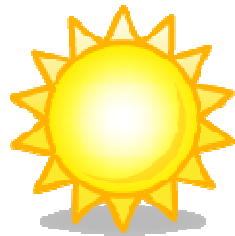


On-Farm Solar Energy Generation

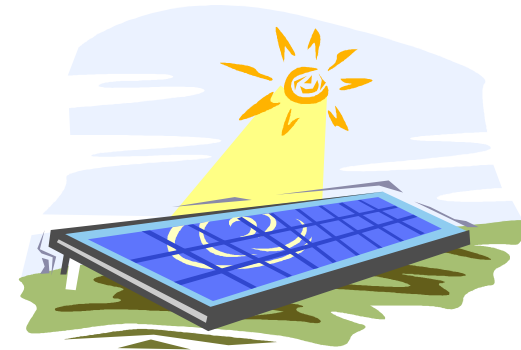


Susan E. Craft, Executive Director
State Agriculture Development Committee

P.L. 2009, c. 213

Defines the extent of solar, wind and biomass energy generation that is considered “agricultural” in scale by:

- Establishing acceptable parameters for **farmland assessment** eligibility
- Providing **right-to-farm** protection to on-farm energy generation that meets farmland assessment criteria
- Identifying allowable limits and criteria for these activities on **preserved farms**



Farmland Assessment



Land used for energy generation is considered to be in ag/hort use provided certain criteria are met, including:

- Energy Generation Limits
 - ✓ No more than **10 acres** in solar
 - ✓ **1:5 ratio** (solar to ag/hort operations)
 - ✓ No more than **2 megawatts (MW)** generated
- Land under the solar panels must be used to the greatest extent practicable for the farming of shade or other crops, or for pasture for grazing
- Owner or operator must have a conservation plan approved by the soil conservation district that addresses
 - ✓ aesthetics
 - ✓ impervious cover
 - ✓ environmental impacts, including water capture and filtration

Right to Farm

Solar energy generation is eligible for Right-to-Farm protection if it meets basic RTF Act eligibility requirements and other provisions of P.L. 2009, c. 213.

What is RTF Protection?

- Protection from onerous county and municipal ordinances
- Protection from nuisance complaints filed against the farm

Basic Eligibility Requirements

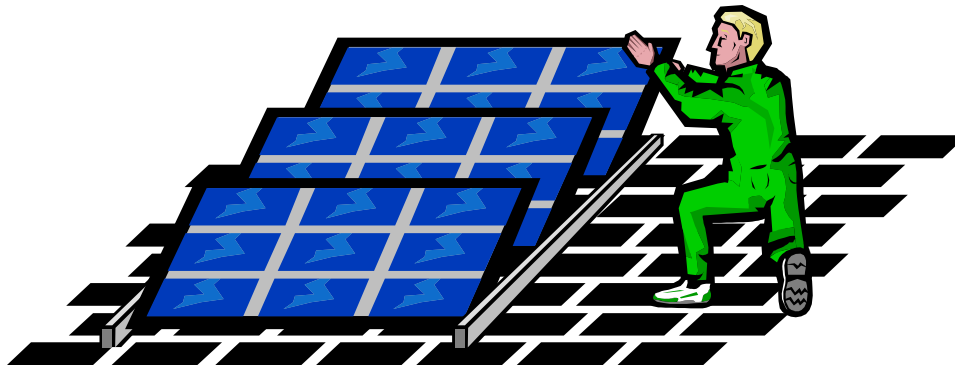
- Must qualify as commercial farm
 - ✓ \$2,500 in ag/hort sales for 5 or more acres
 - ✓ \$50,000 in ag/hort sales for less than 5 acres
- Ag. permitted use under zoning
- Must comply with relevant state and federal statutes and rules
- Cannot pose a direct threat to public health and safety



Right to Farm

Provisions of P.L. 2009, c. 213

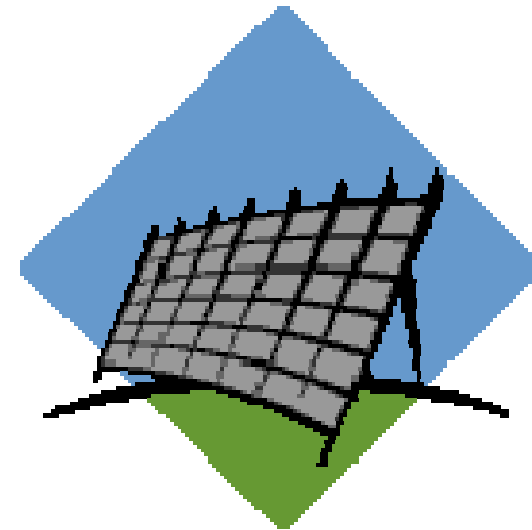
- Must meet requirements for farmland assessment, including 10 acre max., 1:5 ratio, and 2MW limit
- SADC must adopt agricultural management practice (AMP) before RTF protection is available



Proposed Solar AMP

3 Major concerns:

- Setbacks and Screening
- Site Disturbance
- Noise



75 feet



150 feet



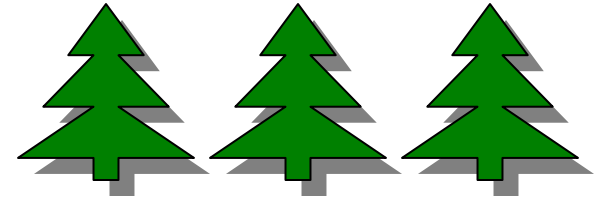
300 feet



400 feet



Proposed Setback, Screening Requirements



Mounting	System Height	Size Of Occupied Area	Minimum Setback To an Adjacent Residence Existing at the Time of System Installation and Not Located on the Commercial Farm	Minimum Setback To Property Line or Public Roadway Right of Way	Required Screening
Ground	Up to 2 feet	Up to 1 acre	200 feet	100 feet	Not Required
Ground	Greater than 2 feet up to 10 feet	Up to 1 acre	300 feet	150 feet	Not Required
Ground	Up to 10 feet	Greater than 1 acre up to 10 acres	300 feet ----- 400 feet	150 feet ----- 300 feet	Required ----- Not required
Ground	Greater than 10 feet up to 20 feet	Up to 10 acres	300 feet ----- 500 feet	300 feet ----- 400 feet	Required ----- Not required

Solar energy facilities cannot exceed a maximum height of 20 feet





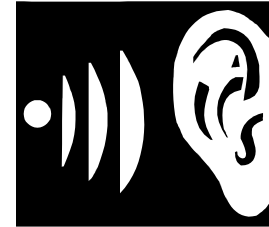
Soil Disturbance Requirements

Overall goal to ensure land can be returned to ag/hort production

- No more than 1 acre of site disturbance
 - Includes grading, soil removal, excavation, compaction
- Non-permanent mounting methods preferred
 - Exception with written justification from licensed professional engineer
- Concrete and asphalt prohibited, except for mounting inverters/system components or if deemed necessary by licensed professional engineer



Noise



Solar energy generation systems must be designed to comply with either of the following standards for sound emissions:

- The sound level cannot exceed 40 dBA when measured at any point on the property line of the commercial farm;

or

- The sound level cannot exceed the ambient sound levels measured on the property line as measured in octave band sound level meter measurements (the Lmin or L90 broadband values)

Preserved Farms




Energy generation systems are allowed provided they meet certain criteria, including:

- Are limited in annual energy generation capacity to:
 - ✓ **110%** of the previous calendar year's energy demand, or
 - ✓ to occupying no more than **1 percent** of the area of the entire farm
- Must be owned by the landowner or will be owned by the landowner on conclusion of a purchase agreement
- Must be used to provide power or heat to the farm, either directly or indirectly, or to reduce energy costs on the farm through net metering or similar programs
- Cannot interfere significantly with use of land for agricultural or horticultural production

Preserved Farms



- Applications must also meet **Farmland Assessment** criteria (10 acre max., 1:5 ratio, 2 MW limit)
- SADC must adopt regulations prior to being able to approve facilities on preserved farmland (2011)
- Easement holder (county or nonprofit) has 30 day comment period on applications to construct energy generation facilities



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