

**GS-15-33** (Minn. PUC Docket # 15-33) Supplemental comments to the **North Star PV Solar Project** information meeting held **April 30, 2015** at the Lent Town Hall in Chisago County regarding the scope of the **Project's environmental review**.

Several of the neighborhood residents expressed their fears and concerns with the locations proposed for the installation of the PV solar panels and inverters – electromagnetic radiation, sunlight reflection/glare, noise generation, security fencing, and the change to the look of the rural landscape as seen from their homes. They assert that the peace and tranquility, safety and health, and intrinsic value of the environment encompassing their personal residences will inevitably and irrevocably be jeopardized and depreciated by a large-scale PV solar operation.

Conversely, as lifelong residents (90+ years) of the North Branch area and farm operators (65+ years) in this specific locale, we have witnessed the evolution – dare be said, degradation – of the area from an invested “family farm” model to that of a “bedroom community” extension of Twin Cities suburbia -- what developers purportedly call “progress”.

Our comments herein are intended as a counterpoint response to the objections voiced toward the North Star Project. Evaluating the technical issues belong to the subject experts, although we do logically expect the generating equipment at a PV solar farm to be silent from at least sundown to sunup ! Who's to say that the EM radiation actually received at peoples' homes from commercial-scale PV panels, DC-AC inverters, or transformers when properly shielded and situated at adequate distances is any more health hazardous than that emitted from kitchen microwave ovens or a cell phone held next to one's head ? It is interesting that there is no significant public uproar over EM radiation from residential PV solar – often installed only a few feet from the inhabitants' living quarters – or from community solar gardens.

The relatively recent non-farm immigrants claim the PV solar project will damage their “quality of life”. Do they not realize how their arrival intruded upon the then-existing bucolic tranquility of “the prairie” (this is the old-timers' term describing the sand plain vicinity where the four townships meet: North Branch, Lent, Chisago Lake, Sunrise). The once pristine vista disappeared as the houses were built on the fields now at issue. The sights and sounds of human activity (road traffic, barking dogs, horses, target shooting, ATV's, dirt bikes, etc.) now pervade an area previously silent except for seasonal farming activities. This transition was accepted by the remaining farm families as they recognized the right of any landowner to control the use of their own property. Is it not only fair that the PV solar project critics honor these same rights of the landowners of the properties upon which the proposed PV solar project is to be built ?

The PV solar project would be situated adjacent to an existing high-voltage transmission line corridor which has been in operation since the 1960's. Concerns over EM radiation were wildly popular when the initial 230 KV line was installed, however when the 500 KV line was added, expressed concerns had substantially waned. The addition of the PV solar farm seems to be a complimentary land utilization to an accepted land use. Should an increase to the “solar portfolio” requirements for investor-owned electric utilities, or even perhaps a similar requirement be made for electric cooperatives, result in a need for more PV solar acreage in the future, this area could perhaps be expanded to the south and east (such as on land presumably already “under option” by Geronimo for PV solar). This could also offer notice to future potential small-acreage land buyers that they might someday become neighbors to a PV solar farm.

We envision PV solar as becoming an integrated necessity in the short-term and an enduring and prominent long-term benign energy resource for our national economy and worldwide security. It is so substantially less damaging to the environment and intrusive upon existing land uses – such as residential development or wildlife habitat – than fossil fuel burning or even hydroelectric. Perhaps this should become the “new era of farming” for this area since the most popular “crop” now sprouting up seems to be more houses ! Rather than further utilizing the Geronimo “distributed” model of PV solar farm placement which likely creates consternation and conflict in a multitude of populated areas, encourage the concentration of PV solar in only a few areas like this – where land is not very productive for farming without the application of considerable fertilizer and irrigation -- so as to minimize its disruptions to the greatest number of people.

It may take some time, but we sincerely believe that resident neighbors to PV solar installations would realize that the solar farms make for excellent neighbors – they're quite and secure, they don't require schools nor added government services, and they provide far more property tax revenue to the local municipalities and school districts than land classified as “agricultural” or “rural residential”. People can be both altruistic for the future and practical for the present. The unique location of the North Star PV Solar Project presents a minimally intrusive site for a large solar farm.

Phil and Clarice Anderson 8720 360<sup>th</sup> Street North Branch, MN 55056

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MINNESOTA DEPARTMENT OF COMMERCE

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ENERGY ENVIRONMENTAL REVIEW AND ANALYSIS ENVIRONMENTAL REVIEW SCOPING COMMENT FORM

NORTH STAR SOLAR PROJECT

Name: Justin + Alanna Baker
Address: 9689 367th St
City: North Branch State: MN ZIP: 55056

Please share your comments and suggestions on the potential impacts, mitigations, site modifications and alternative sites or routes that should be considered in preparing the Environmental Assessment for the proposed North Star Solar Project.

You may turn in this form at the meeting, mail it to the address provided (use additional sheets as necessary), email comments to the Environmental Review Manager at david.birkholz@state.mn.us, comment at http://mn.gov/commerce/energyfacilities/#comment or fax comments to (651) 539-0109. Always use GS-15-33 in the subject line. The comment period closes, Friday, May 15, 2015.

Impacts on human settlement concerns:
50% of our home will be bordered by this project
- What effect will this project have on the value of our home
- Will Community Solar compensate people directly affected
- What noise levels will these panels rise to, how do they plan to mitigate that.
- Landscaping - Community Solar should be required to file a comprehensive Landscaping plan with burns, mature pine tree's, scrubs to limit glare and improve aesthetics
- Would like to see a large set back from property lines, minimum of 200 feet from property line and 500 feet from home/ground water well
- Road repair/wave during and after construction

(over)

Signature: [Handwritten Signature] Date: 5-11-15

Public health concerns:

- Please provide research on EMF and how much this project will produce.

- Increased traffic during construction,

- This is too large of a project in too small of an area

Natural environment concerns

- this will cause loss of habitat

- if they regrade land what will the effects be on watershed

When this project is complete how will they decommission the site. what happens if company is sold / bankrupt. before the 25 year contract is complete.

In closing we have not found a project this large, this close to residential homes including completely surrounding homes and or boarding 50% of property's. The speed in which this project is moving is ~~not~~ not conducive to allowing enough research to be done to ensure safety for humans, animals, waters and the environment.

If this is the only site that will work for community solar they must be held responsible to compensate property owners directly affected, as a cost of completing this project.

thank you

David Birkholz (GS-15-33)  
Environmental Review Manager  
Department of Commerce - EERA  
85 7th Place East, Suite 500  
Saint Paul, Minnesota, 55101-2198

Postage

May 15, 2015

First off, I want to say I am for the solar fields. I am the daughter of John Swenson a man who owns some of the land and used to farm it. There'll be some unhappy people but I see the benefit of it. The land is tired and it's nutrients are diminishing. The solar panels will reduce the amount of dust in the spring and fall. It will also give the land a break of having to produce high-yield agricultural crops. Plus it is funded by a state grand, so we shouldn't see a tax change because of it.

I hear people say it will reduce the amount of wildlife that they see in the fields. My dad has hunted in the area for over 50 years he has noticed a decrease in the amount of deer, and that was well before the solar panel idea. At the meeting one man told a story about deer in his backyard on Christmas eve, well that story was from three years ago, again well before the solar panel idea. People at the meeting were acting like there's a menagerie of animals in the fields. When I drive by you are lucky if you even see a deer in the cornfields. Deer don't live in cornfields, sure you might see them standing in a cornfield while you drive by or running across the cornfield but the majority of animals bear, coyotes, fox, and deer live in the woods.

Also this land will not be farmland forever, the people that farm it are getting older and the land is getting poorer. When I heard somebody say at the meeting say they moved to where they live now because they like to see a cornfield in the their backyard, I thought, maybe they should buy a cornfield. People want to live in the country but they want everybody else to supply the country for them. This land is agricultural zoning which means you could build any type of farm that you want. You could build a large poultry operation, which would have the potential to spread the avian flu, and produce a stench. Or you could build a solar farm with no smell, no disease and minimal noise.

We would be doing ourselves a favor by producing clean effective solar energy for our community. Yes it will be a change, and all people adapt differently to change. We will increase the butterfly and bee population from the natural grasses that they plan to plant. Depending on the fence, the pheasant population might have a chance to flourish again, and the panels might give them protection. There will be no smoke, exhaust, pollution, or chemicals that will come from the solar power, and I like the idea of that. I really hope that we can move forward with the solar fields idea.

Sincerely,

A handwritten signature in black ink, appearing to read 'Lisa Cardelli', written in a cursive style.

Lisa Cardelli

**From:** [david hardin](#)  
**To:** [Birkholz, David \(COMM\)](#)  
**Cc:** [bridgittek@ci.north-branch.mn.us](mailto:bridgittek@ci.north-branch.mn.us)  
**Subject:** Comment re Chisago County North Star Solar project--PUC Docket Number 15-33  
**Date:** Tuesday, May 05, 2015 3:40:53 PM

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Mr. Birkholz--please forward my comment, as follows:

When the tax subsidies (supporting these solar undertakings) go away, the underlying economics will be in for a drastic (negative) change. When that happens and the solar enterprises go broke, or otherwise cease operations, who pays to demo the installations, remove all equipment, and otherwise return the land to its pre-solar condition?

I suggest language requiring the solar enterprise to pay for this demo/removal in toto, and that the solar enterprise provide for that payment by way of insurance policy, escrow or other mechanism sufficient to guarantee the necessary cash.

END OF COMMENT

Thank you. David Hardin, Lent Township.

May 8, 2015

North Star Solar Project  
PUC Docket #IP6943/GS-15-133

David Birkholz,

Here are some concerns that should be considered with the North Star Solar Project:

- 1) What are the noise levels ((dBs) at 50'-100'-300')? From other sites of the community energy projects (moving parts, wind rattles, temp. change, electric motors etc...). These levels should be compiled by an independent company for a 24 hour period.
- 2) What is the heat island affect for the area in the middle?
- 3) Houses in 367<sup>th</sup> area will be in a reflector oven. If it is so safe, Community Energy should build a corporate headquarters on that site!
- 4) Are all the land and homeowners getting the same money? Should this be public information?
- 5) Set back on boundary's should be in writing (more defined).
- 6) End the lack of trust Community Energy – **We don't trust them!**

Sincerely,

Bob Fladeboe  
651-343-7402  
Land Owner on 360<sup>th</sup> and Co. Rd. 14, North West Corner

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**From:** [Barb - Cliff Holcomb](#)  
**To:** [Birkholz, David \(COMM\)](#)  
**Subject:** FW: North star solar project  
**Date:** Friday, May 15, 2015 1:22:52 PM

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GS-15-33 MN PUC #15-33  
North Star Solar Project

The proposed North Star Solar Project will not increase taxes. It will not increase traffic or require better roads. It will not require more schools or added police protection like additional housing development. It will generate more property tax than currently being received by schools, county, and city.

The project will benefit wildlife by providing habitat year around for birds and animals. These fields are bare in the winter months with no cover for the animals. The project will reduce soil erosion from bare fields in spring and fall. With climate change the summers have become warmer and drier, causing some land owners to increase irrigation on their land. The project will save our valuable ground water by eliminating irrigation on current fields and possibly more fields being irrigated in the future.

We feel the 400 ft. set back being asked for by some people is unrealistic as the homes in the area are not close to the property lines. Homes in the area are built close to the road or in the center of their acreage which are on large lots of 10 acres or more.

We realize change is hard but we all have to compromise some times. We think this Solar Project will benefit current residents and future generations by saving our valuable resources and habitat.

I. Clifford & Barbara Holcomb  
9450 367th St.  
North Branch, MN 55056

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# Minnesota Center for Environmental Advocacy

The legal and scientific voice protecting and defending Minnesota's environment

26 East Exchange Street - Suite 206  
Saint Paul, MN 55101-1667

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May 14, 2015

**VIA ELECTRONIC FILING**

David Birkholz & Suzanne Steinhauer, Environmental Review Managers  
Minnesota Department of Commerce  
85 7<sup>th</sup> Place East, Suite 500  
St. Paul MN 55101

*Re: North Star and Marshall Solar Projects – Environmental Assessment  
Scoping Comments  
PUC Docket No. IP-6943/GS-15-33  
PUC Docket No. IP-6941/GS-14-1052*

Dear Mr. Birkholz and Ms. Steinhauer,

Fresh Energy, Izaak Walton League of America – Midwest Office, Minnesota Center for Environmental Advocacy, and Sierra Club, the “Clean Energy Organizations,” are pleased to provide the following comments regarding the scope of the Environmental Assessment being conducted by the Minnesota Department of Commerce for the North Star and Marshall Solar Projects (“Solar Projects”).

The Clean Energy Organizations believe that the scope of the Solar Projects Environmental Assessment should include the anticipated environmental, public health, and socioeconomic benefits associated with the operation of the Solar Projects.

### *Environmental Benefits of the Solar Projects*

The potential environmental impacts of the proposed solar generation included in the Environmental Assessment should not be limited to potential *negative* impacts, but should consider positive impacts as well. For example, permanent vegetative ground cover at the sites will lead to increased pollinator habitat and will reduce runoff, which will benefit both water quality and groundwater retention.

But perhaps most significantly, using larger amounts of solar energy will result in reductions in coal and natural gas use and corresponding reductions in power plant air emissions, water use, and various environmental impacts associated with producing and transporting those fuels. Air emissions associated with fossil fuel

production and consumption include the greenhouse gases carbon dioxide and methane. Reducing greenhouse gases is a necessary step toward mitigating the impacts of climate change. The environmental benefits that stem from both permanent vegetative ground cover and decreased fossil fuel use—most notably climate change mitigation—should be considered and quantified in the Environmental Assessment.

#### *Public Health Benefits of the Solar Projects*

Fossil fuel use also results in emissions of particulate matter, sulfur dioxide, nitrogen oxides, mercury, and other hazardous air pollutants. The immediate public health benefits associated with the Solar Projects due to reduction of these emissions should also be considered and quantified in the Solar Projects Environmental Assessment. For example, the Twin Cities Medical Society (“TCMS”) recently submitted an “Open Letter” to the 2015 Minnesota Legislature regarding public health, energy and the environment. In the letter, the TCMS identified the many and significant public health concerns associated with fossil fueled electric generation—including “worsening asthma and allergic disorders, greater risk of developmental disorders, more frequent exacerbations of chronic heart and lung disease and higher rates of infections such as Lyme Disease.” The Environmental Assessment for the Solar Projects should consider the positive public health impacts from decreasing emissions from fossil fuel plants.

#### *Socioeconomic Benefits of the Solar Projects*

The Solar Projects are helping to move Minnesota and the country forward in a necessary energy transition. This transition has already had positive socioeconomic impacts. For example, the clean-energy sector of Minnesota’s economy supported approximately 15,300 jobs in 2014 and is growing at a significantly faster pace and with significantly higher wages than the rest of the State.<sup>1</sup> The similar positive socioeconomic benefits that will stem from the Solar Projects should be considered and quantified in the Environmental Assessment.

Every project involves change and impacts. The Clean Energy Organizations believe that the broader benefits of clean energy must remain in focus and receive equal emphasis in the Environmental Assessment. The solar projects selected by Northern States Power in the Public Utilities Commission Docket Number 14-162 (including the Solar Projects and one other 24.75 megawatt project) will provide over 9 million megawatt hours of carbon-free energy and displace almost 6 million tons of carbon emissions.<sup>2</sup> This is a significant shift in energy use and the expected environmental, public health, and socioeconomic benefits of the Solar Projects should be included in the scope of the Environmental Assessment.

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<sup>1</sup> Minnesota Department of Employment and Economic Development, Clean Energy and Jobs Report, dated October 2014.

<sup>2</sup> *In the Matter of the Application of Northern States Power Company for an Advance Determination of Prudence for a 187 MW Portfolio of Utility Scale Solar Resources*, Direct Testimony Before the North Dakota Public Service Commission, November 7, 2014, Kurtis J. Haeger, at 24.

David Birkholz & Suzanne Steinhauer

May 15, 2015

Page 3

Thank you for your consideration of these comments.

Date: May 15, 2015

Respectfully submitted,

/s/ Leigh K. Currie

Leigh K. Currie

Minnesota Center for Environmental Advocacy

26 E. Exchange Street, Suite 206

St. Paul, MN 55101

Tel: 651-223-5969

lcurrie@mncenter.org

*Attorney for the Clean Energy Organizations*

**From:** [Brandon Cardelli](#)  
**To:** [Birkholz, David \(COMM\)](#)  
**Subject:** North Star Solar Project  
**Date:** Friday, May 15, 2015 3:27:50 PM

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I support the North Star Solar Project. I feel that Community Energy Solar has been very responsible about their proposal. They have been in contact with the residents in the impacted area and have tried very hard to work with them. If there really is a significant impact on occupied property values in the area of the project, there should be an assessment done so those residents are reasonably compensated. If there is no public health risks related to the project, I don't see a need for any type of buffer between any properties and the solar project. The landowners leasing out the land involved have paid mega taxes on the land for many years not to mention land isn't free to begin with. Nobody should have any right to tell others how to use their own private land as long as it's not hurting the environment. Farm land has a far more negative impact on the environment than solar, when you consider all the chemicals and fertilizers used. Wildlife doesn't exactly thrive in plowed farm fields either. Thanks for taking my comment. Brandon Cardelli, North Branch, MN

**From:** [Debbie](#)  
**To:** [Birkholz, David \(COMM\)](#)  
**Subject:** North Star solar project  
**Date:** Tuesday, May 12, 2015 7:46:16 PM

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Mr. Birkholz

We attended an informational meeting at Lent town hall on May 7. We have 80 acres that butts up to the North Branch Xcel transfer station and we would be interested in selling the forty acres that is directly connected to the transfer station site. We feel that this is the perfect site for some of the projects needs and can possibly offset some of the impact that is occurring where there are homes being surrounded by the solar panels from the project.

Please let us know if there is any interest in this parcel of property. We would be happy to discuss further.

We can be reached at the following contact numbers:

612-865-2959 Frankie cell  
612-810-9638 Debbie cell  
651-257-6334 work  
651-465-5191 home

Frankie and Debbie Dusenka

Sent from my iPad

**From:** [Barb Hagberg](#)  
**To:** [Birkholz, David \(COMM\)](#)  
**Subject:** North Star Solar Project  
**Date:** Friday, May 15, 2015 2:05:06 PM

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You are kidding me, right? I complete the comment page on the project site and it would not submit. I find this rather frustrating and not in the best interests of us landowners. My name is Barbara Hagberg. I reside at 37759 Keystone Avenue, North Branch, MN 55056. Below are the comments I attempted to submit. I expect they will be included in the comments for this project.

I did not move here, live here and work 2-3 jobs to maintain my home and raise my family for someone to come along and take away my freedom of choice and diminish my land and home value 30-50%. This decrease in value does not include any increase in future property value that was my right to enjoy. I have lived here for 30 years. There is a lot of blood, sweat and tears in my home and land. When I look out of my bedroom windows, I will be looking directly at over 80+ acres of mirrors and panels. This is certainly not what I live here for, and I am certain that not one of you would surrender to such injustice. Those people who were present at the meeting to advocate the solar panels were not adjacent landowners. While there are 45 such landowners affected, I would demand that, for purposes of justice and equity for each one of us, we be fully compensated for our property values and be compensated for the inconvenience of uprooting our lives to find alternate land and homes of our choice, and be fully compensated for any other inconveniences or damages caused by this solar power project. The health issue and noise issue for adjacent landowners is also of MAJOR concern. You cannot develop a project such as this without negatively impacting human beings that live within feet of these panels. What about the wildlife, beauty and peacefulness we have enjoyed here? I fully intend to be represented at the hearing and you will most certainly hear from my attorney prior to same. This is not fair, just or equitable to those of us adjacent to any part of this project. You cannot expect to diminish the value of people's life and the property they worked hard for without reasonable and worthwhile compensation. In the alternative, find a different location which does not impact homeowners and residents.

**Field name:** mitigation

**Display name:** Mitigation

**Description:** Please share your comments on how the issues and impacts you've listed might be mitigated. If this is a project with a route, are there alternate routes or route segments that should be considered that would mitigate impacts? If so, please describe them. If this is a project with a site, are there alternate sites that should be considered that would mitigate impacts? If so, please describe them.

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ENERGY ENVIRONMENTAL  
REVIEW AND ANALYSIS  
ENVIRONMENTAL REVIEW  
SCOPING COMMENT FORM

NORTH STAR SOLAR PROJECT

Name: Leon J. Pleau  
Address: 36427 Lincoln Tr.  
City: No. Branch Mn State: Mn ZIP: 55056

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You may turn in this form at the meeting, mail it to the address provided (use additional sheets as necessary), email comments to the Environmental Review Manager at [david.birkholz@state.mn.us](mailto:david.birkholz@state.mn.us), comment at <http://mn.gov/commerce/energyfacilities/#comment> or fax comments to (651) 539-0109. Always use **GS-15-33** in the subject line. The comment period closes, **Friday, May 15, 2015.**

I am concerned about No. Star Solar project being built in my area. I would like the following concerns being considered. I believe there should be a 500 ft. set back from properties. On the outside of the fenced area should be a berm and after that large trees around the perimeter. Lighting should be motion sensitive or limited lighting. Something should be done about the glare from panels. Homeowners within 1/2 mile should be compensated for a 30% loss in property values ~~is~~ verified by a real estate agent. A way for wild life to get out of fenced area should be provided. The panels should be maintained so there is no noise from panels moving. People should be protected from EMF's with proper distance from properties.

Signature: Leon J. Pleau Date: 5-12-15



**ENERGY ENVIRONMENTAL  
REVIEW AND ANALYSIS  
ENVIRONMENTAL REVIEW  
SCOPING COMMENT FORM**

**NORTH STAR SOLAR PROJECT**

Name: Leon J. Pleau  
 Address: 36427 Lincoln Tr.  
 City: No. Branch State: Mn ZIP: 55056

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I would like a designated wildlife area within the boundaries of the solar plant. It would best be situated from abandoned farm property continuing north past the pond and to the farthest point north. Then wildlife could travel back and forth to Carlos Avery area.

**RECEIVED**

MAY 14 2015

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Signature: Leon J. Pleau Date: 5-13-15



ENERGY ENVIRONMENTAL  
REVIEW AND ANALYSIS  
ENVIRONMENTAL REVIEW  
SCOPING COMMENT FORM

NORTH STAR SOLAR PROJECT

Name: Leon J. Pleau  
Address: 36427 Lincoln Tr.  
City: No. Branch State: Mn ZIP: 55056

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I would like to see the location of the project moved to an area where homeowners would not be affected. I request that an advisory task force be appointed. I am hopeful that the task force can find a more appropriate site for this solar plant.

RECEIVED  
MAY 15 2015  
MAILROOM

Signature: Leon J. Pleau Date: 5-13-15

**Environmental Review Manager / [david.birkholz@state.mn.us](mailto:david.birkholz@state.mn.us)**

**GS-15-33 North Star Solar Project**

**Energy Environmental Review and Analysis Environmental Review Scoping Comment**

**From:** Pierre Pleau, Kathryn Pleau, Karlynnna Pleau

36427 Lincoln Trail, North Branch, MN 55056

Pierre J. Pleau      Kathryn Pleau      Karlynnna Pleau      5/13/15

Being that the area we live in is zoned agricultural/rural residential, we would like to propose that the following items should be considered in preparing the Environmental Assessment in order to maintain the quality of life in this area:

- **Setback:** A 300' minimum setback from homeowner property not being leased by North Star Solar. *(300' is the general property lot width for our area.)*
- **Compensation:** Homeowners within ½ mile of the solar farm should be compensated for any loss on their property value if and when they choose to sell. This should be based upon current appraisals for the houses/properties with and without a solar farm being present.
- **Property Taxes:** Due to the devaluation of properties in the surrounding area, taxes should be adjusted accordingly to reflect the reduced value of the homes and compensation paid yearly to Chisago County by North Star Solar for the loss of tax revenue.
- **EMF Emissions:** To protect public health and wildlife, efforts need to be made to utilize technologies to minimize EMF emissions through design, shielding and setback.
- **Sound Levels:** Tracking solar panels need to be regularly maintained to reduce noise and a third party should be hired to inspect the gears and motors etc. seasonally to identify maintenance that needs to be done based upon dB levels.  
If the sound can be heard from 300' away on a homeowner's property, an additional setback may be needed or non-tracking solar panels could be used for a distance after the 300' setback to create an additional sound buffer zone.
- **Lighting:** People living in the country value seeing the night sky, therefore there should not be perimeter security lighting that is on from dusk to dawn. If any security lighting is necessary, motion sensors should control them.
- **Glare & Reflection:** Efforts need to be made to minimize glare and reflection off of the solar panels.

- Trees: A tree line (5' tall black hills spruce, red pine and cedar – diversity in case of disease and dieback) should be planted, watered and maintained on the outside of the fence along roads and neighboring residences. Fences should be set back a minimum of 75' from any roads as trees take time to grow.

In addition there should be a dirt berm planted with native bushes on the outside of the fence (between the fence and trees) where there are houses.

- Fencing: The perimeter fence needs to be low or high enough (7-8') so that white-tailed deer do not get trapped on the inside.

- Existing trees on leased or purchased property should remain for wildlife and aesthetics, including the Norway pines along 367<sup>th</sup> street east of Keystone Ave.

- Agricultural land: In 25 years, if the solar contract is not renewed, or if the solar farm ceases operation, there should be a mandatory schedule for completion of site restoration work, such as removal of above ground and below ground equipment... The land should then be returned to agricultural/rural residential use.

- Green Corridors: There should be a corridor (50m / 164' wide) linking 'Oak Marsh' pond and woods to the marsh land, pond and woods located approx. ¼ mile to the north of the abandoned farmstead on Lincoln Trail. There are currently trees around the abandoned home and more trees and bushes could be planted along a corridor so that wildlife such as deer, raccoons and fox, could safely cross from one wildlife habitat to the next. Currently wildlife can cross the open field from one woods/marsh area to the next, however, the proposed perimeter fencing would block this access and force wildlife to either cross Lincoln Trail or use the street gully, which is used by *ATV's and snowmobiles*.

A green corridor at this location is not only needed to provide a safe haven for the wildlife that we value in our area but also to protect our citizens from serious vehicle collisions with deer as this area is highly populated with them.

**See map for proposed Green Corridor on page 3.**

<http://www.nextstep.state.mn.us>

## **The Green Corridor Project**

An initiative of public and private organizations dedicated to helping Washington and Chisago County residents protect the beautiful countryside, farmland, and special natural areas that make the area such a great place to live. Based upon the project's successes and lessons learned in this project, 1000 Friends of MN (the project coordinator) prepared a 120-page how-to manual for other communities that want to undertake similar initiatives.

# Wildlife corridor

From Wikipedia, the free encyclopedia

A **habitat corridor**, **wildlife corridor** or **green corridor** is an area of habitat connecting wildlife populations separated by human activities or structures...

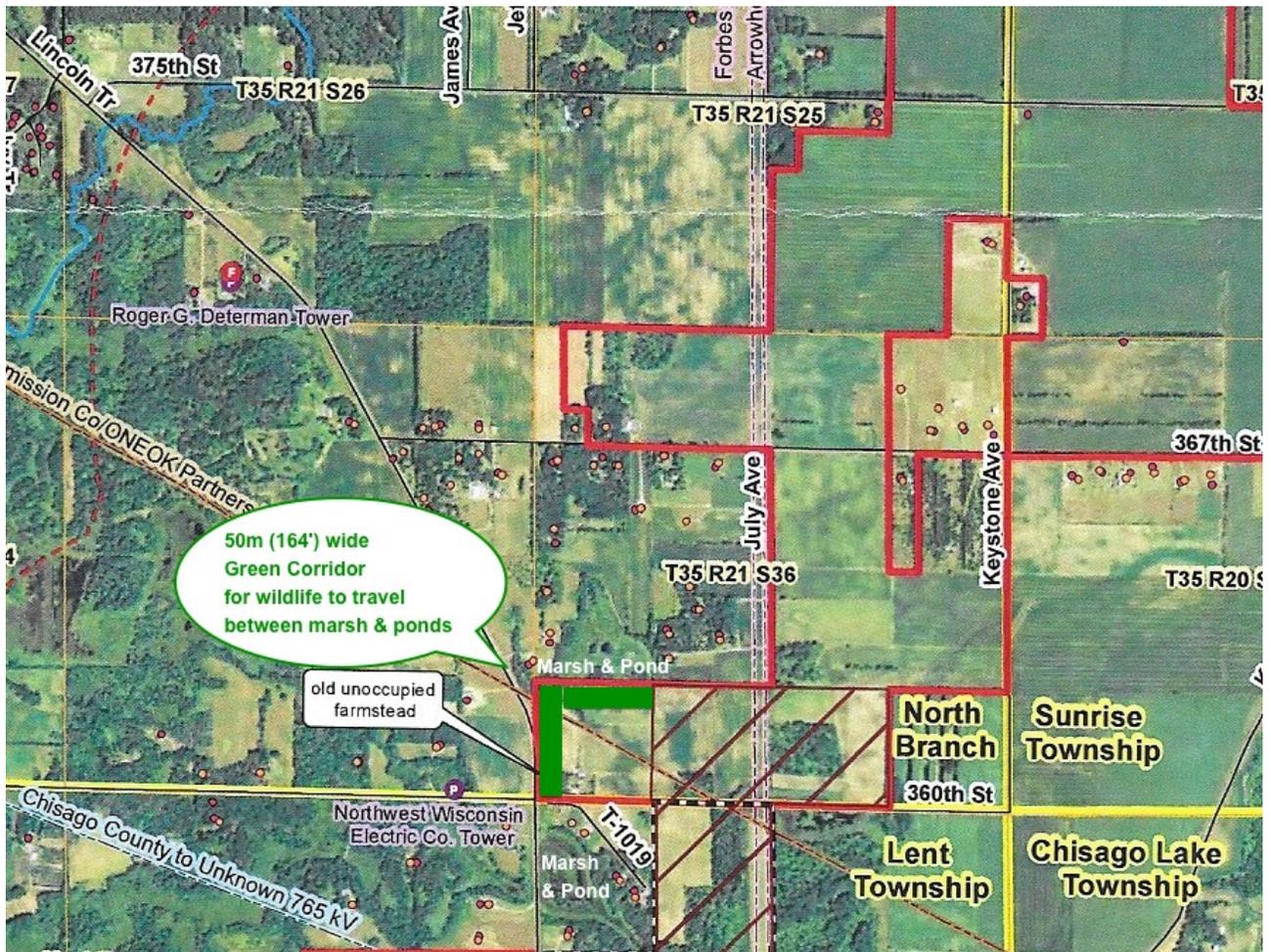
Urbanization can split up habitat areas, causing animals to lose both their natural habitat and the ability to move between regions to use all of the resources they need to survive...

Habitat corridors can be categorized according to their width. Typically the wider the corridor, the more use it will get from species. The following are three divisions in corridor widths:

**Regional** – (>500m wide); connect major ecological gradients such as migratory pathways.

**Sub-regional** – (>300m wide); connect larger vegetated landscape features such as ridgelines and valley floors.

**Local** – (some <50m); connect remnant patches of gullies, wetlands, ridgelines, etc.



**From:** [jason.pederson](#)  
**To:** [Birkholz, David \(COMM\)](#)  
**Subject:** PUC docket number: IP-6943/GS-15-33  
**Date:** Thursday, May 14, 2015 9:26:02 PM

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This is in reference to the North star solar electric power generating plant up in North Branch - Sunrise Minnesota. My house borders this land and I will have a clear view of these panels. What considerations have been made to home owners whose property value will go down with this in there back yard. I have talked to several realtors and every one of them has agreed that this will undoubtedly bring my property value down. Is there any kind of financial packages that will be paid to homeowners like myself. I am self employed and the value of my house is all I have for any kind of financial stability when I get older. I tried to go on your web site to make a comment but it said it was unavailable. I know the comments have to be in by May 15th, and I would have wrote sooner but I am in construction with 3 kids. I work sun up to sun down and run my kids to ball games and practices. Having time to sit down and do this is a rarity. Please respond with any type of answer to my questions. Thank you.

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Jason Pederson

**From:** [Steinhauer, Suzanne \(COMM\)](#)  
**To:** [Olson, Elizabeth \(Chisago Court Admin\)](#)  
**Cc:** [Birkholz, David \(COMM\)](#)  
**Subject:** RE: Comment on solar site, docket GS-14-515  
**Date:** Wednesday, May 13, 2015 12:33:38 PM

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Ms. Olson –

Thank you for your comment. I am forwarding it to David Birkholz, who is the Environmental Review Manager for the proposed North Star Solar facility that you reference in your comments.

Regards,  
Suzanne

Suzanne Steinhauer  
Environmental Review Manager  
Energy Environmental Review and Analysis  
Minnesota Department of Commerce  
85 7<sup>th</sup> Place East, Suite 500, Saint Paul, MN 55101  
P: 651-539-1843



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**From:** Olson, Elizabeth (Chisago Court Admin) [mailto:[Elizabeth.Olson@courts.state.mn.us](mailto:Elizabeth.Olson@courts.state.mn.us)]  
**Sent:** Wednesday, May 13, 2015 11:59 AM  
**To:** Steinhauer, Suzanne (COMM)  
**Subject:** Comment on solar site, docket GS-14-515

I live near the sub station in Lent Township where a possible site is being proposed and I have a lot of concerns. The Sub station is very loud and disruptive. I got the report from Xcel that there was a noise study done and the levels were in range but this is not true. It wakes me up in the middle of the night. It is also an eyesore. With the new solar farm it is stated that there is no noise but that is what was said with the sub station and this is not true. If the solar panels are in the middle of a field it will look horrible.

I hope that opinions are taken into account that this is not wanted in Lent Township

Thank You

Elizabeth Olson

**From:** [rpzangs@aol.com](mailto:rpzangs@aol.com)  
**To:** [Birkholz, David \(COMM\)](#); [staff\\_cao \(PUC\)](#)  
**Cc:** [Ek, Scott \(PUC\)](#)  
**Subject:** State Representation on behalf of Homeowners, Meeting Request  
**Date:** Friday, May 15, 2015 4:29:13 PM

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David and Tracy,  
Enclosed please find a copy of the email request ( below) that we shared with you at the public meeting in Lent Township. Tracy, you had mentioned that Scott would forward this information to you.  
We are still awaiting your response.

Our home where we live with our family and neighbors is located on 367th street.  
The *projects* that are in your review include ( Aurora, Geronimo and North Star). These are not only projects, but decisions under your supervision that will *greatly negatively impact our health and well being* in all areas of our living, and the whole environment of our lives here. This has not only negative impact over the short term on our lives and well being, but long term negative impact and affect on our lives.

If you as our representation of the State of MN approve these Solar Plants - our lives will be surrounded with 8' fencing, 6' solar panels, power stations, inverters and transformers along with 15 foot meteorological stations, a substation with parking lot, and high voltage electrical structures, breakers, transformers, and equipment. Also, a building of 3000 - 5000 square feet for equipment, and more parking for loading equipment will be our "neighbor".

Motion activated lighting over 18 feet tall along with security gates will "decorate" this neighborly site.

Additional gravel roads will be constructed that will be 12 to 20 feet wide.

70 foot high steel structures will be constructed and lined up along our road for transmission.

All vegetation will be removed, all trees removed.

There will be at least 25 to 35 trucks used for equipment delivery daily ( which means how many times driving down our country road? 100 trips daily? 1000 ?

There will be scrapers, bulldozers, dump trucks, watering trucks, motor graders, vibratory compactors, and backhoes along with augers, drills, cranes, etc..etc....

And the "LIFE" of this proposed "PROJECT" is 25 -30 years!

#### SAFETY?

What does, " while a CERTAIN amount of EMF will be generated from this system, it SHOULD not substantially increase public exposure to EMF." And, "while the Solar Project is LIKELY to generate more EMF than from the Solar Project collection system, OVERALL it SHOULD not SUBSTANTIALLY increase public exposure to EMF. What would be your acceptable level of increase in health risk to the citizens of MN as it pertains to this project and other solar projects and with these levels of EMF? How does a few hundred feet differ? What affect on humans?What affect with our gardens, crops and fruit trees? What affect with winds that blow every day?

What chance that these levels of EMF are a factor in developing cancer?

Noise - Pile Drivers, Trucks and vehicles on a continual basis, inverters on a continual basis, ....

Interference - our radios, tvs, and microwave - all electrical and phones may be interfered with and poor or no reception.....

And value of our homes and property that we have invested in over 17 years? After years of depression and now this depreciation? A realtor in our area confirmed that we would have loss of at least 30% more of home value ( if they could even sell it).

Mitigative measures - All of our residential homes ARE negatively impacted by this PROJECT.  
What will be done?

Community Energy Solar is located in CO. They have no vested interest in our environment, in our State, in our community or in our families and our lives.

Chase Whitney and Sam Sours who met with us called the above - "a good neighbor" and mentioned a few trees will fix the above.

NOW, multiply the above times three. Our home is located in the midst of three solar plants that you as the state are now in review of.

We ask that all aspects in these areas be researched with the same dilligence, integrity and justice as if this were your family, your health and your livelihood.

Patrice and Bob Zangs

-----Original Message-----

From: rpzangs <rpzangs@aol.com>

To: Scott.Ek <Scott.Ek@state.mn.us>

Sent: Wed, Mar 11, 2015 11:11 am

Subject: State Representation on behalf of Homeowners, Meeting Request

Scott,

As noted in my brief phone call to you, we have no experience with the State of MN Utilities Commission, and no experience with Solar Power Plants placed within neighborhoods.

1. *What representation does the State provide to MN residents in these situations?*
2. *We would like to meet with whomever has the power to approve or disprove issuance of a permit for a Solar Power Plant that is being suggested to be placed in our front yard and surrounding 800 acres of our immediate neighborhood.*
3. *Who is the State Fiduciary overseeing "this plan" - on our behalf? - our representation.*
4. *What will be established by the State prior to any decision being made on the permit- so that we as homeowners who will be most affected by any decision the State makes - will receive positive outcomes for our families - both of positive health and wellness outcomes , and as well as positive financial outcomes?*

*The issuance of a permit in this location of our neighborhood will adversely affect our **quality of life, the freedoms we have ( and purposely moved here for and have paid more for - to live in this environment) and the value of our homes and property.***

We have not had much opportunity to address the issues with the value of our house, and the future affects - with the recent notification of this proposed permit for a Power Plant surrounding our neighborhoods.

This is not just a project to us. This is our life and our neighborhood. We would appreciate receiving answers to the above, and meeting with you and the key individuals making this decision- **prior to** the State's decision being made on a permit.

We appreciate your review, and look forward to your response.

*Patrice and Bob Zangs*



ENERGY ENVIRONMENTAL  
REVIEW AND ANALYSIS  
ENVIRONMENTAL REVIEW  
SCOPING COMMENT FORM

NORTH STAR SOLAR PROJECT

Name: John + Susan Swenson  
Address: 11609 St Croix Trail  
City: North Branch MN State: \_\_\_\_\_ ZIP: 55056

Please share your comments and suggestions on the potential impacts, mitigations, site modifications and alternative sites or routes that should be considered in preparing the Environmental Assessment for the proposed North Star Solar Project.

You may turn in this form at the meeting, mail it to the address provided (use additional sheets as necessary), email comments to the Environmental Review Manager at [david.birkholz@state.mn.us](mailto:david.birkholz@state.mn.us), comment at <http://mn.gov/commerce/energyfacilities/#comment> or fax comments to (651) 539-0109. Always use **GS-15-33** in the subject line. The comment period closes, **Friday, May 15, 2015**.

4 pages including cover.

Signature: Susan Swenson Date: 5/15/15  
3pm

GS-15-33

pg 1

Having attended the meeting on April 30 2015 at Tent Town Hall and hearing the concerns and criticisms of local residents we have been prompted to respond to the objections voiced.

Being a life time resident and landowner farming the "prairie" for over 40 years it has been difficult to watch houses be built in fields that once were farmed. And to see the noise and activity a mini Suburbia brings. We were once privileged to true Country living.

The remaining farmers in the area did not go into a full scale protest as they respect the rights of the landowner to control the use of their own property. So should not the critics of the Solar Project extend the same respect to the landowners of the proposed solar site?

We heard alot about how they are concerned about their "Country view". These fields are not public land or a state park. There is no guarantee

John + Susan Swenson

GS-15-33

pa 2

John + Susan  
Lawson

that they will remain planted in farm crops until the end of time. There could always be more housing developments in the future of this property. How would that enhance the countryside or benefit the wild life. The Solar Project may be a more quiet neighbor after all. The land being proposed is not prime farm land so no high producing farm land would be taken out of production however native grasses and plants such as Big Blue Stem and others could grow under the panels and a native prairie of sorts could be reestablished.

As for wild life concern the fields are barren of trees and are tilled up now from fence row to fence row leaving little sanctuary for wild life until corn is almost ripe (fall) and then it is harvested leaving bare fields again

GS-15-33

pg 3

John + Susan Swenson

The PV solar project proposed is adjacent to the existing transmission line corridor, which is already in operation, it only makes sense to locate it here and better utilize the land for the production of energy, which in essence has already been started with the building years ago of the transmission line.

The Country, has an ever increasing need for more energy, that is not going to change. Why not provide it in a way that is least damaging to the environment instead of burning fossil fuels or expecting hydroelectric.

The farmer has given up land to the ever increasing need for housing, maybe its time to give it up (so to say) for the benefit of the most people in production of solar energy, local economy with jobs and taxes paid. And actually, in a way, the saving of some "Country Side."

John + Susan Swenson 11609 St Croix Trail