

## **Appendix D – Preliminary Vegetation Management Plan**

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**PRELIMINARY VEGETATION MANAGEMENT PLAN  
BLUE LAKE ENERGY STORAGE PROJECT**

**June 2025**

**Northern States Power Company**



**414 Nicollet Mall  
Minneapolis, MN 55401**

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## 1 INTRODUCTION

The Blue Lake Energy Storage Project (“Project”) involves construction of a new 135.5-megawatt (“MW”)/542 megawatt-hour (“MWh”) Energy Storage System composed of lithium-ion battery technology. The proposed standalone storage project would consist of approximately 128 Energy Storage System (“ESS”) units, 32 medium voltage transformers and one main power transformer on approximately 13.4 acres within a larger 67.8 parcel. All this associated equipment, referred to as the (“ESS Facility” or Project), is located on land owned by Xcel Energy adjacent to the Xcel-owned and operated Blue Lake Generating Station in Shakopee, Minnesota.

This Vegetation Management Plan (“VMP” or “Plan”) is intended to describe Xcel Energy’s standards for handling of vegetation removal and protection of existing vegetation during site preparation and construction and for revegetation of areas of exposed soil during restoration following Project construction.

Xcel Energy provides this draft VMP for consideration as part of the route permit proceedings.

## 2 GENERAL VEGETATION MANAGEMENT

Xcel Energy’s standard practice is to clear all woody vegetation within the preliminary development footprint for construction of new energy storage system facilities. This includes areas adjacent to or co-located with existing energy infrastructure, such as the Blue Lake Substation adjacent to the Project. Vegetation clearing is performed to ensure safe and efficient access for construction equipment and personnel, to establish fire-safe zones around the facility, and to maintain necessary clearances for ongoing safe and reliable operation of the ESS Facility once in service. In certain limited cases, vegetation may be selectively retained if it does not interfere with facility design, construction access, or applicable safety codes. While removal of woody vegetation within a development area is often necessary, efforts are made to preserve compatible vegetation to help minimize impacts such as soil erosion, wetland disturbance, or loss of sensitive habitats. The following outlines general vegetation management practices that will be implemented to reduce environmental impacts during construction of the Project.

- Use erosion control best management practices (“BMPs”) to intercept stormwater runoff from areas disturbed as part of clearing operations. Stormwater BMPs are addressed in the Stormwater Pollution Prevention Plan (“SWPPP”).

- Minimize rutting by using matting materials in wetland areas for all construction activities, including development area clearing activities; or perform work on firm or frozen ground that can support the equipment used.
- Minimize soil disturbance in steeply sloped areas, to the extent possible and/or practicable.
- Limit construction activities, including vegetation removal, to the development area and off right-of-way access.
- To the extent practicable, limit traffic in the development area between structure locations to a single access path.
- Limit staging and lay-down areas to previously disturbed areas where practicable.
- Use construction mats to minimize impacts within wetlands and other areas with easily disturbed soils when construction during winter (frozen) months is not possible.
- To the extent practicable, complete construction in wet organic soils when the ground is frozen.
- When existing low-growing vegetation is disturbed during construction restoration efforts, focus on establishing compatible (low growing) non-invasive species within the development area.
- Minimize the amount of gravel foundation areas for ESS Facility equipment.

### **3 VEGETATION REMOVAL**

The Project will require the clearing of vegetation within the development area and along construction access paths. Vegetation that may interfere with safe construction and safe and reliable operation of the ESS Facility will be removed and managed through the operational life of the Project.

Clearing of vegetation will occur prior to other construction activities as allowed by permit conditions. Clearing may be accomplished with the use of chainsaws, mowers, and hydraulic tree-cutting equipment. Vegetation will be cut at, or slightly above, the ground surface. Rootstock or stumps will typically be ground and leveled off.

Non-merchantable material, including trees, brush, and slash, will be either cut and scattered, placed in windrow piles, chipped, or burned within the development area. Non-merchantable felled material may also be removed from the development area in a fashion that does not cause erosion unless BMPs are installed.

### **3.1 UPLAND VEGETATION REMOVAL**

The cut and scatter method, where understory trees, branches and brush are simply cut, sectioned into smaller pieces, and scattered across the site, may be used in areas where limited clearing is necessary, and access is challenging. The purpose of this method is to limit unnecessary equipment access and hauling which could potentially disturb existing ground or vegetation.

Woody vegetation may be chipped and scattered over the development area to a maximum depth of one inch in non-agricultural upland areas.

### **3.2 WETLAND VEGETATION REMOVAL**

The use of heavy equipment in wetlands and wetland vegetation removal is not anticipated for the Project. Should any wetland vegetation be removed, it will be minimized to the extent practicable. Wetland impact minimization will be accomplished by:

- constructing in wetlands during frozen conditions to the extent feasible;
- working in dry conditions;
- using low ground-pressure tires or specialized tracked vehicles; and
- using matting materials when the ground is not frozen.

These BMPs are intended to minimize damage to wetland vegetation and soils.

Removal of trees and shrubs from forested wetlands is not necessary for the Blue Lake ESS; however, should the need arise, the following information details a plan for vegetation removal from forested wetlands.

The removal of woody vegetation within forested wetlands will be conducted in accordance with U.S. Army Corps of Engineers permit conditions. Within these areas, all trees and large shrub species will be cleared to ground level. Small diameter trees and shrubs (<6" diameter) will be cut and debris scattered in place. Large diameter trees and shrubs (>6" diameter) will be hauled out of wetland areas to suitable upland locations and treated according to applicable procedures. If the cut and scatter method is used within wetland areas, no slash material will be left in the wetlands. Chipping or scattering of chips will not occur in wetlands.

Stump removal may occur within wetlands only where stumps interfere with the placement of construction mats or pose a risk to construction tires and equipment. Where removal is required for access, stumps will be ground to a point at or slightly below the ground surface using low ground-pressure track-mounted equipment.

Woody materials generated by stump grinding may be thin-spread in the wetland; but said material will not be mounded.

#### **4 HERBICIDE USE**

Herbicides may be used within the development area to control regrowth of woody species, prevent the re-sprout of the stumps of tall-growing tree species or to control listed invasive or noxious weed species. All herbicide use will be in accordance with manufacturer's specifications and all applicable federal and state regulations. Herbicides designated for upland use will not be used within 75 feet of the vegetative buffer of waterbodies. Herbicides used in or near wetlands and waterbodies must be designed for use in wet areas as designated by manufacture's specifications and federal and state regulations.

The contractor applying herbicide will be required to obtain any necessary permits and/or certifications prior to herbicide placement and will be required to keep proper documentation of location and timing of herbicide use. Treatment shall conform to manufacturers' specifications.

#### **5 NOXIOUS WEEDS AND INVASIVE SPECIES CONTROL**

Xcel Energy has identified mitigation measures to be implemented to prevent the introduction and spread of new infestations of noxious weeds and invasive species ("NWIS") due to the Project on lands disturbed by construction activities.

Preventing the introduction by the Project of NWIS from outside of the Project area is primarily accomplished by ensuring that, prior to arrival onsite, equipment is cleaned and visible dirt or plant parts are removed using methods such as vehicle washing, high pressure compressed air blowers or brushing. A variety of methods can be used to control NWIS that are already present within the Project. These include completing tree and brush clearing during the winter, treating NWIS infested areas with herbicide prior to start of clearing, spreading mulch along access paths, and routing access paths away from NWIS infested areas.

Winter clearing limits the likelihood of construction equipment coming in contact with NWIS plant parts or seeds and reduces the chances of spreading those parts throughout the development area. Treatment of NWIS areas with herbicides before they are able to go to seed can also minimize spread. If any mulch is used on the Project, it will consist of state-certified weed-free material or mulch derived from onsite locations. The contractor will be responsible for locating and documenting the source of certified

weed-free mulch. Copies of the applicable certification documentation must be made available upon request to the appropriate agencies. Mulch derived from onsite locations may be spread up to six inches deep in upland areas to provide ground protection along access paths. No mulch will be spread in wetland locations. Major infestation areas due to the Project which are identified during the first growing season will be treated with the use of herbicides or by mechanical methods.

## **6 SEEDING AND REVEGETATION**

Revegetation of areas disturbed by construction activities will take place as soon as practicable following construction completion in those areas. Seedbed preparation will be dependent on the site conditions following construction activities and may include tilling to a minimum depth of four inches with a disc, field cultivator, or chisel plow, breaking up large clumps and firming the soil surface. Prior to seeding, prepared beds should be sufficiently soft to allow for seed penetration and mulch anchoring, while sufficiently firm to provide surface soil stability. Seeding and mulching should occur parallel to ground contours as practicable.

Because ESS Facility developments are typically concentrated within a defined project footprint, the impacts to landcover types and plant communities are generally localized but may still vary depending on site conditions. Restoration efforts will aim to reflect pre-construction vegetation and land use where feasible and consistent with the safe and reliable operation of the facility. In areas with exposed soils such as access roads, equipment pads, or previously disturbed zones dominated by non-native vegetation, a Minnesota state seed mix from the 25 series (Non-Native Grassland) may be applied. These certified seed mixes are designed for regional conditions and meet standards for purity, germination, weed content, and live seed weight, and are verified as noxious weed-free. In locations where construction disturbs previously undisturbed natural areas supporting native vegetation, appropriate native seed mixes will be used to promote ecological integrity.

### **6.1 SEEDING METHODS**

Seeding methods may include broadcast, seed drilling or hydroseeding. Broadcast seeding is the most commonly used method for relatively small, disturbed areas, which are typically what is seen in ESS Facility construction for areas outside of the gravel foundation. Seed is uniformly distributed by a mechanical, hand-operated seeder; or in small seeding areas, by hand. Following seeding, the surface is typically raked with a cultipacker, harrow, or hand rake. The bed is to be firmed as appropriate to site conditions.

Drilled seed will typically be sown at a depth of approximately 0.25 inches; however some native seed mixes contain small seed which needs to be more shallow. If native

seed mixes are being installed via seed drill, equipment will be able to accommodate and uniformly distribute different sizes of seed at the required depth. Feeding mechanisms will be able to evenly distribute different seed types at the rates specified. Seedbed soil is to be suitably firmed immediately following seed drilling. Seed drilling is only used in areas with a larger disturbance footprint.

Hydroseeding involves applying seed in a broadcast, hydromulch slurry. The hydromulch mix allows the installer to see where application has taken place, ensuring uniform coverage of the seeding area. The hydro-seeder must provide for continuous agitation of slurry and provide for a uniform flow of slurry. This method is not recommended for diverse native seed mixed because of the range of seed sized and necessary planting depths.

When used, native seed mixes are typically most successful when installed between April 1 to June 30, or when soil temperatures have fallen below 55 degrees Fahrenheit in the fall. However, seeding will also be completed outside of those time periods, as areas are ready for revegetation. This is to facilitate permanent vegetation cover as soon as possible. Additional seed may be installed in areas where initial seeding is not successful. Temporary seed (oats or winter wheat) may also be applied in those situations as a cover crop.

Temporary seeding of cover crop will occur in locations where unfrozen, bare soil surface conditions and ruts will not be permanently restored within 30 days of completion of active work. Temporary restoration activities will include the repair of rutted surfaces and an even broadcast-seeding of the temporary cover-crop seed mix at a rate appropriate to the cover crop to provide erosion control of the soils. No mulch is to be applied in wetland areas.

## **6.2 NATURAL REVEGETATION**

In many cases, natural revegetation by early successional native species following tree clearing is expected to occur. In areas where native species voluntarily revegetate the area, active restoration and seeding may not be required. Regular monitoring will take place to ensure that NWIS within the area are controlled, that desirable native plant species become the dominant vegetation communities in natural areas, and that bare soils are quickly stabilized to reduce erosion. In areas of minimal disturbance, vegetation will be allowed to regenerate naturally.

Where standing water is not present, and where surrounding vegetation is dominated by abundant native species, the seeding of bare soils created by rutting, using the temporary cover-crop seed mix may be sufficient for cover while native species revegetate the area.

In areas where wetland plant communities are dominated by native species with rhizomatous root systems that will likely recolonize areas of limited disturbance rapidly, bare soils may be broadcast-seeded with the seasonally appropriate temporary cover-crop. In areas where disturbed and bare soils are sufficient to preclude revegetation from the local, native seed source, a native wetland seed mix will be applied.

## **7 EROSION CONTROL**

In some cases, temporary erosion control methods will be necessary to stabilize soils and give the seed time to germinate. Erosion control measures may consist of anchored straw mulch, hydromulch, wood chip mulch, or erosion control blankets. When used, the contractor will be responsible for acquiring certified weed-free mulch. If used, erosion control blanketing will be wildlife-friendly non-welded weave in order to minimize impacts to small wildlife. Mulch or blanketing will be required on disturbed, exposed soils on all slopes greater than five percent, and on dry, sandy soils prone to erosion by wind or rain.

If there are locations where seeding is not possible, and there is adequate seed bank present in the soil, temporary stabilization using erosion control matting or mulch will be installed and maintained in a similar manner as in seeded areas. Dormant seeding may be used after soil temperatures have fallen below 55 degrees Fahrenheit when lower temperatures prevent seed from germinating. If dormant seeding is performed, temporary erosion control measures will be installed as indicated in the project SWPPP.

## **8 MONITORING**

The Permittee will be required to monitor and control NWIS due to the Project within the development area throughout Project construction. Infestations of NWIS in the development area will be reported to the appropriate agencies. The Permittee will work with the appropriate agencies to achieve standards set forth in Minnesota Statutes Chapters 18 and 84D, along with Minnesota Administrative Rules Chapter 6216.

The Permittee will monitor areas where seeding and erosion control measures have been implemented and will follow-up with reseeding measures where vegetative cover by the specified seed mix, or revegetation by the local, native seed source is inadequate to provide long term stability and sustainable native plant communities.