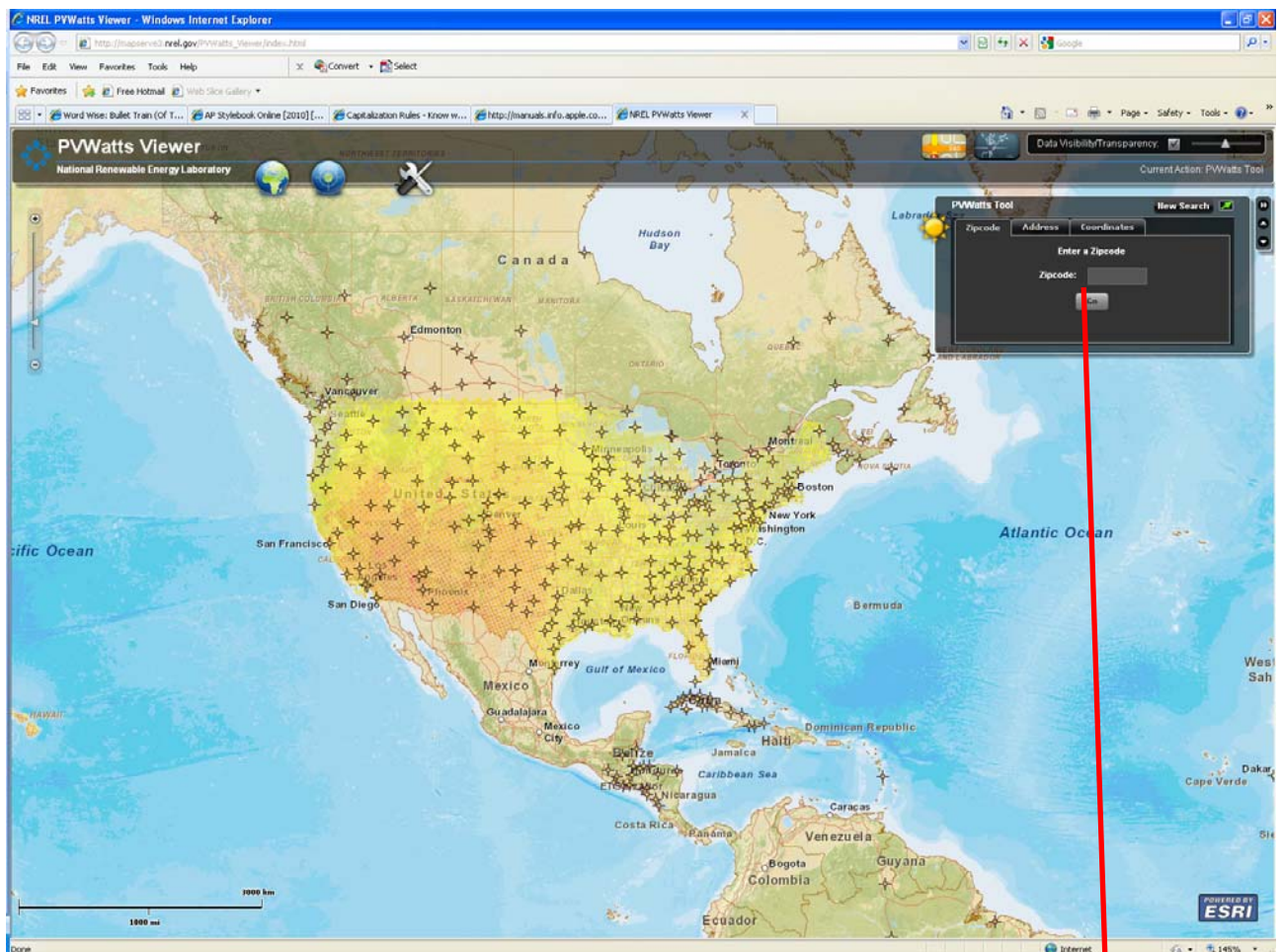


Before you begin, make sure you are using *PVWATTS Version 2*. Also, be sure your popup blocker is disabled.

## PVWatts Calculator – *Initial Screen*



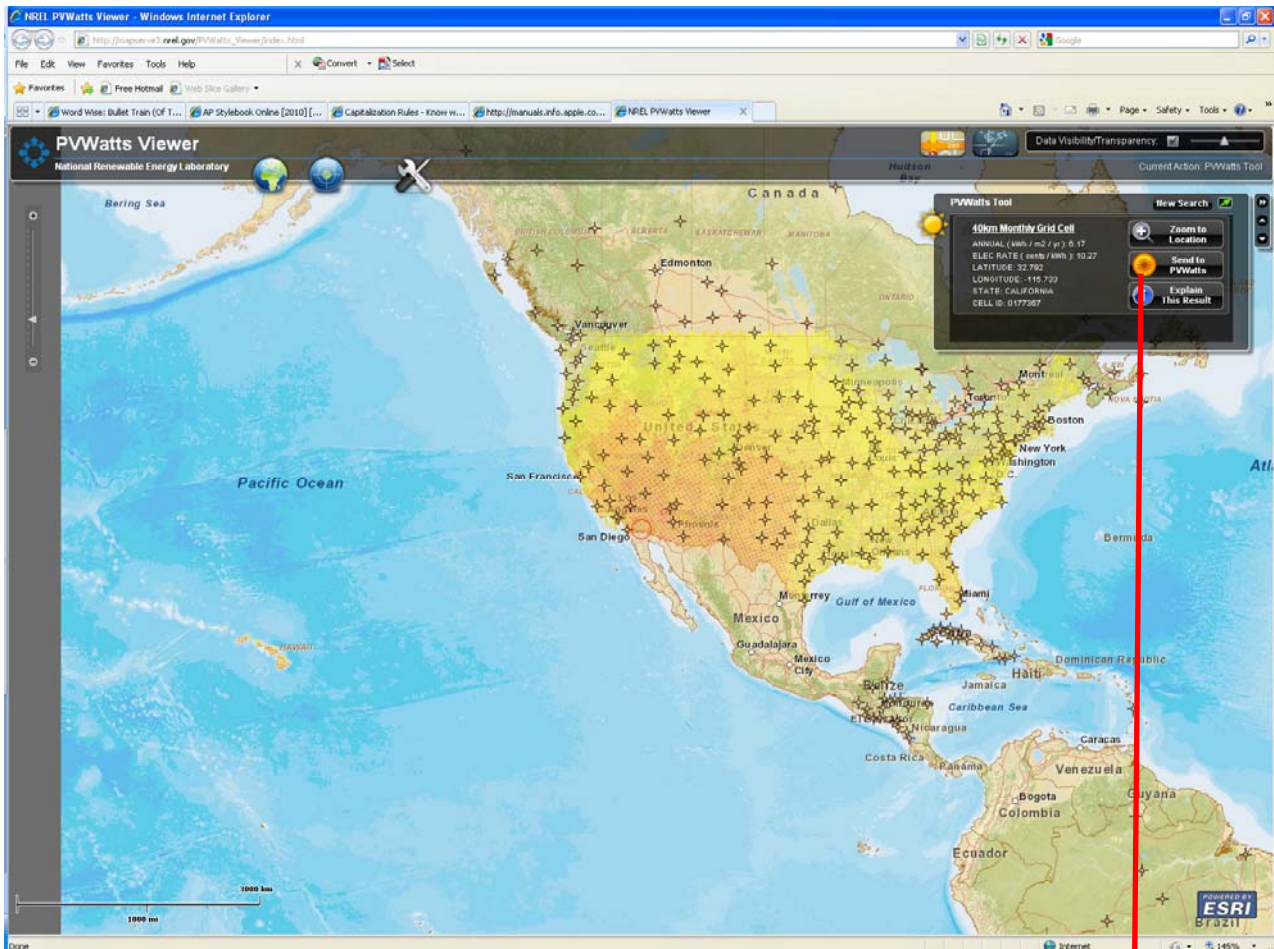
1 - Enter the Zip code in the field provided on the map.

2 - Click Go.

Insert zip code  
and click go

The map will refresh and will look similar to the picture below. An area inside the map will be highlighted.

4 - Click on the yellow circle icon that says, "Send to PVWatts."



Yellow circle icon

The following page will open in a new window.

This is the *Site Location* page.

**PV Walls**

Click on **Calculate** if default values are acceptable, or after selecting your system specifications. Click on **Help** for information about system specifications. To use a DC to AC derate factor other than the default, click on **Derate Factor Help** for information.

---

**Site Location:**

Cell ID:	0175361
State:	California
Latitude:	34.075
Longitude:	-117.951

---

**PV System Specifications:**

DC Rating (kW):	<input type="text" value="4.0"/>
DC to AC Derate Factor:	<input type="text" value="0.77"/>
Array Type:	<input type="text" value="Fixed Tilt"/>
Fixed Tilt or 1-Axis Tracking System:	
Array Tilt (degrees):	<input type="text" value="34.075"/> (Default = Latitude)
Array Azimuth (degrees):	<input type="text" value="180.0"/> (Default = South)

---

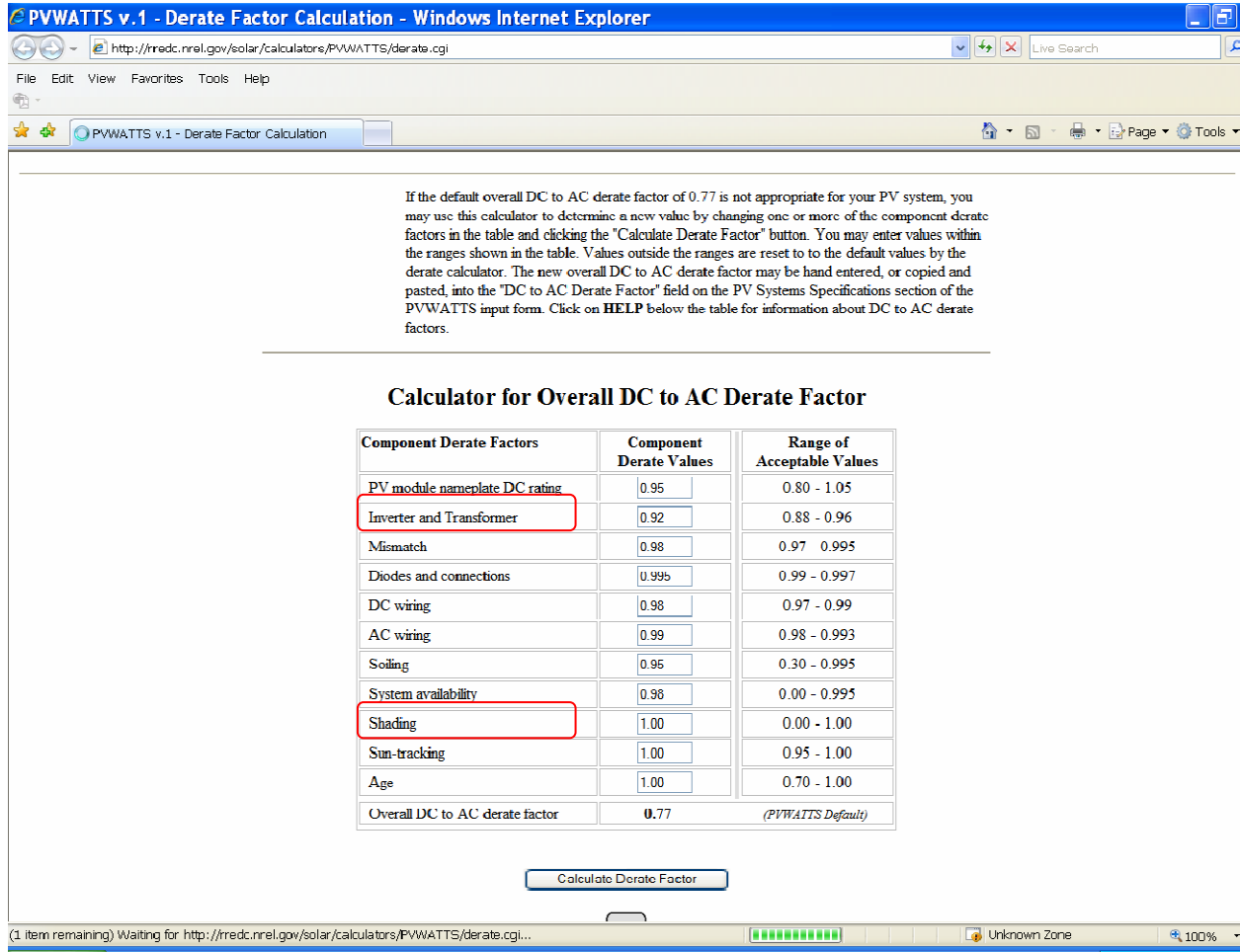
**Energy Data:**

Cost of Electricity (cents/kWh):	<input type="text" value="10.509"/>
----------------------------------	-------------------------------------

Click on the Derate Factor Help button to the right of the screen.

The following page will open in a new window.

This is the *Derate Screen*.



To calculate the Derate Factor:

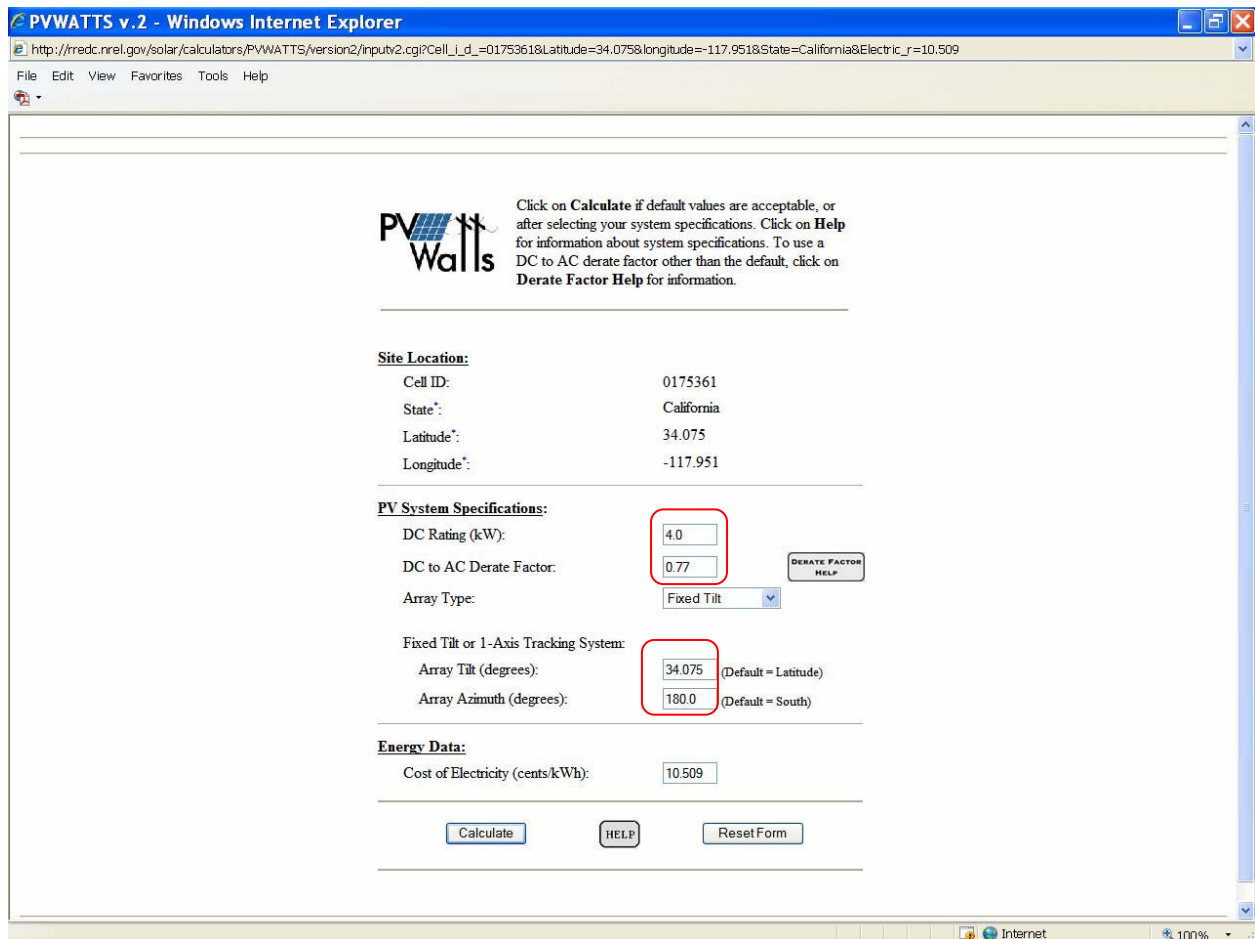
**Change the Inverter and Transformer field to match the efficiency as listed on the CEC approved system components web page.**

**Change the shading factor if applicable.**

Click the Calculate Derate Factor button.

Print the results and Close the window.

You will be directed back to the Site Location page



On this page, enter your Adjusted STC in the DC Rating (kW) field, under PV System Specifications. Use a whole number and three decimal places. **DO NOT round off.** PVWATTS will round for you.

The Adjusted STC is calculated using the following formula:

$$\frac{(\text{CEC PTC Rating} \times 1.12 \times \# \text{ of Modules})}{1000}$$

Change the DC to AC Derate Factor as calculated on the previous page.

Change the Array Tilt field and Azimuth as applicable to your system installation or installation plans.

Click Calculate.

The following page will appear.

Print this page.

**PV Walls** **AC Energy & Cost Savings**

Station Identification	
Cell ID:	0175361
State:	California
Latitude:	34.1 ° N
Longitude:	118.0 ° W
PV System Specifications	
DC Rating:	4.00 kW
DC to AC Derate Factor:	0.770
AC Rating:	3.08 kW
Array Type:	Fixed Tilt
Array Tilt:	34.1 °
Array Azimuth:	180.0 °
Energy Specifications	
Cost of Electricity:	10.5 ¢/kWh

Results			
Month	Solar Radiation (kWh/m <sup>2</sup> /day)	AC Energy (kWh)	Energy Value (\$)
1	4.59	413	43.40
2	5.11	416	43.72
3	5.70	510	53.60
4	6.11	519	54.54
5	6.38	557	58.54
6	6.77	560	58.85
7	6.78	571	60.01
8	6.90	580	60.95
9	6.31	516	54.23
10	5.56	482	50.65
11	5.07	436	45.82
12	4.37	392	41.20
Year	5.81	5951	625.39

[Run PVWATTS v.2 for another location](#) [Run PVWATTS v.1](#)

Please send questions and comments to [Webmaster](#)  
[Disclaimer and copyright notice.](#)

Use the results found under the AC Energy (kWh) column, DC to AC derate factor and AC Rating on this page, on the solar application (Reservation Request form).

Please send both pages of this PVWATTS calculation with your Reservation Request form/application.