



Legislation Text

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Date: January 17, 2019

To: Members of the Planning Commission

From: Scott Tempel, City Planner

Public Hearing on Conditional Use Permit for 1MW Community Solar Garden

Action Requested:

The Planning Commission is requested to hold a public hearing and provide a recommendation to City Council on a proposed Community Solar Garden.

Summary Report:

The Community Development Department received a proposal from Nokomis Energy for a community solar garden (CSG) conditional use permit (CUP) to permit a Photovoltaic Ground IMWac Solar Energy System in the Agricultural Zoning District (A-S). The project is located at 320th Street and Garrett Avenue in Dakota County. Chub Garden LLC will consist of approximately 3700 to 4000 panels on roughly 5 acres of land. The CSG will have a contract life of 25 years and a useful life of 35 years. Once operating, this project will deliver ~1,800,000 kWh of clean, local energy annually to the surrounding community for 25+ years with only the sun as feedstock. As part of Xcel Energy's Solar*Rewards Community Program, Xcel Energy customers may subscribe to a solar garden and receive a credit on their monthly Xcel Energy bill based upon the production of their garden subscription.

Conditional Use Permit Analysis:

The site is currently located in the A-S Agricultural zoning district. The proposed project is allowed as a Conditional Use according to Table 2.7-1: Permitted Principal Uses. A CUP follows the Type 4 Review Procedure found in Section 5.4.7 of the LDC. When reviewing a CUP, the Planning Commission is to consider the following criteria:

a) The proposed use is allowed as a conditional use in the district for which it is proposed.

A Community Solar Garden is allowed as a conditional use in the A-S zone district according to Table 2.7-1 of the LDC.

b) The conditional use will be in accordance with the general objectives, or with any specific objective, of the city's comprehensive plan and this LDC.

The conditional use is in compliance with the Comprehensive Plan. Map 4.3 Conservation and Development designates the project area for Managed Growth, which are areas that are supportive of mixed-use development. The Comprehensive Plan context zone designation for this site is District, which is a

special use area composed of large business or industrial structures. District states that no change in character is anticipated in these areas with respect to future development.

Environmental Resources Strategy 10 indicates the City will remain responsive to issues of climate change and will act to reduce Northfield's contribution to climate change. Specifically, ER 10.3 is to "promote the reduction of greenhouse gas emissions at residential, industrial and commercial scales".

The proposal meets the Site Development Standards for the Agricultural Zone District as defined in Article 3 of the LDC and the Use Specific Standards found in Article 2.

- c) The conditional use will be designed, constructed, operated, and maintained so as to be harmonious and appropriate in appearance with the existing or intended character of the general vicinity and that such use will not change the essential character of the same area.**

The Chub Garden project is harmonious and appropriate with the general vicinity. The construction period for the CSG is typically three months. Geotechnical reports will be used to design the racking system. Piles will be driven, underground electrical will start, as well as fencing. Work will continue with modules mounted and switchgear placed. The construction period will close with energization inspections and generator testing. The CSG will utilize existing Xcel overhead distribution lines and poles. The system will connect to the NOF071 feeder line for the Northfield Substation. Ongoing operation and maintenance would consist of 2-4 visits a year from an electrician, as well as a groundskeeper to ensure the system is operating safely and the landscaping is properly maintained. The cover crop inside the footprint of the system will be a combination of low growth native crops and a seed mix that promotes pollinator friendly habitats and maintains neighborhood harmony.

- d) The conditional use will not be hazardous or reasonably disturbing to existing or future uses.**

The land is currently in agricultural land use. The Project will have a positive impact on the soil because it will be re-vegetated with low-growing species, providing better quality habitat and soil-building conditions. A reversion to the agricultural land use or a change to another land use can occur after the Project is removed at the end of the Project's useful life. The Project is not anticipated to preclude current or planned land use on any adjacent parcel. A National Pollutant Discharge Elimination System permit application to discharge stormwater from construction will be acquired from the Minnesota Pollution Control Agency. Best Management Practices will be used during construction and operation of the Project to protect topsoil and adjacent resources and to minimize soil erosion, whether the erosion is caused by water or wind. A Stormwater Pollution Prevention Plan will be developed for the Project. This project utilizes silicon based solar panels which have an anti-glare coating. There are no moving parts nor hazardous materials in the system, and no noise other than typical transformer humming would be present onsite. The system will be enclosed within a 6-foot-tall agricultural fence to minimize the visual impact and restrict access to the system from unqualified personnel. A landscaped buffer will be installed along road ROWs.

- e) The conditional use will be served adequately by essential public facilities and services such as streets, police and fire protection, drainage structures, refuse disposal, water and sewer.**

The property is served by public utilities adequate for the proposed use. Limited essential public services (police and fire protection) will be necessary for construction and operation of the Project.

- f) The benefits of the conditional use outweigh the potential negative effects of the surrounding community.**

No significant negative effects are anticipated from this project on the surrounding community. CGS are energy systems within communities, which accelerate the adoption of local, clean power. Through community solar, individuals, businesses and municipalities can choose solar as their energy resource, an option that has not existed until now and benefit from the low cost, improved infrastructure and local economic development.

g) The conditional use will not create excessive additional requirements at public cost for public facilities and services.

No additional public costs for public facilities and services are anticipated at this time. Limited essential public services (police and fire protection) will be necessary for construction and operation of the Project.

h) The conditional use will not involve uses, activities, processes, materials, equipment and conditions or operations that will be detrimental to any persons, property or the general welfare by reason of excessive traffic, noise, smoke, fumes, glare, or odors.

During construction, noise will be emitted by the construction vehicles and equipment. The amount of noise will vary based on what type of construction is occurring on a given day. These noise impacts will be temporary. During the construction phase, temporary impacts are anticipated on some public roads within the vicinity of the Project, primarily through additional traffic and slow-moving construction vehicles. To limit reflection, solar PV panels are constructed of dark, light-absorbing materials and covered with an anti-reflective coating. Today's panels reflect as little as two percent of the incoming sunlight depending on the angle of the sun.

i) The conditional use will not result in the destruction, loss, or damage of natural, scenic, or historic features of major importance as may be established in the comprehensive plan or other city plans related to natural, scenic, or historic features

None identified.

j) The traffic and parking generated by the use will not lower the Levels of Services as described in the comprehensive plan update of intersections within a quarter mile of the site.

Once constructed, traffic to the site will be limited to period inspection and maintenance. There will be little or no impact on the level of service for intersections within a quarter mile of the site. Traffic during construction is estimated to be 25-35 trucks daily. Traffic will include pickup trucks, semi-trailers for delivery of equipment, and other machinery. It is unexpected to use any overweight or oversized loads during the construction.

k) In residential districts - Not applicable to this site.

l) In the Perimeter Transition Area (PTA) - Not applicable to this site.

m) Impacts such as noise, hours of activity, and outdoor lighting have been addressed to mitigate negative impacts on nearby uses.

There will be no negative impacts to nearby uses, which are mainly agricultural. There are no residences in proximity. The site will not be permanently lit nor have regular operation hours. Construction is targeted for the late spring of 2019 and proposed working times would be between the hours of 8pm-5pm. These hours are flexible and they intend to work with the community to control noise and disturbance. Pile driving and the buzz of generators may be heard, but are temporary. There are no exterior lights.

n) Parking is adequately provided for the proposed conditional use.

No designated parking area is planned. Personnel would be on site infrequently when maintenance is required. Maintenance typically includes personnel on site with a truck and spare parts.

Alternative Options:

If a proposed conditional use satisfies both the general and specific standards set forth in the zoning ordinance, the applicant is entitled to the conditional use permit. Importantly, if the applicant meets the general and specific ordinance standards, the city usually has no legal basis for denying the CUP.

Financial Impacts:

The development would be taxable and will increase the tax capacity for the City of Northfield based on the final assessed value by Dakota County. In addition, a production tax credit will be split between the City and the County on projects of this nature.

Tentative Timelines:

City Council - February 5, 2019