

Renewable Energy & Conservation Advisory Board (RECAB)

Solar Recommendation

February 6, 2015

Over the past several months, RECAB studied several aspects of solar power as a form of electrical generation for Logan City Light & Power. Our research to date has included the following:

- A presentation by UAMPS Doug Hunter and related Solar Electric Power Association (SEPA) webinar regarding Germany and the pros/cons of significant saturation of Solar PV. RECAB learned that high saturation of rooftop installed solar PV can be difficult for utilities to manage.
- RECAB looked at case studies detailing various approaches to community solar programs including power purchase agreements (PPA) from private companies and public community solar programs. RECAB learned from Mark Montgomery (with help from Mike Taylor) that whether Logan City Light & Power creates their own PV installation or enters into a PPA with a private company, the cost is roughly similar, but in the former model means that LCL&P retains control of the installation. RECAB also learned Logan City Light and Power could see substantial increases in wheeling fees with increased renewable energy production. Due to wheeling fees, a PPA might seem more attractive, but it can be equally as beneficial for Logan City to maintain control of their system depending on the size. A community solar program similar to the program implemented in St. George is not a good idea because of the large initial costs to participants and proved to be a barrier to success for the program.
- Logan City Light and Power's current PV installation was analyzed and found to produce enough power to allow approximately 30 homes to offer 100 kWh shares in a community solar program. There is available space to triple the size of the existing array, and Logan City has other suitable sites for additional expansion of solar power. Tripling the size of the solar array would most likely would not result increased backup power cost (wheeling fees) imposed by Rocky Mountain Power.
- Several members of RECAB heard a presentation about University of Utah's Solar bulk purchase program from Utah Clean Energy. RECAB discussed the benefits to Logan City, Cache County, and the public if a similar program were to be implemented here.
- Mark Montgomery from Logan City Light and Power, after meeting with Mike Taylor from SEPA, presented information about proposed a rate structure for a local community solar program and what the costs would look like for various sizes of installations.
- A pro/con evaluation of the various solar programs was performed by a solar subcommittee for RECAB.

After extensive consideration, RECAB feels that solar has a place in the Logan Renewable Energy portfolio both with private installation and through the expansion of the current solar farm. And, as a result, sends forth the following recommendations:

- Draft Rate Schedule #4 should be passed to establish a residential service with a solar share rate. This new rate would start a community solar program for LCL&P, and allow for thirty households to offset 100 kW of monthly electrical usage with solar power at a increased rate but with no rate increases for 20 years. This new rate will be used as a test case to gauge community support for solar power and with significant support the solar array should be expanded to match interest from the public. Following the successful adoption of Rate Schedule #4 the current green power program should be discontinued.
- Logan City Light and Power continue to work with UAMPS regarding distributed solar in order to minimize negative effects to the utility from large increases in distributed solar.
- Logan City should continue to look at solar power as an option for the Logan City Light & Power portfolio.