summary, EIP staff recommend that the applicant continue to coordinate with the VMPWG as it finalizes the vegetation management plan, including the development of native seed mixes and substitutions suitable for the site, refinement of the installation, management, and monitoring plans, annual reporting details, and further clarification of project-specific details and management units. The VMPWG looks forward to the successful site restoration of the Lake Charlotte Solar Project. The VMPWG will provide additional review and recommendations to the Commission and the applicant as part of EIP staff pre-construction compliance review.

The VMPWG appreciates the opportunity to comment on the proposed Lake Charlotte Solar Project.

Sincerely,

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CC:

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