

{{hoa\_name}}, {{date}}

In our eﬀorts to design the most productive solar system on the {{name}}’s residence, we placed a total of {{quantity}} modules on the {{old\_direction}} facing portion of the roof that we will be doing this analysis for. We modeled the {{new\_direction}} facing portion of the roof for this analysis to show that production for this array would decrease by greater than 10%. For this report we used a calculator called PV Watts, from the National Renewable Energy Laboratory (NREL), which estimates the energy production of photovoltaic energy systems throughout the world. Please review the following results:

**{{old\_direction}}-facing Array**

|  |  |  |  |
| --- | --- | --- | --- |
| **Location** | **Array** | **Orientation** | **Production (kWh)** |
| {{old\_direction}}, array | ({{quantity}}) SunPower {{mod\_watt}} Modules | {{old\_azimuth}}°, {{old\_tilt}}° | {{ac\_monthly\_original}} kW |
| Total Production |  |  | {{ac\_monthly\_original}} kW |

**{{new\_direction}}-facing Alternate Array**

|  |  |  |  |
| --- | --- | --- | --- |
| **Location** | **Array** | **Orientation** | **Production (kWh)** |
| {{new\_direction}}, array | ({{quantity2}}) SunPower {{mod\_watt}} Modules | {{new\_azimuth}}°, {{new\_tilt}}° | {{ac\_monthly\_new}} kW |
| Total Production |  |  | {{ac\_monthly\_new}} kW |
| Loss of Production |  |  | {{percent}} |

As you can see, if we were to relocate these panels, the system will lose greater than ten percent production on the {{new\_direction}} facing roof face.

{{state}}

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