

September 12, 2025

Ms. Sasha Bergman

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

RE: Vegetation Management Plan  
Benton Solar Project  
**PUC Docket No.** IP7115/GS-23-423, ESS-24-283  
**OA# Docket No.** 25-2500-40508

Ms. Bergman:

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

The VMPWG has reviewed the draft VMP for the proposed Benton Solar Project (project) included as Appendix D of the Joint Site Permit Application filed September 24, 2024.<sup>1</sup> 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 Benton 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 and includes a range of potential seed mixes that can meet the anticipated permit conditions and the applicant's objectives to establish regionally appropriate vegetation that:

- Increases ecological diversity and function by using species that provide pollinator value and establishing a diverse vegetation community that provides ecosystem services throughout the season.
- Stabilizes soils, controls surface runoff, and prevents soil erosion.
- Does not impede or interfere with solar panels.
- Reduces the need for long-term maintenance and invasive species management efforts.

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

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<sup>1</sup> Benton Solar LLC, *Joint Site Permit Application: Benton Solar Project. Appendix D Vegetation Management Plan*. September 24, 2024, eDocket No. [20249-210442-13](#).

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

## Site Description

- The discussion of site hydrology should include a description of any known or likely agricultural drainage features, such as drain tile or county drainage ditches.

## Management Areas

- All vegetation management areas must be described throughout the VMP. The applicant has identified short- and long-term management objectives, described establishment, management, and monitoring procedures, and provided seed mixes for the array management area and the buffer management area. This information is also needed for the transmission line ROW management area and stormwater basin areas.

## Site Preparation

- The different vegetation management areas 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 some management areas or under certain circumstances. Site preparation methods for all management areas should be discussed.
- The VMPWG appreciates that the applicant intends to conduct soil testing to assess the presence of 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.
- It is generally advised to avoid the use of mulch or erosion control materials that contain plastic netting, including within hydroseed mulch. The current plan to use straw mulch to cover topsoil is a wildlife friendly choice.

## Seed Installation

- The VMP describes the timing of seed installation, the seed installation methods and necessary equipment, and includes a table summarizing planned seeding timing and installation methods for the array and buffer management areas. The applicant should also provide this information for the transmission line ROW management area and the stormwater basin areas.
- If 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.

## Seed Mixes

- Seed mixes should be provided for all management areas, including the transmission line ROW management area and stormwater basin areas.
- The applicant should describe the relevant characteristics of each seed mix regarding plant species composition, diversity, suitability, and characteristics.
- The VMPWG notes that the sandy and excessively drained soils of the project area will limit the growth height of many species.
- The applicant has provided a list of seed mix substitutions that were selected 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 upland 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.
- Array Management Area Seed Mix:
  - This seed mix would benefit from additional early blooming forbs, such as Golden Alexanders, and late blooming forbs, such as Heath Aster, Sky Blue Aster, and Gray Goldenrod, as this will maximize benefits to pollinators. The VMPWG recommends the inclusion of at least one milkweed species; whorled milkweed would do well at this site.
  - Timing will be important regarding the inclusion of Prairie dropseed in this seed mix, as this species has limited seed viability.
  - The VMPWG recommends that Prairie Trefoil is replaced with Partridge Pea as another legume.
  - The applicant is advised that Woolly Plantain may not be commercially available, or may only be available in small amounts.
- Buffer Management Area Seed Mix:
  - The VMPWG recommends that Missouri Goldenrod is replaced with Showy Goldenrod, as Showy Goldenrod is a more common species on the soil types of the site.

## Visual Screening

- The applicant should clarify whether vegetative screening will be utilized for this project, as the use of vegetative screening will require 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.

## Mowing and Haying

- 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 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. The applicant indicates that measures will 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 should clarify if grazing is being considered as an adaptive management strategy. If grazing is utilized, a grazing plan is needed. 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

- Discuss any populations of invasive species or noxious weeds that are already known to be present on site.
- 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.
- The applicant must provide additional information about anticipated herbicide use, including herbicide type, 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. The applicant is advised that widespread application of herbicides may act as a pre-emergent and reduce germination of desired vegetation. The applicant indicates that a survey will be done regarding the potential for herbicide drift to impact revegetation and vegetation management methods. In this case, extended use of temporary cover crop will be considered. This can reduce the potential for spray drift to impact neighboring plant communities.

- The applicant should provide additional information about control of trees and shrubs, including the use of both mechanical and chemical techniques and the conditions in which said techniques are appropriate.

## Management

- Management strategies are provided for the establishment and long-term management phases within the array and buffer management areas. Management information should also be provided for the transmission line ROW management area and stormwater basin areas.
- Provide a management schedule in table format that describes the type and timing of management activities, including adaptive management, throughout the project's lifespan. The schedule should start in Year 0, following seeding, and break down the activities by vegetation phase (establishment and management).

## Monitoring and Reporting

- The applicant should provide an assessment of the anticipated outcomes of vegetation establishment.
- The applicant should provide a description of the monitoring protocols and the qualitative and quantitative methods that will be used in monitoring.
- Monitoring should be conducted by a qualified, third party, independent agency. The selected monitor should have sufficient botanical experience in identifying native plants, native plant communities, invasive species, and non-native species typical of Minnesota. The applicant should develop a monitoring plan that includes both quantitative and qualitative methods and provides an assessment of anticipated outcomes.
- 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. The applicant describes annual monitoring and reporting that will be conducted throughout the project lifetime. Annual monitoring reports for each growing season should be filed with the Commission on a yearly basis.

## Habitat Friendly Solar Program

- The VMPWG recommends that the applicant enroll this project in the state's [Habitat Friendly Solar Program](#). Enrollment in the program will highlight the habitat establishment at the project and make the site eligible for MRETs credits.

## Updates to the Vegetation Management Plan

- The VMPWG understands that Benton Solar is still finalizing aspects of the VMP and requests that Benton 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 diverse, native seed mixes suitable for the site, refinement of the installation, management, and monitoring plans, and clarification of project-specific details. The VMPWG looks forward to the successful site restoration of the Benton Solar Project. The VMPWG will provide additional review and recommendations to the Commission as part of EIP staff pre-construction compliance review.

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

Sincerely,



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PUC EIP Environmental Review Manager



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PUC EIP Environmental Review Manager

CC:

Vegetation Management Planning Working Group

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