



**Report to House Utilities Committee  
Plan to Meet Kansas Renewable Portfolio Standards for 2012, 2016, and 2020  
January 23, 2012**

Sunflower Electric Power Corporation (Sunflower) and Mid-Kansas Electric Company, LLC (Mid-Kansas) utility systems are operated jointly as one control area in central and western Kansas.

Sunflower is a wholesale generation and transmission company owned and operated as a cooperative on behalf of six rural electric cooperatives. The rural electric cooperatives are Lane-Scott Electric Cooperative, Inc.; Pioneer Electric Cooperative, Inc.; Prairie Land Electric Cooperative, Inc.; The Victory Electric Cooperative, Inc.; Western Cooperative Electric Cooperative, Inc.; and Wheatland Electric Cooperative, Inc.

Mid-Kansas was formed in 2005 to acquire the Kansas Electric utility property from Aquila, Inc. The companies that own Mid-Kansas are Lane-Scott Electric Cooperative, Inc.; Southern Pioneer Electric Company, Inc.; Prairie Land Electric Cooperative, Inc.; The Victory Electric Cooperative, Inc.; Western Cooperative Electric Cooperative, Inc.; and Wheatland Electric Cooperative, Inc.

**2012 Renewable Resources**

As of January 2012, Sunflower and Mid-Kansas have power purchase agreements for generation from the following resources:

2012 Resources	Contract Expiration	MW Capacity	KS Adjustment
Smoky Hill Wind Farm 1	January 2018	50	55
Smoky Hill Wind Farm 2	December 2018	24	26
Gray County Wind Farm	September 2016	51	55
Western Area Power Admin.	December 2024	5	5
<b>Total</b>			<b>141</b>

In 2012 Sunflower and Mid-Kansas expect to have 685.79 MW of retail Member load. In 2010 Sunflower and Mid-Kansas had 142 MW of energy for RPS reporting purposes. Assuming that renewable generation will remain constant, in 2012 Sunflower expects to have 21% of energy generated from renewable sources.

## 2016 Renewable Resources

Resources	Contract Expiration	MW Capacity	KS Adjustment
Smoky Hill Wind Farm 1	January 2018	50	55
Smoky Hill Wind Farm 2	December 2018	24	26
Gray County Wind Farm	September 2016*	38 as calculated by (51*.75)	42
Western Area Power Admin.	December 2024	5	5
Shooting Star Wind Farm	December 2032	104	114
Total			242

\*For the first 3 quarters of 2016 Sunflower and Mid-Kansas will have access to 51 MW of the Gray County Wind Farm.

Adjusting for that expiring contract, in 2016 Sunflower and Mid-Kansas expect to meet the RPS with a total of 242 MW of capacity. Assuming a projected load of 721 MW for the combined system, this results in a 34% RPS.

## 2020 Renewable Resources

Resources	Contract Expiration	MW Capacity	KS Adjustment
Western Area Power Admin.	December 2024	5.3	5
Shooting Star Wind Farm	December 2032	104	114
Total			119

In 2020 Sunflower and Mid-Kansas expect to have 750 MW of combined retail load and will have 119 MW of generation to credit toward the RPS. This will result in an expected 16% RPS.

## Meeting the RPS from 2020 Forward

The conclusion of the Smoky Hill Wind Farm 1 & 2 power purchase agreements will result in the combined system falling below the required 20% RPS for Sunflower after 2020. If the 3.5¢ production tax credit is not extended, the new contracts are expected to be at least 3.5¢ higher to absorb costs covered by the production tax credit. This would result in an expected average cost of 6 to 7 cent per kilowatt. Based on the load profile of wind generation, this cost is expected to increase our wholesale rate.