



**Barry Electric  
Cooperative**



*Owned by those we serve*

Mark Aeilts, CEO/General Manager

Page 1 of 3

## **INVESTMENTS TO \$AVE: DON'T BE SORRY – BE INFORMED**

**FIRST: “Power Checks” beginning cost is \$1,200 + may qualify for rebates**

**SECOND: Battery to manage time-of-use charge may have prompt payback**

**THIRD: Solar will have the largest investment (MONTHLY Net Meter)**

Solar energy is sustainable, renewable, and plentiful, but those selling solar equipment may not have your best interest in mind. Some solar vendors use deceptive sales tactics. Barry Electric Co-op (BEC) is here to help you make the most cost effective choice for you, our member-owner. Going solar is a long term strategy—think decades, not years. If only for a short term, solar is an expensive option and inconsistent in its savings. Energy efficiency may be less exciting, but is far more affordable and consistent in its savings.

### **START WITH ENERGY EFFICIENCY OR BATTERY STORAGE**

You can save big by investing in your commercial building efficiency, and there are multiple ways to do that. First, stop the energy leaks. Conserve energy by avoiding phantom loads when appliances are in standby mode instead of being turned off. Second, invest in energy efficient products such as LED lighting, motor replacement or HVAC applications. Third, “Power Checks” is for members who have greater than 50kW annual average demand. Based on recommendations from the energy auditor, member may qualify for rebates from BEC including Geothermal Heat Pump Rebates and the Business Lighting Program. Additionally, a battery system can drastically reduce energy use during time-of-use demand hours, and could prove an easy, worthwhile investment.

### **AVOID HYPE AND SEEK COMPETITIVE BIDS**

Solar companies use a basic sales pitch: ‘Did you know going solar can save thousands of dollars?’ However, savings through solar are not guaranteed, nor easily computed. As a not-for-profit which serves member-owners, BEC has a vested interest in our member-owners’ financial wellbeing, and that’s why we recommend reading the Solar Energy Industries Association (SEIA) Residential Consumer Guide to Solar Power prior to making solar decisions or signing contracts. It is also important to seek competitive bids to insure the best warranties and price.

Some solar sales persons claim BEC electric bills will rise annually by 6%. This is false. BEC electric bills have risen approximately 2% per year. The service availability charge and other unavoidable charges still remain for any services that are purchased from BEC. You must know the future BEC rate per kWh to be able to calculate a solar investment payback.



4015 Main Street, P. O. Box 307  
Cassville, MO 65625

Telephone: (417) 847-2131  
Fax: (417) 847-5524

Powered by **Barry Electric Cooperative**

## FUTURE BEC RATE STRUCTURE

Page 2 of 3

The BEC rate structure is changing from a two-part to a four-part rate structure to become more cost based. Cost based rates allow more equity between members and send correct price signals for members to make their best choices for energy saving investments. First, there is a BEC service availability charge to cover fixed costs. Second, there is an energy charge per kWh. The new charges are for time-of-use demand hours per kW and a peak charge per kW. If you are being charged a \$1.40 per day service availability charge, then it will remain unchanged. The energy charge may go down from \$0.0965 to \$0.0364 per kWh while the new demand charge(s) rise.

The total utility bill for two-thirds of the membership will be the same or go down. Those members who use most of their power during the BEC peak time periods will pay more. Yet, for those members who consistently use power across most week day hours, or those who use power only during non-peak hours, the total electric bill will hold steady—or even decrease—using the four-part rate structure.

## CAN I SAVE MONEY BY INSTALLING A SOLAR ENERGY SYSTEM? Maybe

When evaluating the potential of installing a solar electric system at a business, please follow the recommendations of the Missouri Department of National Resources financial considerations. 1. Solar access: South facing with no shading (suggest avoiding roof mount) 2. Future Retail Cost of Electricity (shown above) 3. Certain solar energy systems may qualify for a Federal credit of 30% percent until 2019. Rentals do not qualify. (Be sure to understand if the solar price quotes include the assumption that you need to offset sufficient tax liabilities. If so, many customers have found they do not qualify or need additional tax incentives in their present circumstance.)

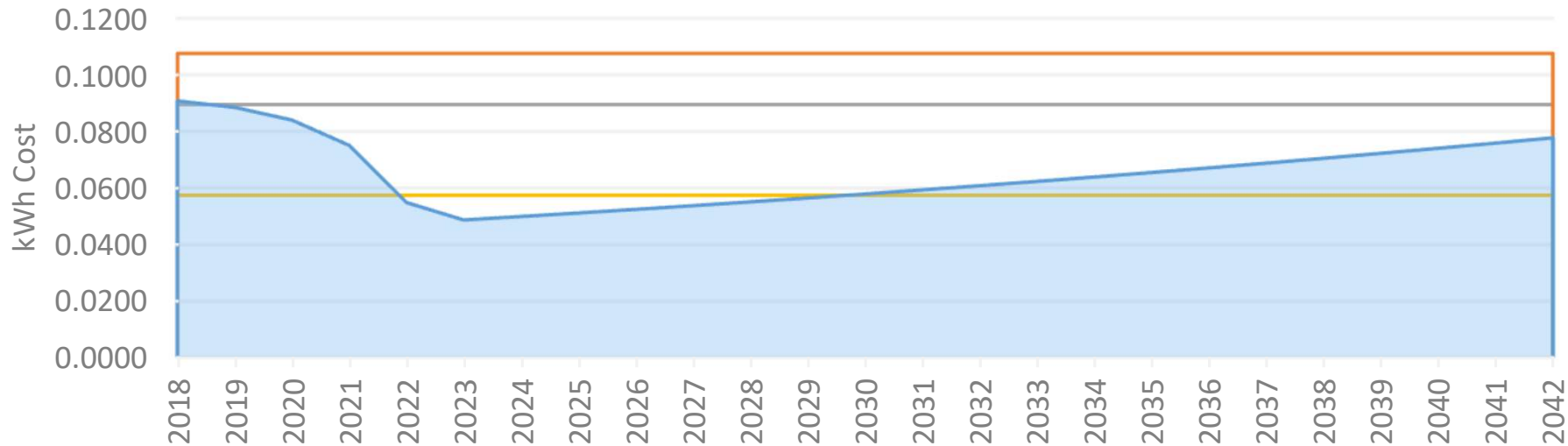
One of many online solar calculators asks for the total monthly electric bill rather than the avoidable kWh energy portion of the bill. For instance, one online solar calculator made the claim that there would be no money down and an “immediate” payback. This claim is false because it ignores the solar loan repayment and any ongoing unavoidable utility cost. We demand more honesty and transparency for our members.

## BE PREPARED TO ASK THE RIGHT QUESTIONS: Is solar energy right for me?

Please seek a “Power Checks” audit and invest in energy efficiency to reduce the size of power needs. Next conduct research by comparing competitive bids and check references. Be aware BEC prepay billing cannot be net metered; therefore, a change to traditional billing will require a deposit. There is a one-time \$100 net meter change fee and an annual \$100 fee to safety check the auto-disconnect switch. Be sure to avoid exceeding **MONTHLY ENERGY NEEDS** with too large of an array for the best payback.

Ask installation vendors for proof of licensure. Ask if they are a member of the SEIA, the national trade association for solar that requires all of its members to abide by their code of ethics. If a SEIA member does not abide by the code of ethics, please use the SEIA grievance procedure. The Residential Consumer Guide to Solar Power includes a section entitled “Key Questions to Ask Before Entering into an Agreement.” Please call Barry Electric Cooperative at 417-847-2131 or visit us on the web at [www.barryelectric.com](http://www.barryelectric.com), and visit [www.seia.org](http://www.seia.org) for more information.

# Barry Electric Co-op grid costs vs. Solar options in NREL System Advisory Model (SAM)



■ BEC avoidable kWh rate is decreasing (please see attached explanation)

□ LCOE rate 5 kW solar array size matches low use month of April; therefore, receive full credit of \$0.0908 /kWh each month

□ LCOE rate 9 kW solar array matches annual load. Missouri law: net meter per month. Excess production at \$0.022 /kWh.  
..... Any excess credits must be used within a year; no check paid.

□ Solar install rate 9 kW solar array excluding important costs of maintenance, insurance (\$250 /yr) and financing

Solar energy is sustainable, renewable and plentiful. BEC will help you size a solar system with factual pros and cons. Technology can be good but if there are false claims for low solar costs or high savings that is not good.

Solar Levelized Cost of Energy (LCOE) rate includes installation, insurance (i.e. \$250 /yr), maintenance, & panel performance. Note that this does not include financing which also needs to be included. In this example a home uses 14,000 kWh per year. Many consumers find it difficult to use the 30% federal tax credit. If the tax credit is utilized and the system is paid for in cash then the payback return on investment is over 20 years. A loan payment of \$165 per month for 25 yrs = \$49,500 vs. BEC avoidable kWh charge of \$23,100. These costs are in addition to service availability, time-of-use and outdoor light charges.