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VIA EFILING AND EMAIL

Kate Kahlert
Minnesota Public Utilities Commission
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RE: *In the Matter of Possible Amendments to Rules Governing Certificates of Need and Site and Route Permits for Large Electric Power Plants and High-Voltage Transmission Lines, Minn. R., Chapters 7849 and 7850; and to Rules Governing Notice Plan Requirements for High-Voltage Transmission Lines, Minn. R., part 7829.2550*
Docket No. E,ET, IP-999/R-12-1246

Dear Ms. Kahlert,

EDF Renewables, Inc. (“EDF”) appreciates this opportunity to submit comments on the above-captioned rulemaking. EDF also requests a public hearing in connection with this rulemaking. EDF’s comments are limited to Minn. R. 7850.4400, subp. 4.

EDF opposes the proposal to maintain section 7850.4400, subp. 4 in its current state because it retains an outdated and inflexible standard for siting energy projects on prime farmland (“Prime Farmland Rule”).¹ Rather than maintaining the status quo with respect to the Prime Farmland Rule, EDF requests the Commission modify this rule in a manner that would allow for the orderly and appropriate siting of solar projects, including utility-scale solar projects, on prime farmland subject to a farmland and vegetation management plan developed in conjunction with the Department of Agriculture and approved by the Minnesota Public Utilities Commission (“Commission”). EDF supports the language previously discussed by the Commission that would allow approval of solar projects sited on prime farmland subject to an approved farmland mitigation plan developed in consultation with the Department of Agriculture.²

¹ EDF does not take a position on any other provisions of the proposed rules.

² See Document 20187-145121-01, Briefing Papers, *In the Matter of Possible Amendments to Rules Governing Certificates of Need and Site and Route Permits for Large Electric Power Plant and High-Voltage Transmission Lines, Minnesota Rules, Chapters 7849 and 7850; and to Rules Governing Notice Plan Filing Requirements for High-Voltage Transmission Lines, Minnesota Rules, part 7829.2550* (dated July 23, 2018) (“2018 Briefing Papers”) at 48. This proposal also included a provision deferring to any local zoning ordinance regarding development of solar on prime farmland. This provision was not supported by the majority of those stakeholders that addressed this proposed modification in comments or at the hearing, and EDF does not support such a modification to the rule.

The Existing Prime Farmland Rule

The Prime Farmland Rule presents a formula that restricts the development of *all* electric generation projects on prime farmland, regardless of the type of development, unless there is “no feasible and prudent alternative” to locating the project on prime farmland:

Subp. 4. Prime farmland exclusion.

No large electric power generating plant site may be permitted where the developed portion of the plant site, excluding water storage reservoirs and cooling ponds, includes more than 0.5 acres of prime farmland per megawatt of net generating capacity, or where makeup water storage reservoir or cooling pond facilities include more than 0.5 acres of prime farmland per megawatt of net generating capacity, unless there is no feasible and prudent alternative. Economic considerations alone do not justify the use of more prime farmland.
...³

This rule was adopted by the Environmental Quality Board (“EQB”) in the early 1980s. The Prime Farmland Rule was unquestionably not intended to address projects such as modern utility-scale solar, as such projects were not envisioned at that time. When this rule was adopted, the EQB was focused on the impacts associated with development of the “conventional power plant” of the day:

The conventional power plant site consists of a power station or developed portion, in which structures, facilities and land uses necessary to plant operation are located, and a buffer area. The buffer area is land surrounding the power station that is used to minimize plant impacts, such as noise and cooling tower drift, that diminish with increased distance from the plant. A proposed plant may also include a water storage reservoir or cooling pond to store water for the cooling systems or to comprise the cooling system, respectively.

By this definition, the developed portion of the plant site would consist of structure, facilities and land uses that preclude crop production. . . .⁴

The EQB also noted that “[t]here can be no debate that development of a power plant on top of productive agricultural land will adversely affect that land’s productivity in a significant, *and largely irreversible* way.”⁵ Adverse effects could include soil compaction resulting from heavy machinery, removal of topsoil, and mixing of soils.

By contrast, modern solar installations do not involve permanent structures and facilities. The racking systems that support solar arrays are driven directly into the ground like fenceposts, and do not require the addition of concrete or gravel. The underground electric collection conductors are directly buried four feet below grade. Inverter skids are placed on shallow pile foundations or placed at grade with no

³ Minn. R. 7850.4400, subp. 4.

⁴ *In the Matter of the Proposed Amendments to Rules Relating to Siting Large Electric Power Generating Plants*, Environmental Quality Board Statement of Need and Reasonableness (June 25, 1981) (“1981 EQB SONAR”) at 23.

⁵ 1981 EQB SONAR at 9 (emphasis added).

foundation other than a concrete platform. In addition, the equipment used to install solar projects are similar to equipment that would normally be used in an agricultural setting, and does not include heavy equipment like cranes.⁶ Solar installations do not involve substantial subsurface work to install building footings or foundations, and are designed to be removed when no longer in use, with land returned to agricultural production. In this way, when paired with plantings of regionally-appropriate vegetation, the impacts of utility-scale solar on farmland is more similar to those of enrollment in the federal Conservation Reserve Program (“CRP”) than the impacts associated with a central station coal plant in terms. In fact, solar is superior to even CRP, as it is privately funded, has longer term conservation benefits (30-40 years), and also produces an in-demand, affordable and clean solar energy product.

Solar projects also provide 30 or more years of co-benefits, such as providing pollinator-friendly vegetation, improvements to water quality and soil quality, fertilizer and pesticide use reduction, and wildlife habitat, in addition to generating in-demand carbon-free energy. Solar projects also compensate participating landowners at rates far greater than any commodity row crop or public land conservation program provides, which can be a welcome supplement to farm income.

It is long past time to refine this rule. The Commission should not forego the opportunity to revise this forty-year-old rule to allow for a different treatment of the siting of large solar facilities with respect to Prime Farmland.

The Prime Farmland Rule Could Impede the Development of Utility-Scale Solar Projects

The Prime Farmland Rule has impacts on an enormous swath of Minnesota lands, especially in southern and western Minnesota. Clean Energy Resource Teams (“CERTs”) reports that Minnesota has over 25 million acres of land in farms, and over 17.3 million acres of prime farmland.⁷

During the past few years, the Commission has allowed siting of utility-scale solar on prime farmland upon a showing that no feasible or prudent alternatives exist subject to reasonable agricultural mitigation and vegetation management practices. EDF appreciates the Commission’s thoughtful handling of these particular cases. However, while the outcome of these recent determinations has been encouraging, case-by-case consideration is not a substitute for the regulatory certainty and consistency that could be achieved through a change to the Prime Farmland Rule. EDF is concerned that at some point in the future, the Prime Farmland Rule could be misused to block utility-scale solar projects.

The establishment of a clear exemption for solar development would ensure that future Commissions will apply predictable criteria to solar siting, and that solar projects will be treated consistently with respect to the temporary use of Minnesota’s prime farmland.⁸ Absent a modification, the risk of inconsistent treatment persists. In the long run, this could divert solar investment away from Minnesota towards states with a more predictable and certain regulatory scheme. This could make achievement of Minnesota’s solar and carbon reduction goals more difficult. Alternatively, strict enforcement of the Prime Farmland

⁶ See Illustrations in attached Appendix A.

⁷ <https://www.cleanenergyresourceteams.org/minnesota-solar-guide#land-use> (last visited November 16, 2021).

⁸ In its earlier consideration of modifications to the Prime Farmland Rule, the Commission also considered the deletion of this rule in its entirety.

Rule could have the effect of pushing solar development in Minnesota towards forested lands or smaller parcels that may lead to greater human and environmental impacts.

The Prime Farmland Rule Eliminates Solar as a Choice for Landowners While More Harmful Development Opportunities Remain Available

In addition to restricting the universe of available solar sites for these important projects, the Prime Farmland Rule also restricts private landowners from voluntarily enrolling farmland in solar developments. That same landowner, however, is free to develop that same land for other purposes, including uses that could generate negative impacts far greater than those caused by solar energy development.

There are many other uses, many of which take more farmland out of production than would solar, that are not prohibited by law or regulation. CERTs provides some insightful statistics on this issue:⁹

- Minnesota's goal of obtaining 10% of electrical energy from solar is estimated to take up between 60,000 and 100,000 acres of surface area (based on an estimate of 6-10 acres per megawatt of solar).
- Compared to other land uses that displace agricultural uses of prime farmland, this amounts to approximately 0.34%-0.57% of prime farmland. This amount does not include solar development that will take place on marginal farmland, or in urban environments.
- Minnesota loses approximately 30,000 acres of farmland to low density residential and commercial development per year.
- Over 1,000,000 acres of farmland is held in a CRP as of the 2017 Agricultural Census.

EDF recognizes the importance of maintaining Minnesota's prime farmland, and is supportive of a regulatory regime that maintains the integrity of prime farmland during the time the land is occupied by a solar project and provides for return to agricultural use once the solar project is no longer operating. That said, the benefits that are achieved by the Prime Farmland Rule in its current inception do not justify the negative impact it could have on solar development in Minnesota, or the restriction it places on landowners' wishes to enroll their land in solar projects.

This Modification Has Been Discussed by the Commission and Stakeholders¹⁰

The rule published by the Public Utilities Commission in its *Notice of Intent to Adopt Rules Without a Public Hearing Unless 25 or More Persons Request a Hearing, and Notice of Hearing if 25 or More Requests for Hearing Are Received*, dated September 30, 2021 ("Notice"), did not include any

⁹ <https://www.cleanenergyresourceteams.org/minnesota-solar-guide#land-use> (last visited November 16, 2021).

¹⁰ While the Commission or Administrative Law Judge (should this matter proceed to hearing) may be concerned that such a modification may render the rule "substantially different" than that proposed, the prior record here should be considered. And, if necessary, the Commission could follow the procedure for adopting such a rule as set forth in Minn. R. 1400.2110.

modification to the Prime Farmland Rule. That said, given the history of this rulemaking, comments urging a modification of the rule to provide an exemption for solar from the strict application of the rule should be expected.

In 2017 and 2018 the Commission published a potential proposed rule that would have proposed a revision to the Prime Farmland Rule. This new rule would have exempted solar projects from the prohibition provided it was subject to a farmland mitigation plan designed in consultation with the Department of Agriculture.¹¹ The Commission discussed this potential modification, but determined to take no action to change the rule at that time.¹²

Conclusion

EDF appreciates the opportunity to provide comments on this important rulemaking, and specifically on this important issue for the development of utility-scale solar projects. EDF reiterates its request for a hearing on this matter, and looks forward to presenting its views at that time.

Very truly yours,

EDF RENEWABLES, INC.

/s/ Adam Sokolski

Adam Sokolski

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¹¹ See 2018 Briefing Papers at 48.

¹² Available at http://minnesotapuc.granicus.com/MediaPlayer.php?view_id=2&clip_id=755 (last visited November 17, 2021). The discussion of the potential modifications to the Prime Farmland Rule begins at approximately 5:01.

Appendix A:



Figure 1: Typical Solar Tracker Row Design

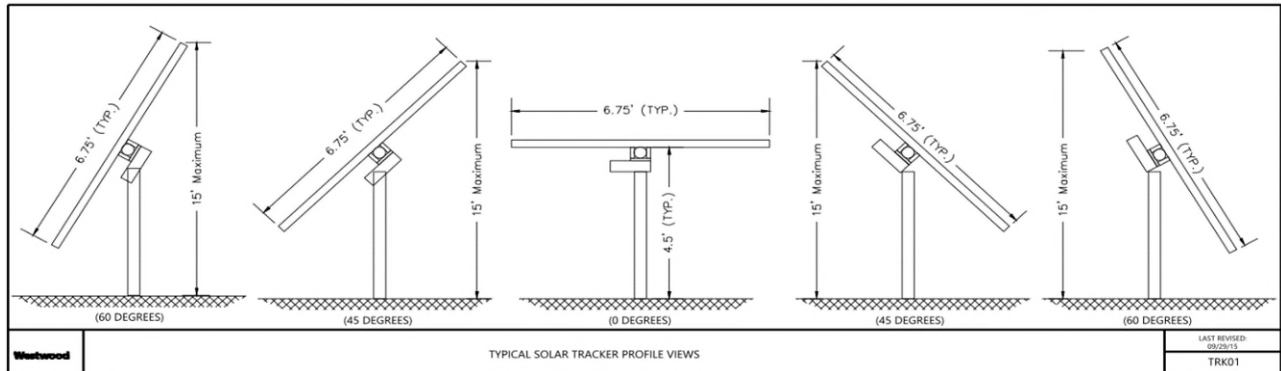


Figure 2: Typical Solar Tracker Profile

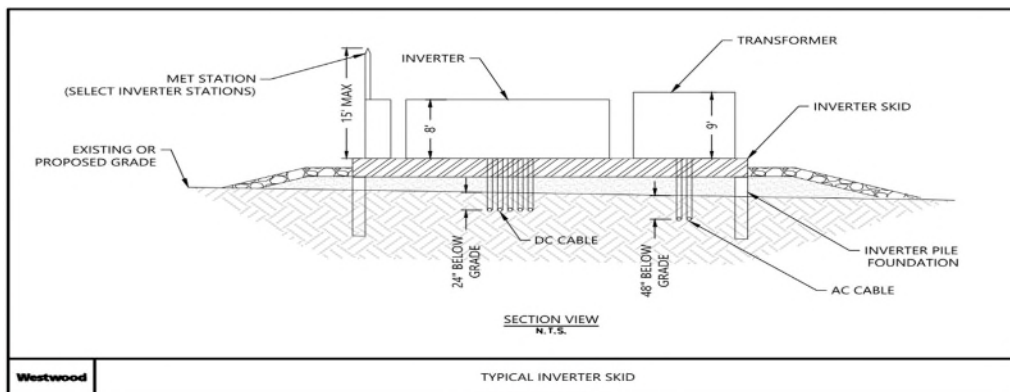


Figure 3: Typical Solar Inverter Skid

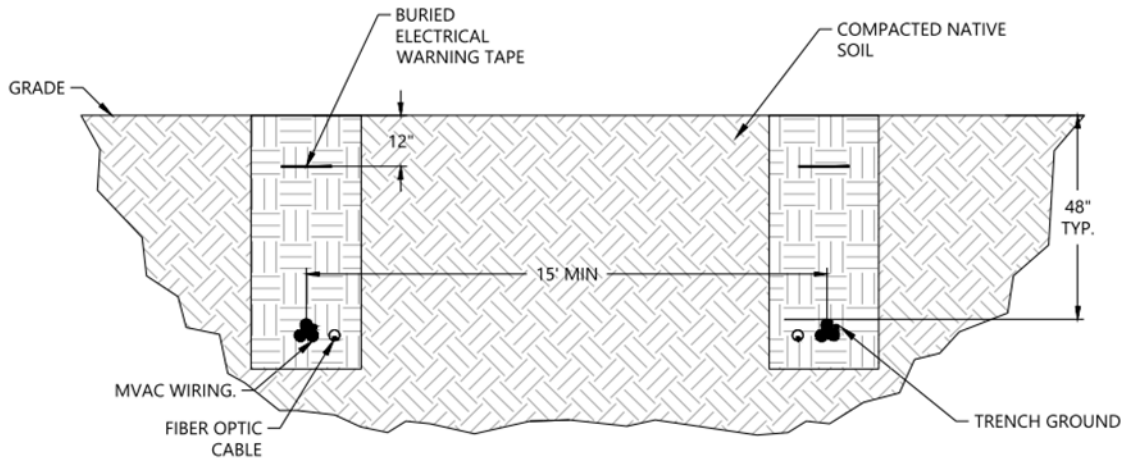


Figure 4: Typical Solar Collection Trenches for Cables