

Harnessing the power of renewables

Renewable avoided cost

The “avoided cost” value of renewable power is lower than our retail rate. This is due to the natural intermittency of solar and wind and the mismatch between renewable peak power and our early morning winter peaks and late afternoon summer peaks.

Because renewable energy may not be available during peak periods, your cooperative has to provide for the generation capacity and energy for those peak periods from other sources. For example, when solar energy is available mid-day, the resulting

savings or “avoided cost” of solar energy is the avoided fuel cost and the avoided variable operations and maintenance cost from other generation sources.

In summary, the value of electricity varies throughout the day. It is most valuable during peak periods, which is early morning during winter and late afternoon during both summer and winter. It is less valuable in the middle of the day and least valuable in the middle of the night, which explains the value associated with avoided cost.

Understanding electricity demand periods

On a clear day (green curve) solar power generation does not match well with the time when your electric cooperative needs electricity the most.

