



Solar Shenanigans

a.k.a. Spinning Straw Into Gold

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Step 1 of 7

What's the main reason you are interested in going solar?

**Lower My
Electric Bil**



**Power
Outages**



**Go
Green**



**Increase
Home Value**



**Adding Panels
To My System**



A true story from a senior executive retreat about 20 years ago speaks volumes ...

Today's Agenda

Spinning Straw Into Gold?

- Enabling customer perspectives
- Relational do's and don'ts
- Enabling project mechanics
 - Include great conservation measures
 - Finance with low interest rates
 - Tilt financing to hide true near-term costs
 - Overstate kWh production
 - Overstate kWh value over time
 - Neglect taxation and roof repair costs
- How Apogee can be helpful



Enabling Customer Perspectives

Lots of cash with no “safe return on investment”

The right thing to do – a destiny investment

Virtue signaling

Part of the “optimal” solution: EV + Solar + Batteries

Emergency power backup for power outages

Didn't know what better options they had

Welcome to the Solar Adviser tool

- ✓ Is solar a good option for me?
- ✓ What do I need to know when considering solar?
- ✓ How can I get more information?



At Georgia Power, we're here to help you make informed decisions about your energy usage. This tool will ask you a series of questions that will help you decide if solar could be a good option for you. You'll need your Georgia Power account number to complete this tool and be contacted by one of our Renewable Development representatives about installing solar.

[Get Started](#)

Is Solar Right for You?

Select the size of your home

For an estimate of how much you can save by installing solar, pick the home that best matches your own.



SMALL

Below 1,600 Sq. Ft.

4kW System Size

Installation Cost

\$10,080*



MEDIUM

1,600-3,499 Sq. Ft.

6kW System Size

Installation Cost

\$15,120*



LARGE

3,500 Sq Ft & Up

10kW System Size

Installation Cost

\$25,200*

**Totals assume eligibility for current Federal Tax Credit. For more information, please visit the [EnergyStar website](#).*

Your Estimated Savings and Financials

Your selections



Home Size:

Large (3,500 Sq Ft & Up)



System Size:

10kW

Your estimated cost & savings



Installation Cost:

\$25,200*



Estimated annual savings:

\$1,847*



Estimated payback period:

14 years*

Send Me My Results

*Assumptions in this screening tool are limited to current electric rates. Actual system performance, system cost, savings and payback period will vary. Totals assume eligibility for current Federal Tax Credit. For more information, please visit the [EnergyStar website](#).

[↶ Edit Responses](#)

[Next](#)

Relational Do's and Don'ts

Don't do any the following:

- Ambivalence always backfires - you will be blamed
- Argue customers shouldn't put solar on their roof
- Assume customers are making economic decisions
- Net metering is them getting something for nothing

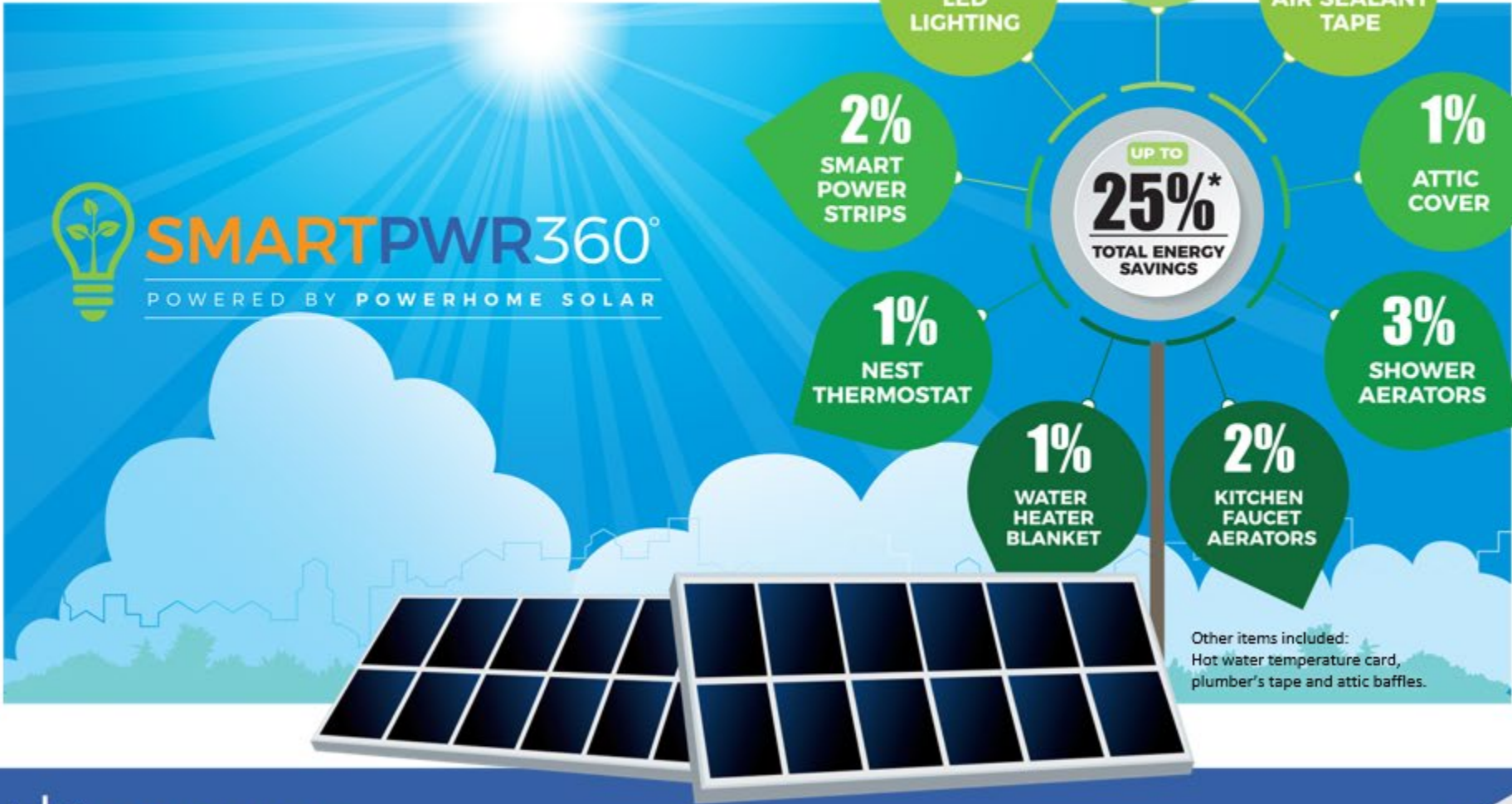
Do the following:

- Thank them for their interest in these ideas
- Look first for EE and DR low hanging fruit
- Help them save money and improve reliability
- If they truly have a solar opportunity, help them
- Offer other ways like buying kWh, Solar Farms, etc.

SMARTPWR360^o™

Solar panels perform best when they have support. To help supplement your solar panel production, we developed our SMARTPWR360^o™ Program, complete with 9 energy savings-solutions and energy tips designated to maximize your savings potential by up to 25%*

*Actual results will vary on various factors. Results are not guaranteed.



Enabling Method 1: Include low hanging fruit

Benefits Of Going Solar

Our Markets

SMARTPWR360^o™

Our Panels

Our Awards

Our Partnerships

POWERHOME Gives Back

How Solar Works

Our Battery

Customer Testimonials

Incentives



Low Interest Rates and Escalation Tilts

01

Easy credit with low interest rates hides first cost realities

02

Give away year 1 to desensitize real economic scrutiny

03

Start year 2 with low annual payments that escalate

Overstate kWh Produced and Savings

- Plenty of excellent tools out there to check the math
- Our house is the worst situation – yet they said we would save money!



Date	KWh	Bill
8/23/2021	2,320	\$365
7/22/2021	1,920	\$297
6/22/2021	1,640	\$252
5/21/2021	1,440	\$162
4/22/2021	1,560	\$174
3/24/2021	1,800	\$197
2/22/2021	1,840	\$200
1/25/2021	2,360	\$255
12/22/2020	2,120	\$230
11/20/2020	1,600	\$178
10/22/2020	1,320	\$129
9/22/2020	1,880	\$292
8/21/2020	2,200	\$345





Vivian
Howard

Deep Run Roots

Stories and
Recipes from
My Corner of
the South

LB
LITTLE
BROWN

America's Favorite Brand Name
ONE-DISH MEALS

PUBLICATIONS INTERNATIONAL, LTD.



BLUEGRASS WINNERS



SELECT
DISPLAY

ENTER
MUTE



Power



Broadband

Phone



WPS



“I moved some panels around so they can have a better energy output. If you cut down some trees the output would be much greater. The total net cost of your system is \$76,216 (after tax credits) with a monthly payment of \$273 (in the first year).”

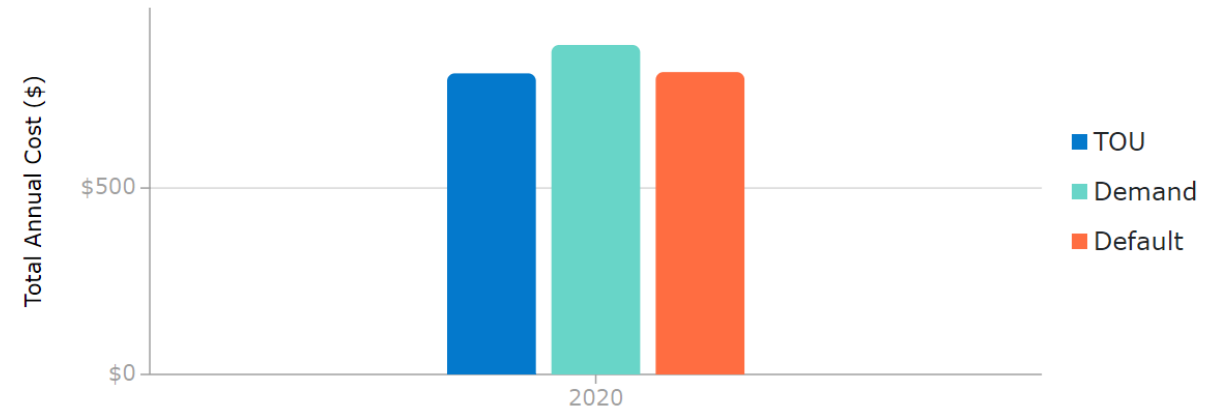
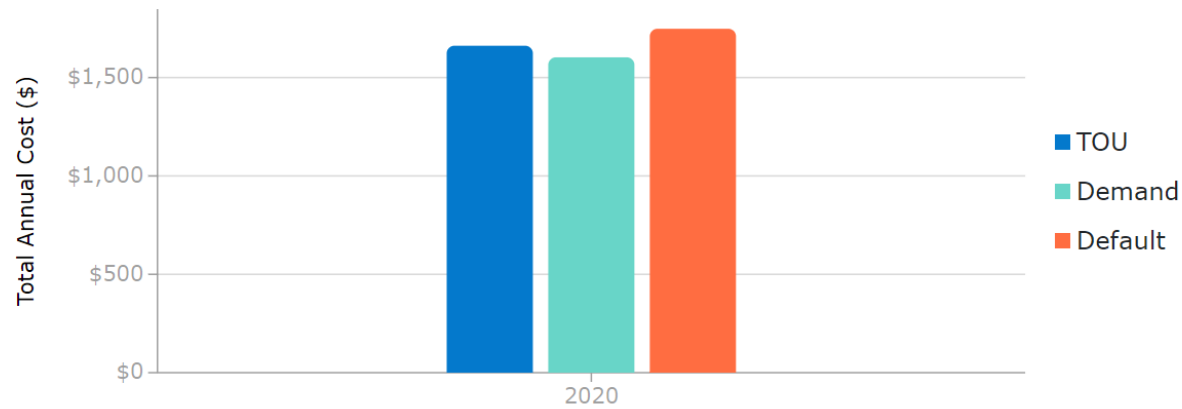
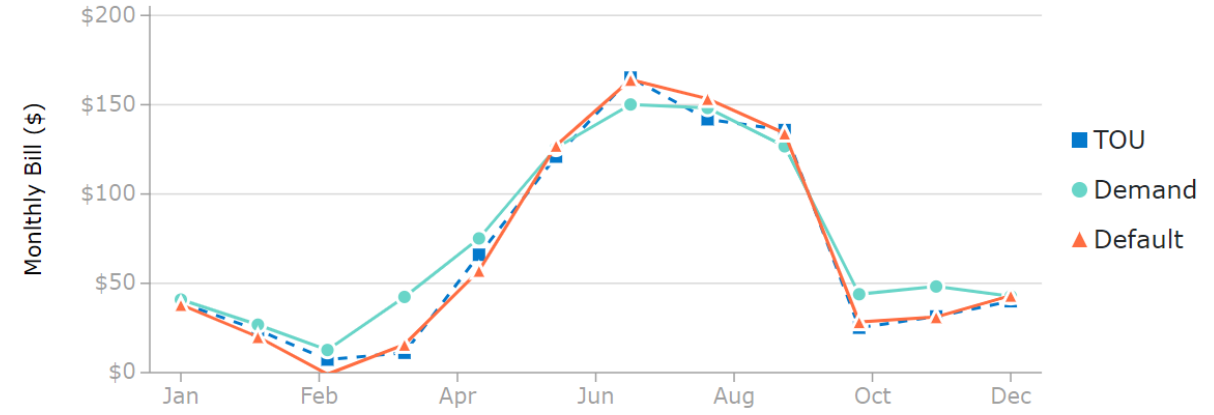
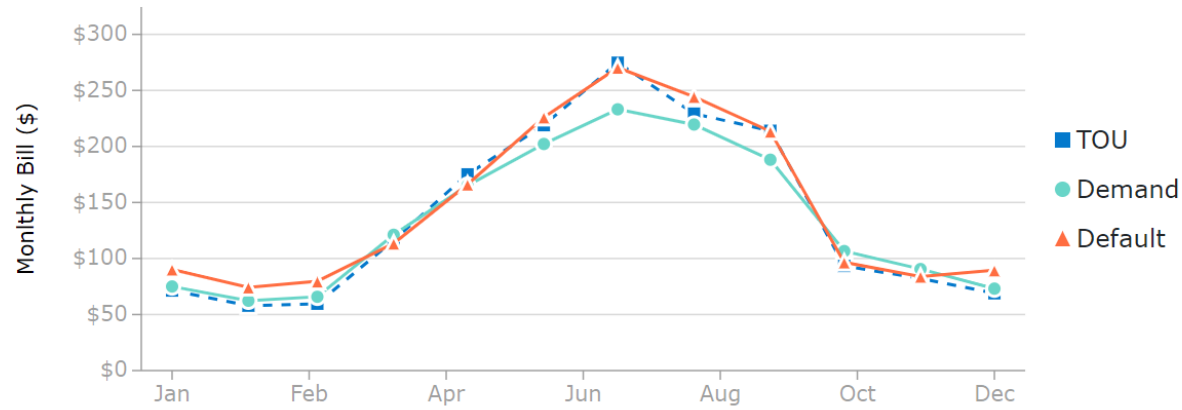
“We will send you a check for \$3,288 to cover the first year of payments. The first year on us would also help you see a Return On Investment as soon as it is installed since you won't be paying anything for your solar and a huge portion of your electricity bill will be covered by your solar system.”

Our bills only averaged \$228 for the past year!

Oh, and I told them in their survey

Our roof is about 20 years old!!

We can model Solar with Complex Rates



House 4000 Relatively New Natural Gas

Many Appliances Solar kW 0 Occupancy 100 %

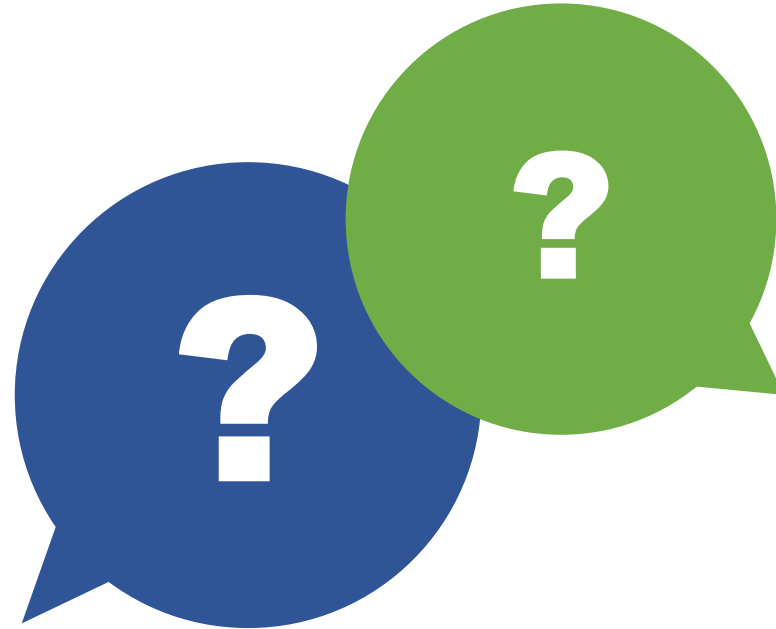
House 4000 Relatively New Natural Gas

Many Appliances Solar kW 7 Occupancy 100 %

So ... How can Apogee Help You?

- We have solar built in but almost no one has turned it on!?!
 - That will at least illustrate a more realistic kWh production
 - What are the public sources not doing that you need?
1. <https://sam.nrel.gov/> NREL's SAMs financial models include residential and commercial projects where the renewable energy system is on the customer side of the electric utility meter (behind the meter), and power from the system is used to reduce the customer's electricity bill. The SAM model combines detailed performance modeling with detailed financial modeling, cost data, detailed incentive abilities and robust user interface to create a full system analysis for PV technologies..
 2. <https://pvwatts.nrel.gov/> PVWatts Model The PVWatts model is an implementation of NREL's popular online photovoltaic calculator. It models a grid-connected photovoltaic system using a few basic inputs to describe the system's nameplate capacity, array orientation and mounting type, and system losses. PVWatts makes internal assumptions about module and inverter characteristics for three types of modules. SAM's implementation of PVWatts includes options for modeling shading that are not available with the online version.

Any Questions

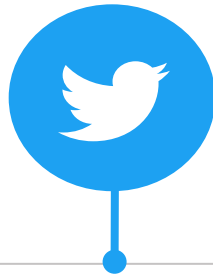


Upcoming Events

- **Oct. 24 – 27, American Public Power Association, Connections, Scottsdale AZ**
- **Nov. 8 – 10th Peak Load Management Alliance, Online**
- **Nov. 16 - 17 Smart Energy Consumers Collaborative, Atlanta**



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