AEOS

Harness the Sun

Bethany Salmon
Planner | Development Services
14700 Ravina Ave, Orland Park, IL 60462

10255 w.144th St. Solar Reflection

Bethany,

Per your request, this is the assurance from Aeos Energy (solar install contractor) that the proposed Photovoltaic System will not pose any glare issues for the surrounding neighbors.

While I understand that potential glare maybe a worry for surrounding neighbors, I can assure you this will not be an issue. I have included several items to illustrate this;

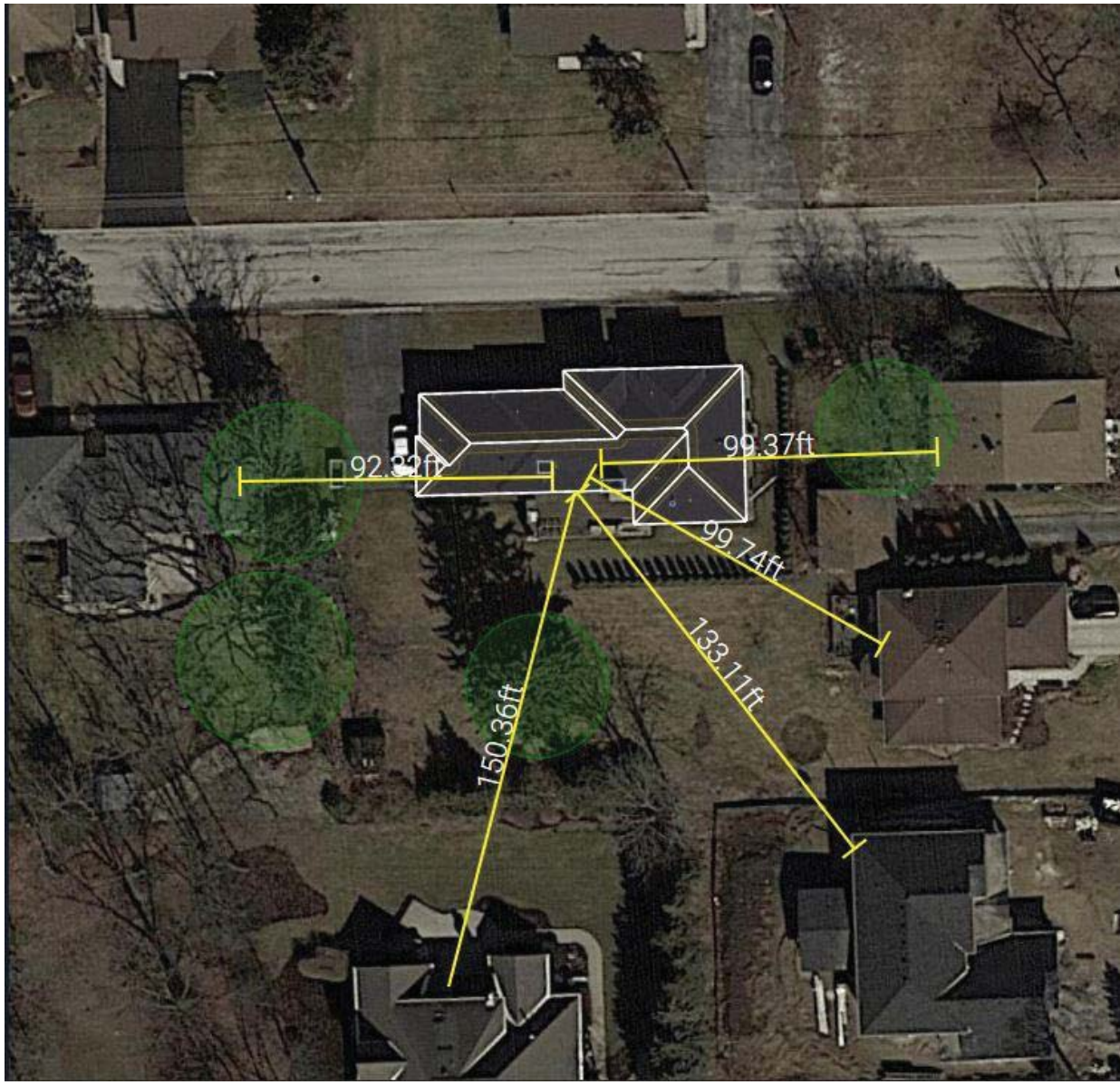
- ❑ This article , from solarprofessional.com discusses what a PV System may pose regarding glare. Here is a quote from the article; "Generally speaking, if a PV array is facing south, incident sunlight at sunrise and sunset arriving from the east or the west does not directly strike the surface of a residential roof-mounted array. By the time sunlight does strike the array directly, its angle of incidence is high enough to preclude the visibility of any glare to neighbors."
- ❑ An aerial photo of the residence and surround residences with distances in feet.
- ❑ A scale drawing illustrating the reflection of the sun of the array during both Summer and Winter Solstice.
- ❑ Solar readings from NOAA (Earth System Research Laboratory) using the latitude and longitude coordinates for 10255 w.144th St

If you have any further questions regarding this issue, please to not hesitate to contact me directly.

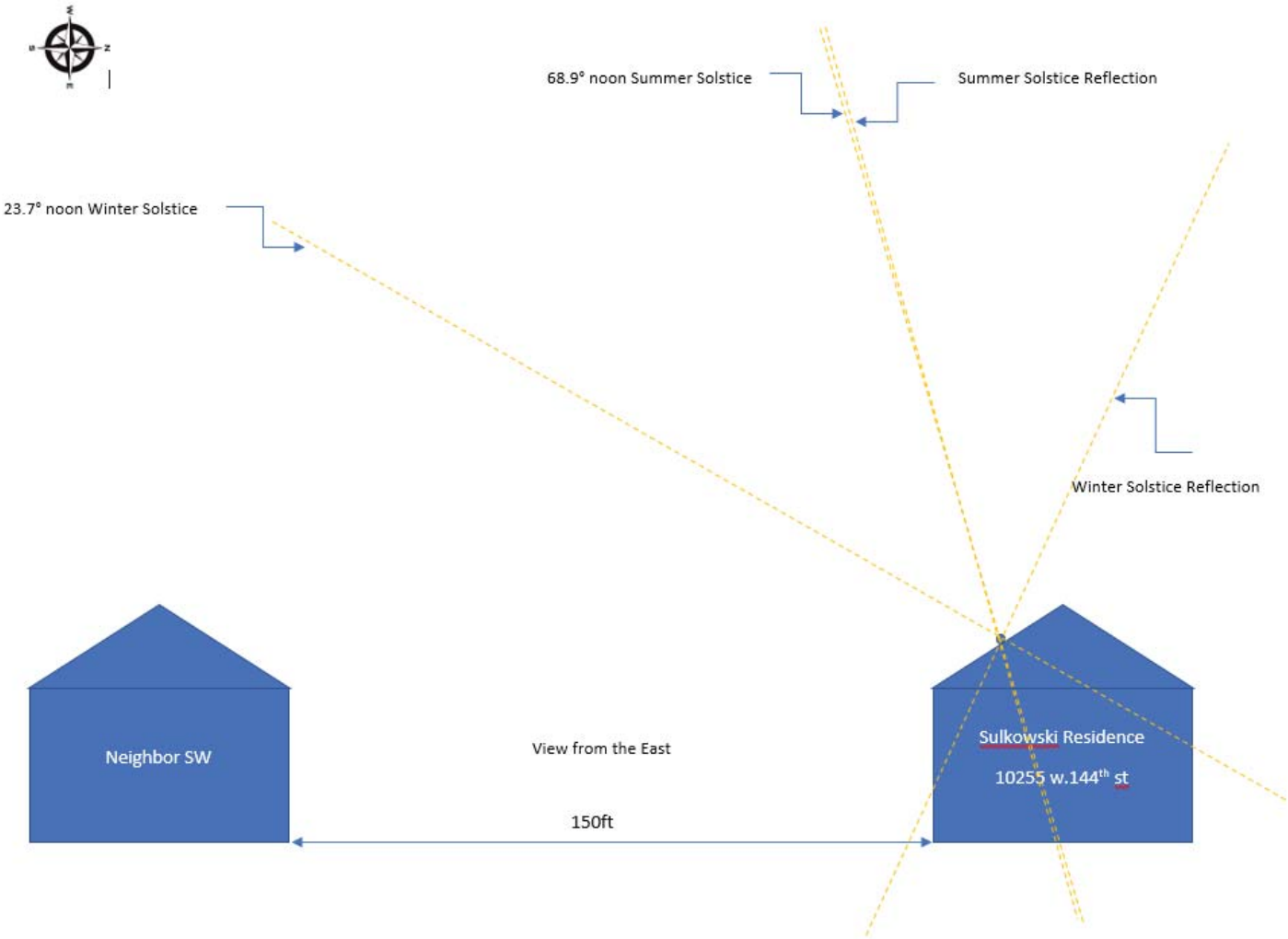
Warm Regards,

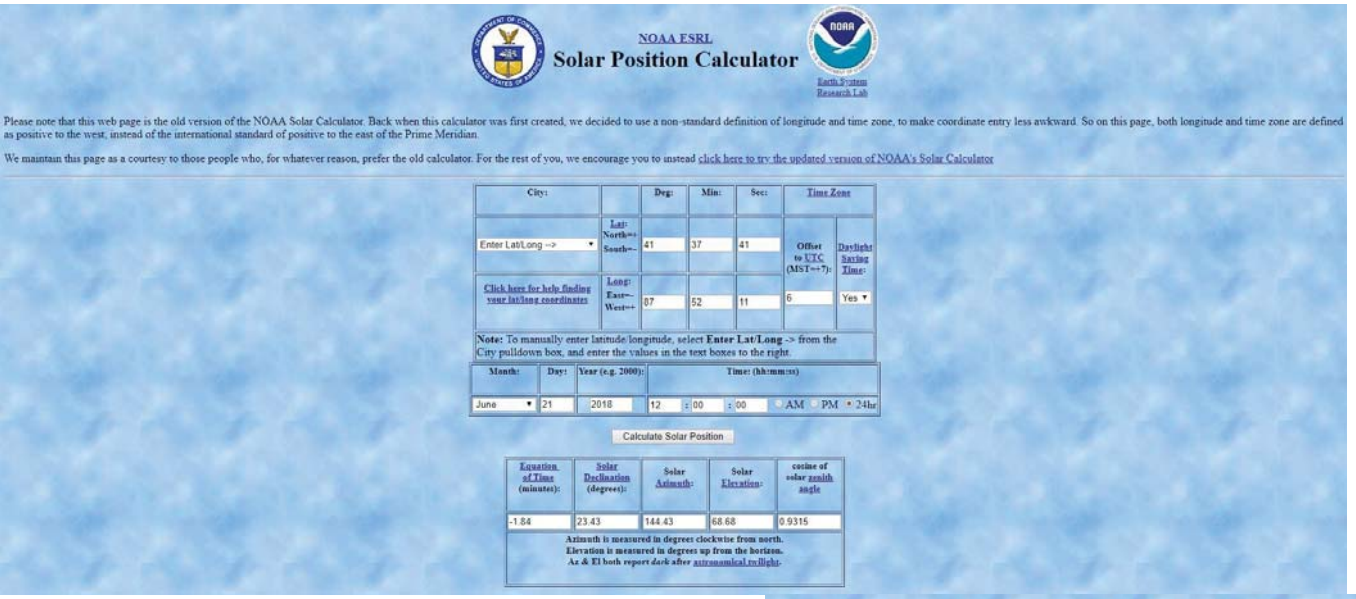
Joe DeSimone
Director of Sale
Aeos Energy

ARIEL VIEW OF 10255 W.144TH ST WITH DISTANCES TO SURROUNDING NEIGHBORS THAT MAYBE IN GLARE RADIUS.



A scale drawing showing the expected direction of reflected sunlight on Summer and Winter Solstices (highest and lowest point of the year the sun will appear)





NOAA ESRL

Solar Position Calculator

Earth System Research Lab

Please note that this web page is the old version of the NOAA Solar Calculator. Back when this calculator was first created, we decided to use a non-standard definition of longitude and time zone, to make coordinate entry less awkward. So on this page, both longitude and time zone are defined as positive to the west, instead of the international standard of positive to the east of the Prime Meridian.

We maintain this page as a courtesy to those people who, for whatever reason, prefer the old calculator. For the rest of you, we encourage you to instead click here to try the updated version of NOAA's Solar Calculator

City:		Deg:	Min:	Sec:	Time Zone	
Enter Lat/Long -->	Lat: North=+ South=-	41	37	41	Offset to UTC (MST=+7):	Daylight Saving Time:
Click here for help finding your lat/long coordinates	Long: East=- West=+	87	52	11	6	Yes

Note: To manually enter latitude/longitude, select **Enter Lat/Long** -> from the City pulldown box, and enter the values in the text boxes to the right.

Month:	Day:	Year (e.g. 2000):	Time: (hh:mm:ss)
June	21	2018	12 : 00 : 00 AM PM 24hr

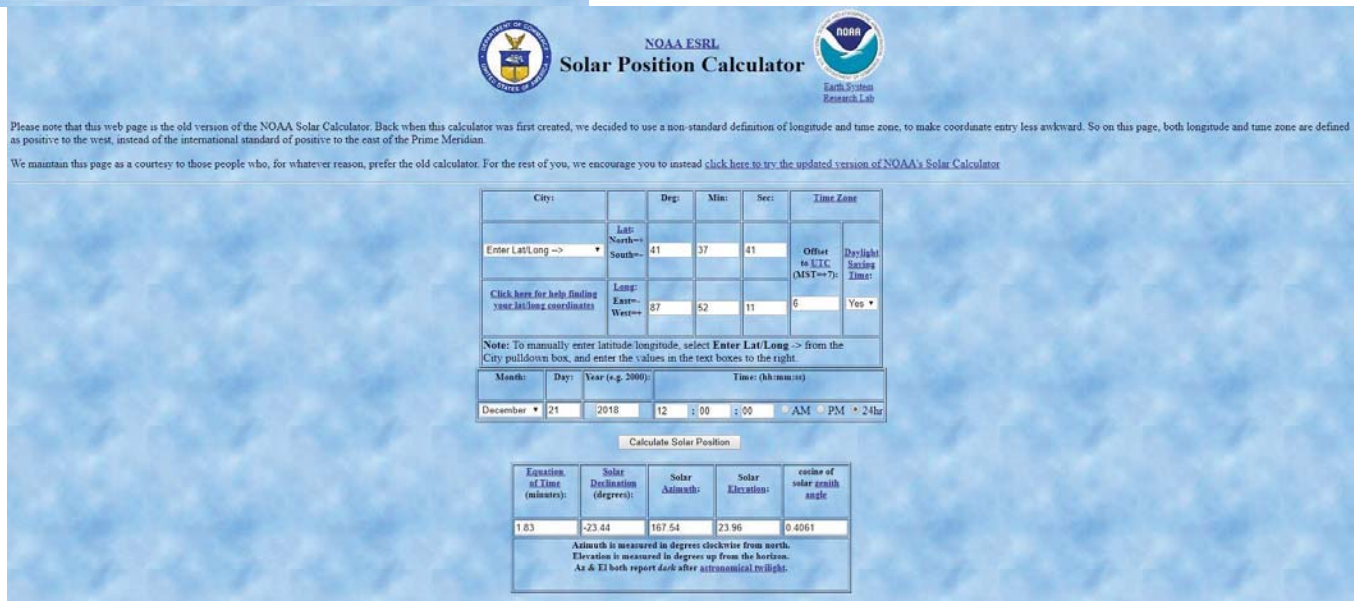
Calculate Solar Position

Equation of Time (minutes):	Solar Declination (degrees):	Solar Azimuth:	Solar Elevation:	cosine of solar zenith angle
-1.84	23.43	144.43	68.68	0.9315

Azimuth is measured in degrees clockwise from north.
Elevation is measured in degrees up from the horizon.
Az & El both report *dark* after astronomical twilight.

SUMMER SOLSTICE
6.21.2018

WINTER SOLSTICE
12.21.2018



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Note: To manually enter latitude/longitude, select **Enter Lat/Long** -> from the City pulldown box, and enter the values in the text boxes to the right.

Month:	Day:	Year (e.g. 2000):	Time: (hh:mm:ss)
December	21	2018	12 : 00 : 00 AM PM 24hr

Calculate Solar Position

Equation of Time (minutes):	Solar Declination (degrees):	Solar Azimuth:	Solar Elevation:	cosine of solar zenith angle
1.83	-23.44	167.54	23.96	0.4061

Azimuth is measured in degrees clockwise from north.
Elevation is measured in degrees up from the horizon.
Az & El both report *dark* after astronomical twilight.

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