

Minnesota Department of Commerce

Solar Energy Production Report Form

1/13/2023 form version

For questions about this worksheet, contact Kim Grosenheider at 651-539-1808 or kim.grosenheider@state.mn.us.

Instructions

Enter data into the light green cells (example below) in each of the worksheets.

example cell

Non-light green cells should not be changed. However, some formulas may need adjustments from the default. Follow instructions.

Individual worksheets contain instructions, indicated by a red triangle in the upper right of the cell.

Add data to the previous year's spreadsheet, **DO NOT use a new spreadsheet** each year.

e-file by February 1 in **Excel (XLS or XLSX)** format, **DO NOT submit as a PDF**

- Worksheet 1. General Information
- Worksheet 2. Production Data
- Worksheet 3. Production Loss Data
- Worksheet 4. Solar Strength Gradient Data

Definitions

kWh = kilowatt hour

m² = meters squared

MW = megawatt

MWh = megawatt hour

MISO = Midcontinent Independent System Operator

General Information

Project Name:	
Docket Number:	
Permit states production data is:	
Permittee is filing data as:	
Person Completing Spreadsheet:	
Phone:	
Email:	
Installed Nameplate Capacity (MW):	100
Operation Start Date:	
Repower Installed Nameplate Capacity (MW):	
Repower Start Date:	
2nd Repower Installed Nameplate Capacity (MW):	
2nd Repower Start Date:	
Operation Stop Date:	

Notes - including any major performance improvements

Production Data

	Day	Daily Energy Generated	Month	Number of Days in Month	Total Monthly Energy Generated	Monthly Capacity Factor	Annual Energy Generated	Annual Capacity Factor
unit of measure		MWh A		B	MWh C	percent D	MWh E	percent F
formula					=SUM(A1:Ax)	=C/(nameplate capacity x B x 24)	=SUM(C1:C12)	=E/(nameplate capacity x (SUM(B1:B12) x 24))
	Example							
YEAR:	1/1/2021	155.3	January	31	6544	8.8%	188018	21.5%
XXXX	1/2/2021	33.3	February	28	10837	16.1%		
	1/3/2021	244.4	March	31	17533	23.6%		
	1/4/2021	386.2	April	30	16659	23.1%		
	1/5/2021	331.5	May	31	22170	29.8%		
	1/6/2021	390.9	June	30	25208	35.0%		
	1/7/2021	416.9	July	31	27139	36.5%		
	1/8/2021	257.0	August	31	20568	27.6%		
	1/9/2021	46.0	September	30	17436	24.2%		
	1/10/2021	22.4	October	31	11652	15.7%		
	1/11/2021	8.3	November	30	7238	10.1%		
	1/12/2021	41.8	December	31	5033	6.8%		
	12/31/2021	273.2						

start entering your data here

YEAR:			January	31	0	0.0%	0	0.0%
			February	28	0	0.0%		
			March	31	0	0.0%		
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YEAR:			January	31	0	0.0%	0	0.0%
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		September	30	0	0.0%		
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		September	30	0	0.0%		
		October	31	0	0.0%		
		November	30	0	0.0%		
		December	31	0	0.0%		

Solar Strength Gradient Data

	Day	Solar Strength Gradient	Month	Number of Days in Month	Average Monthly Solar Strength Gradient	Average Annual Solar Strength Gradient
unit of measure		kWh/m ² /Day A		B	kWh/m ² /Day C	kWh/m ² /Day D
formula					=SUM(A1:Ax)/B	=AVERAGE(C1:C12)
Example						
YEAR:	1/1/2022	155.3	January	31	211.1	514.5
XXXX	1/2/2022	33.3	February	28	387.0	
	1/3/2022	244.4	March	31	565.6	
	1/4/2022	386.2	April	30	555.3	
	1/5/2022	331.5	May	31	715.2	
	1/6/2022	390.9	June	30	840.3	
	1/7/2022	416.9	July	31	875.4	
	1/8/2022	257.0	August	31	663.5	
	1/9/2022	46.0	September	30	581.2	
	1/10/2022	22.4	October	31	375.9	
	1/11/2022	8.3	November	30	241.3	
	1/12/2022	41.8	December	31	162.4	
	12/31/2022	273.2				

start entering your data here

YEAR:			January	31	0.0	0.0
			February	28	0.0	
			March	31	0.0	
			April	30	0.0	
			May	31	0.0	
			June	30	0.0	
			July	31	0.0	
			August	31	0.0	
			September	30	0.0	
			October	31	0.0	
			November	30	0.0	
			December	31	0.0	

YEAR:			January	31	0.0	0.0
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			October	31	0.0	
			November	30	0.0	
			December	31	0.0	

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			July	31	0.0	
			August	31	0.0	
			September	30	0.0	
			October	31	0.0	
			November	30	0.0	
			December	31	0.0	

YEAR:			January	31	0.0	0.0
			February	28	0.0	
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			April	30	0.0	

		May	31	0.0
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		July	31	0.0
		August	31	0.0
		September	30	0.0
		October	31	0.0
		November	30	0.0
		December	31	0.0

YEAR:		January	31	0.0	0.0
		February	28	0.0	
		March	31	0.0	
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		September	30	0.0	
		October	31	0.0	
		November	30	0.0	
		December	31	0.0	

YEAR:		January	31	0.0	0.0
		February	28	0.0	
		March	31	0.0	
		April	30	0.0	
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		June	30	0.0	
		July	31	0.0	
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		December	31	0.0	

YEAR:		January	31	0.0	0.0
		February	28	0.0	
		March	31	0.0	
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		June	30	0.0	
		July	31	0.0	
		August	31	0.0	
		September	30	0.0	
		October	31	0.0	
		November	30	0.0	
		December	31	0.0	

YEAR:		January	31	0.0	0.0
		February	28	0.0	
		March	31	0.0	
		April	30	0.0	
		May	31	0.0	
		June	30	0.0	
		July	31	0.0	
		August	31	0.0	
		September	30	0.0	
		October	31	0.0	
		November	30	0.0	
		December	31	0.0	

YEAR:		January	31	0.0	0.0
		February	28	0.0	
		March	31	0.0	
		April	30	0.0	
		May	31	0.0	

		June	30	0.0
		July	31	0.0
		August	31	0.0
		September	30	0.0
		October	31	0.0
		November	30	0.0
		December	31	0.0

YEAR:		January	31	0.0	0.0
		February	28	0.0	
		March	31	0.0	
		April	30	0.0	
		May	31	0.0	
		June	30	0.0	
		July	31	0.0	
		August	31	0.0	
		September	30	0.0	
		October	31	0.0	
		November	30	0.0	
		December	31	0.0	

YEAR:		January	31	0.0	0.0
		February	28	0.0	
		March	31	0.0	
		April	30	0.0	
		May	31	0.0	
		June	30	0.0	
		July	31	0.0	
		August	31	0.0	
		September	30	0.0	
		October	31	0.0	
		November	30	0.0	
		December	31	0.0	

YEAR:		January	31	0.0	0.0
		February	28	0.0	
		March	31	0.0	
		April	30	0.0	
		May	31	0.0	
		June	30	0.0	
		July	31	0.0	
		August	31	0.0	
		September	30	0.0	
		October	31	0.0	
		November	30	0.0	
		December	31	0.0	

YEAR:		January	31	0.0	0.0
		February	28	0.0	
		March	31	0.0	
		April	30	0.0	
		May	31	0.0	
		June	30	0.0	
		July	31	0.0	
		August	31	0.0	
		September	30	0.0	
		October	31	0.0	
		November	30	0.0	
		December	31	0.0	

YEAR:		January	31	0.0	0.0
		February	28	0.0	
		March	31	0.0	
		April	30	0.0	
		May	31	0.0	
		June	30	0.0	

		July	31	0.0
		August	31	0.0
		September	30	0.0
		October	31	0.0
		November	30	0.0
		December	31	0.0

YEAR:		January	31	0.0	0.0
		February	28	0.0	
		March	31	0.0	
		April	30	0.0	
		May	31	0.0	
		June	30	0.0	
		July	31	0.0	
		August	31	0.0	
		September	30	0.0	
		October	31	0.0	
		November	30	0.0	
		December	31	0.0	

YEAR:		January	31	0.0	0.0
		February	28	0.0	
		March	31	0.0	
		April	30	0.0	
		May	31	0.0	
		June	30	0.0	
		July	31	0.0	
		August	31	0.0	
		September	30	0.0	
		October	31	0.0	
		November	30	0.0	
		December	31	0.0	

YEAR:		January	31	0.0	0.0
		February	28	0.0	
		March	31	0.0	
		April	30	0.0	
		May	31	0.0	
		June	30	0.0	
		July	31	0.0	
		August	31	0.0	
		September	30	0.0	
		October	31	0.0	
		November	30	0.0	
		December	31	0.0	

YEAR:		January	31	0.0	0.0
		February	28	0.0	
		March	31	0.0	
		April	30	0.0	
		May	31	0.0	
		June	30	0.0	
		July	31	0.0	
		August	31	0.0	
		September	30	0.0	
		October	31	0.0	
		November	30	0.0	
		December	31	0.0	

YEAR:		January	31	0.0	0.0
		February	28	0.0	
		March	31	0.0	
		April	30	0.0	
		May	31	0.0	
		June	30	0.0	
		July	31	0.0	

		August	31	0.0
		September	30	0.0
		October	31	0.0
		November	30	0.0
		December	31	0.0

YEAR:		January	31	0.0	0.0
		February	28	0.0	
		March	31	0.0	
		April	30	0.0	
		May	31	0.0	
		June	30	0.0	
		July	31	0.0	
		August	31	0.0	
		September	30	0.0	
		October	31	0.0	
		November	30	0.0	
		December	31	0.0	

YEAR:		January	31	0.0	0.0
		February	28	0.0	
		March	31	0.0	
		April	30	0.0	
		May	31	0.0	
		June	30	0.0	
		July	31	0.0	
		August	31	0.0	
		September	30	0.0	
		October	31	0.0	
		November	30	0.0	
		December	31	0.0	

YEAR:		January	31	0.0	0.0
		February	28	0.0	
		March	31	0.0	
		April	30	0.0	
		May	31	0.0	
		June	30	0.0	
		July	31	0.0	
		August	31	0.0	
		September	30	0.0	
		October	31	0.0	
		November	30	0.0	
		December	31	0.0	

YEAR:		January	31	0.0	0.0
		February	28	0.0	
		March	31	0.0	
		April	30	0.0	
		May	31	0.0	
		June	30	0.0	
		July	31	0.0	
		August	31	0.0	
		September	30	0.0	
		October	31	0.0	
		November	30	0.0	
		December	31	0.0	

YEAR:		January	31	0.0	0.0
		February	28	0.0	
		March	31	0.0	
		April	30	0.0	
		May	31	0.0	
		June	30	0.0	
		July	31	0.0	
		August	31	0.0	

		September	30	0.0
		October	31	0.0
		November	30	0.0
		December	31	0.0

YEAR:		January	31	0.0	0.0
		February	28	0.0	
		March	31	0.0	
		April	30	0.0	
		May	31	0.0	
		June	30	0.0	
		July	31	0.0	
		August	31	0.0	
		September	30	0.0	
		October	31	0.0	
		November	30	0.0	
		December	31	0.0	

YEAR:		January	31	0.0	0.0
		February	28	0.0	
		March	31	0.0	
		April	30	0.0	
		May	31	0.0	
		June	30	0.0	
		July	31	0.0	
		August	31	0.0	
		September	30	0.0	
		October	31	0.0	
		November	30	0.0	
		December	31	0.0	

YEAR:		January	31	0.0	0.0
		February	28	0.0	
		March	31	0.0	
		April	30	0.0	
		May	31	0.0	
		June	30	0.0	
		July	31	0.0	
		August	31	0.0	
		September	30	0.0	
		October	31	0.0	
		November	30	0.0	
		December	31	0.0	

YEAR:		January	31	0.0	0.0
		February	28	0.0	
		March	31	0.0	
		April	30	0.0	
		May	31	0.0	
		June	30	0.0	
		July	31	0.0	
		August	31	0.0	
		September	30	0.0	
		October	31	0.0	
		November	30	0.0	
		December	31	0.0	

YEAR:		January	31	0.0	0.0
		February	28	0.0	
		March	31	0.0	
		April	30	0.0	
		May	31	0.0	
		June	30	0.0	
		July	31	0.0	
		August	31	0.0	
		September	30	0.0	

