RESEARCH NEEDS FOR PLANNING TAG

EFFECTIVE/UPDATED 7/12/2018

ISSUE

Technical and Financial Feasibility Study for Installation of Solar Panels at IDOT Owned Facilities

SUMMARY OF PROBLEM

Over the past decade, several state DOTs have explored the options associated with renewable energy to help curb facility costs. IDOT does not have a robust solar or alternative energy policy or mandate. With better solar panel technology available, coupled with Illinois’s current budget situation, now is the time to look at this as a viable option; not only for the savings but, the sustainability nature of the project. In a recent February 2018 ASSHTO article, the Maryland Department of Transportation (MDOT) announced it would, “install solar panels at up to 35 MDOT sites within 18 months” (AASHTO, 2018). According to MDOT, once the solar systems are in place, they will buy the power at a fixed rate for 20-25 years. For the project to be approved, the rate must be less than what MDOT would pay to the utility. MDOT expects its utility payments to drop from an average of 10 to 11 cents per kilowatt hour to 6 to 8 cents per kilowatt hour, which is a potential savings of 30 to 40 percent (AASHTO, 2018). Across the country, private companies, local governments, and private citizens are installing solar panels on new construction and even existing facilities.

DESIRED RESULTS/OUTCOME

This study will analyze: 1) Applicable state energy laws; 2) The installation cost estimations for solar on stand alone and current infrastructure; 3) Department of Energy incentive programs; 4) Any issues with the using of right of way for this application; and 5) The appetite of various energy companies throughout Illinois for the probability of a P3.

Oregon DOT provides a great guide to establishing such a partnership.