





THE SPOKES SPEAK - GEARED TO SERVICE

Rotary Club of the North Fork Valley

POB 1543, Paonia, CO 81428

WEB SITES: <u>www.rotary.org</u> <u>www.rotary5470.org</u> <u>www.paoniarotary.org</u>

Meeting Thursdays at Noon in the Paonia Town Hall

District 5470 Club 1180 - Chartered 12/20/22

Vol 57 Issue 26 July 19, 2018 Guest Editor: Bain Weinberger

LAST MEETING: July 12, 2018

Mike and Felix did the setup – Thanks!

No Glenn, so no Don's cards.

No Vising Rotarians.

Other Visitors: Danelle Kurae, speaker Brad Burritt's wife

No Key Guest (Sarah reported she is working diligently on finding someone)

The Club sang America the Beautiful sans piano accompaniment. No other singing was attempted.

Announcements:

- President Heck announced that she had sheets of labels Members can use to put over the address labels on their Rotarian Magazines to then distribute to waiting rooms and other public places for folks to read and learn about Rotary.
- President Heck also made a short presentation regarding Rotary sponsoring a plaque on the new Town Park entrance wall. She originally suggested a mid-sized plaque but the Club eventually settled on the largest (\$350) plaque. Ulli volunteered to take charge of the effort to design and sponsor the plaque. He also offered to make up any difference in the amount the Club contributes to the cost of the plaque and the final cost.
 - Motion: To purchase a Rotary Club plaque for the park wall. Passed unanimously except for one abstention.
- President Heck informed the Club about another fundraising opportunity being presented by the Paradise Theater. They will be showing the film "Won't You Be My Neighbor" (a biopic about Fred Rogers) and splitting the proceeds with various non-profits. Rotary has been offered Sunday, August 19 to participate. President Heck said that all Rotary needs to do is get our friends to the movie and "drink lots of wine".
- President Heck also mentioned that Rotary would be buying an ad for the Ducky Derby to run at the Paradise Theater.
- Treasurer Bishop reported that the Club has sold around \$1,200 to \$1,300 worth of Ducky Derby tickets so far. The goal is \$8,000. She also passed out a sign-up sheet for Ducky Derby sales assignments at various venues in the Valley (to be completed at a subsequent meeting). She also offered additional tickets for anyone who wanted to take some to sell.

Program: Brad Burritt – Empowered Energy Systems

Brad was introduced by Felix, who was responsible for this week's program.

Empowered Energy Systems is in the business of designing and installing solar power systems for both residential and commercial applications. They provide turnkey solar energy installations for both off-grid and grid-tied installations (with or without battery backup). His business and workers are fully insured and certified.

Brad said his family has lived in Delta County for 5 generations. He and Danelle live on Redlands Mesa. He has been in business since 2004 and mostly operates in Delta County.

He said the North Fork Valley is a "fabulous" solar resource area with lots of intense sun. Although other areas may provide better sun, they are not such nice places to live. The return on investment for solar electric is better than solar hot water. His company only does photo-voltaic installations.

With the drop in solar panel prices, it is now possible to realize a reasonable return on panels installed in less than ideal locations (such as Minnesota), or in a less than the ideal orientation. He said the guidelines now boil down to putting the panels, "blue side up and not in the shade". The panels can achieve at least 80% efficiency in most cases. There is currently a 30% tax credit available on solar installations. However, this is being phased out so those interested were encouraged to act fast.

A basic grid-tied installation requires panels, an inverter and connection to the electrical distribution panel of the home or business. For off-grid, battery backup or non-net-metered (Grid-Zero) installations, batteries and additional control equipment is required. Most backup batteries are still lead-acid. Batteries can add around 50% to the cost of the installation. It is also possible to retrofit grid-tied installations with backup batteries.

Panels can be installed in a variety of ways and locations. Some go on roofs (either pitched or flat). Others are placed on the ground or on car ports. They can even be installed as awnings. Once installed, systems can be monitored over the internet

Our local electrical utility, DMEA, offers Net Metering to their customers. Excess summer and daytime production is credited to the customer to compensate for reduced winter and nighttime production. Any remaining credits are paid to the customers in March at the rate of \$0.07 or \$0.08/kwh. Brad praised DMEA for being very easy to work with.

However, in some locations (such as Hawaii), net metering is not an option. In this case a Grid Zero installation includes batteries to utilize excess daytime generation at night or in bad weather so that the installation utilizes all of the solar energy generated and thus requires a minimum purchase from the electrical utility.

Brad showed some example graphs, showing payback time and cash flow. He pointed out that, once installed, the cost of energy is "level" for the life of the system. Utility costs, on the other hand, are projected to rise by 3%/year on average. He also pointed out that a typical system can offset 800,000 pounds of CO2 over the life of the system, or about 972,525 miles of driving.

Brad then threw the presentation open to questions:

Q: How does the presence of a solar system affect the selling price of a house?

A: It depends on the buyer, but it generally adds about as much as the cost of the system.

Q: What level of maintenance is required?

A: The inverter is the most likely component to fail. It has a warranty of 12 years. The lifetime of the solar panels is about 25 years, at which point they are running about 80% of their original capacity.

Q: What about hail?

A: The system should be added to the homeowners insurance, but none have been damaged by hail in the Valley as of yet. It should be easy enough to obtain insurance coverage. The system is exempt from property tax.

Remember to feed the polio jar. Also, pay your dues.

UPCOMING MEETINGS:

July 19: Emma Stopher-Griffin of the new Farm Runners Station in Hotchkiss

July 26: Larry Wilkening, the new mayor of Hotchkiss





