

Solar Energy Evaluation Project – October 28, 2024

Ranchview County Water District currently utilizes approximately 75,000 kWh annually of electrical energy. The vast majority of this electrical energy is used during the summer to power the irrigation distribution system. The Board of Directors recently received a \$30,000 grant from the Department of Natural Resources (DNRC) to explore the possibilities of installing a ground-based photovoltaic solar system at or near the well house that would be capable of generating 50,000 kWh annually. The DNRC grant allows the Board to evaluate the potential for a solar project at no expense to Ranchview County Water District homeowners!

Developing and installing a solar generation system is complex. In order to accomplish such a project, the Board has contracted with a Helena firm, Tetra Tech, to provide the expertise of various professionals to design and evaluate the potential for this large solar system. Tetra Tech will develop a Technical Narrative Update to address the myriad of legal and technical issues involved. In general, Tetra Tech is charged with addressing the following issues:

1. Identify legal and technical issues related to installing a photovoltaic solar system on the existing easement for the water district;
2. Identify solar system design options and restrictions;
3. Provide a cost/benefit analysis of installing a solar system;
4. Develop an installation timeline with a narrative detailing steps and permissions necessary to complete the installation;
5. Identify various grant and loan opportunities that may reduce the District's initial costs for installing renewable energy technologies; and
6. Identify educational and outreach opportunities for the District to help other small, rural county water districts move forward with utilizing renewable energy technologies.

Once Tetra Tech has completed the Technical Narrative (estimated to be sometime in the spring of 2025), the Board will begin the process of evaluating the feasibility of pursuing a project for solar energy to augment electrical consumption from Northwestern Energy. For such a project to go forward in 2025 or later, the Board will need to explore funding opportunities to offset the cost of the project. If you have any questions or comments, please contact a board member.