



Rural Minnesota Energy Board Solar Presentation

Monday, July 25, 2011 @ 9:30 am
Center for Regional Development

Jean Christoffels
Murray County Zoning Administrator



Timeline

March 3, 2010 – Initial contact with developer

March 4, 2010 – Polled Minnesota Zoning Administrators

March 4, 2010 – Contacted Public Utilities Commission (PUC)

April 9, 2010 – Toured Solar Farm at St. John's Abbey & University



April 15, 2010 – County Commissioners directed Planning Commission to begin ordinance amendment process

May 24, 2010 – Brian Ross presentation at RMEB Meeting

October 21, 2010 – Public Hearing for Ordinance Amendments

November 2, 2010 – Murray County Renewable Energy Ordinance adopted

Resources and Websites

- Stearns County Zoning Ordinance
- Minnesota State Statutes
 - 216B.1691 Renewable Energy Objectives
 - 216B.243 Certificate of Need for Large Energy Facility
 - 216C.06 Definitions
 - 216C.25 Solar Energy System Standards
 - 500.30 Solar or Wind Easements
- Minnesota Rules
 - Chapter 1325 Department of Labor and Industry Solar Energy

Resources and Websites

- Other Websites/Resources
 - Solar Energy Development Environmental Considerations: www.solareis.anl.gov
 - U.S. Department of Energy – Solar: www.1.eere.energy.gov/solar
 - U.S. Department of Energy – Small Solar Electric System Arrays: www.energysavers.gov
 - Model Ordinances for Sustainable Development – Solar Energy Standards: www.crplanning.com/susdo.htm
 - Solar Power How it Works: www.seriouslysolar.com/solar-power-works.php
 - How Solar Energy Works: www.ucsusa.org/clean_energy
 - Solar Energy Systems Terms and Definitions: www.freesunpower.com/solar_terms.php

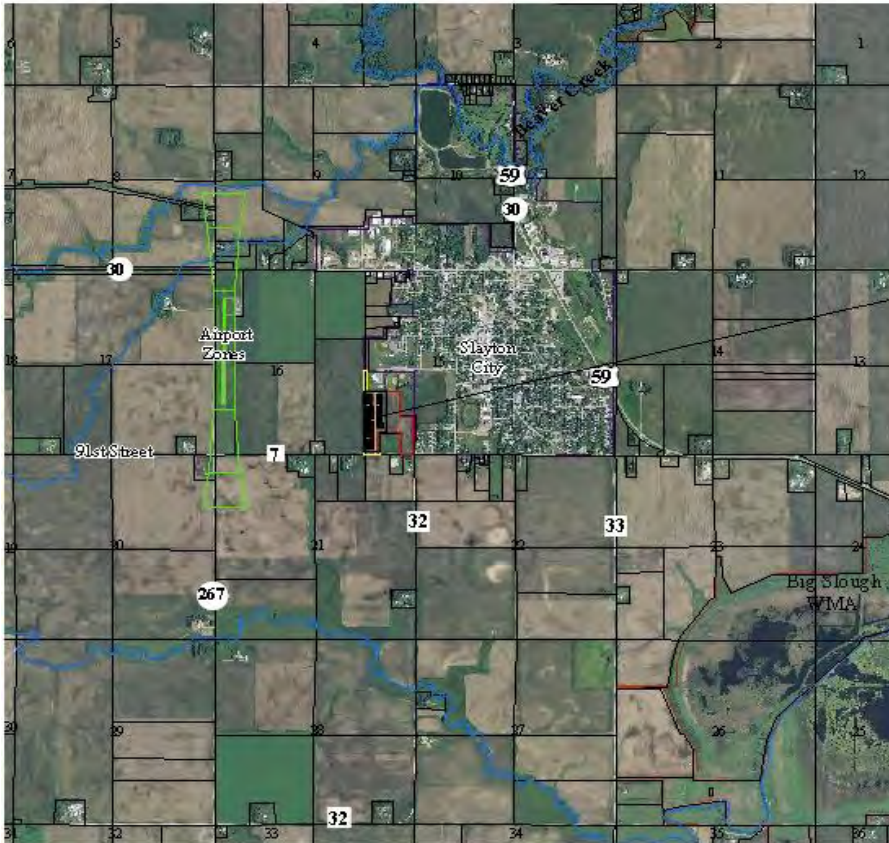
Solar Farm in Murray County

April 28, 2011 – Public Hearing for first Solar Farm in Murray County

Concerns raised

- Tile damage
- Glare to neighbor's residence
- Decreased property values
- Interference with TV reception or internet connections
- Snow problems for neighbors and roadway
- Response time for maintenance personnel for problems at the farm
- Vegetation under solar panels
- Increased vehicle traffic
- Overhead power line connection to substation
- Noise levels from the transformers and inverters
- Escrow Account for Decommissioning of the site
- Emergency Response Plan

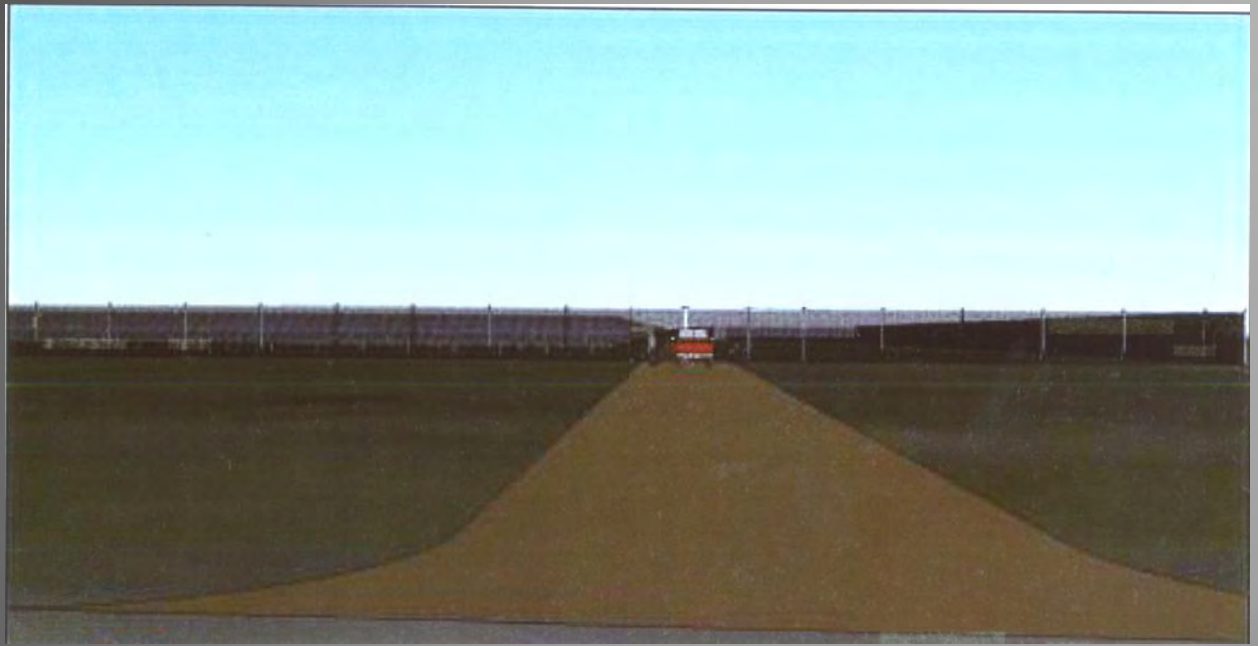
Ecos Energy, LLC - Slayton Solar
39.3 acre parcel in E1/2 SE1/4, Section 16, Slayton Township
Conditional Use Public Hearing
Thursday, April 28, 2011 @ 7:30 pm



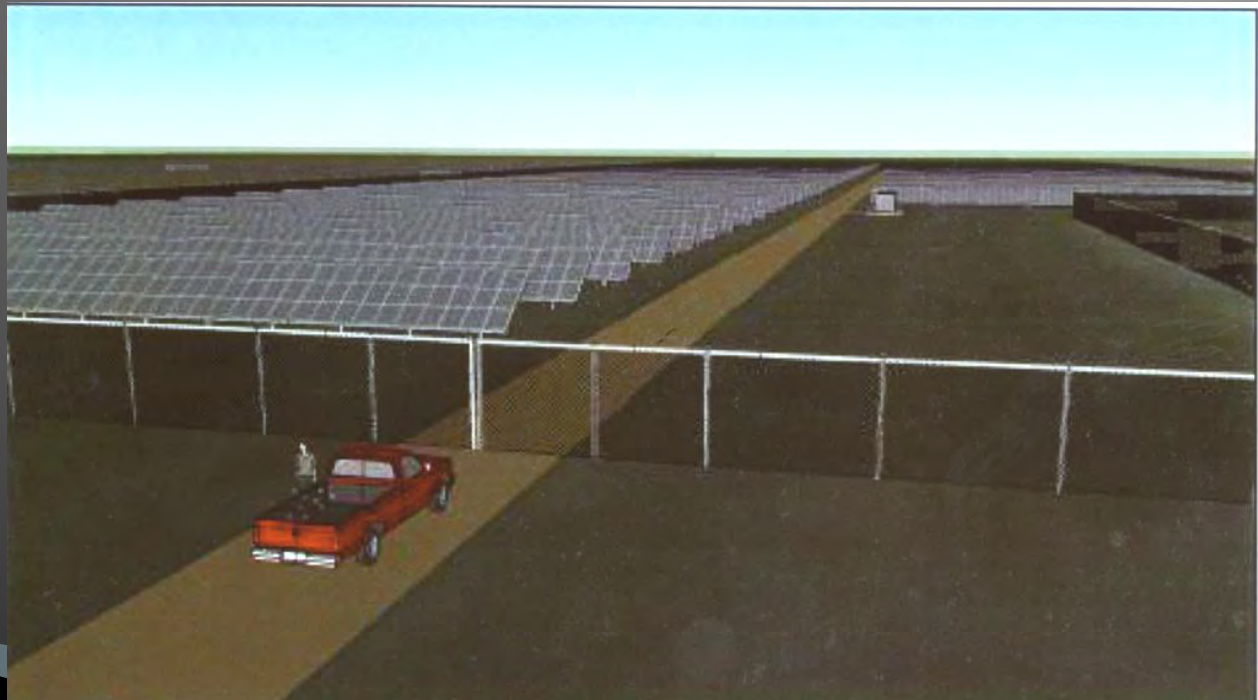
Source: Murray Co. GIS Data
Prepared By: Murray Co. Environmental Office
Displayed Using: Murray Co. Coordinate System



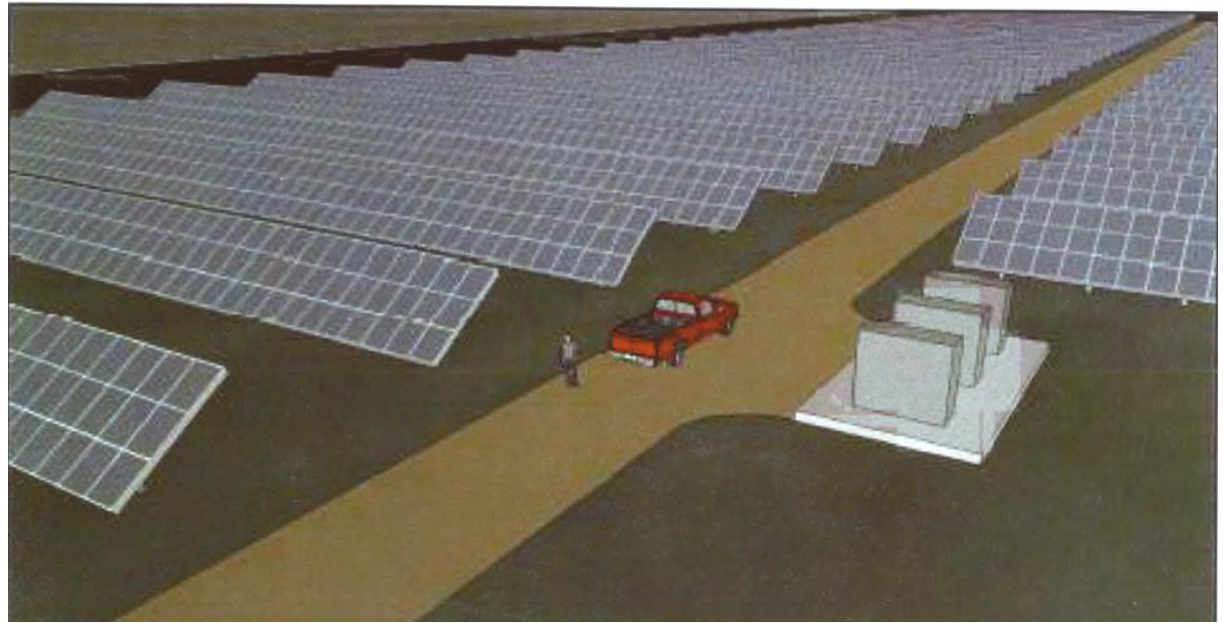
View From
Street



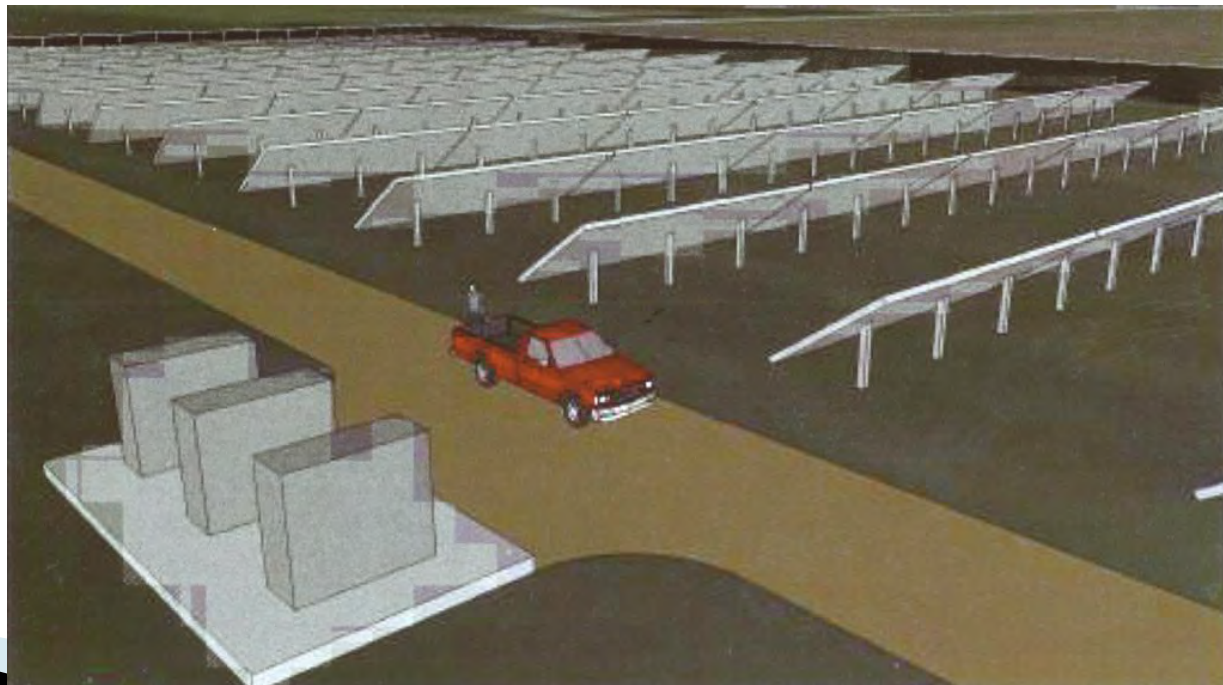
View From
Entrance



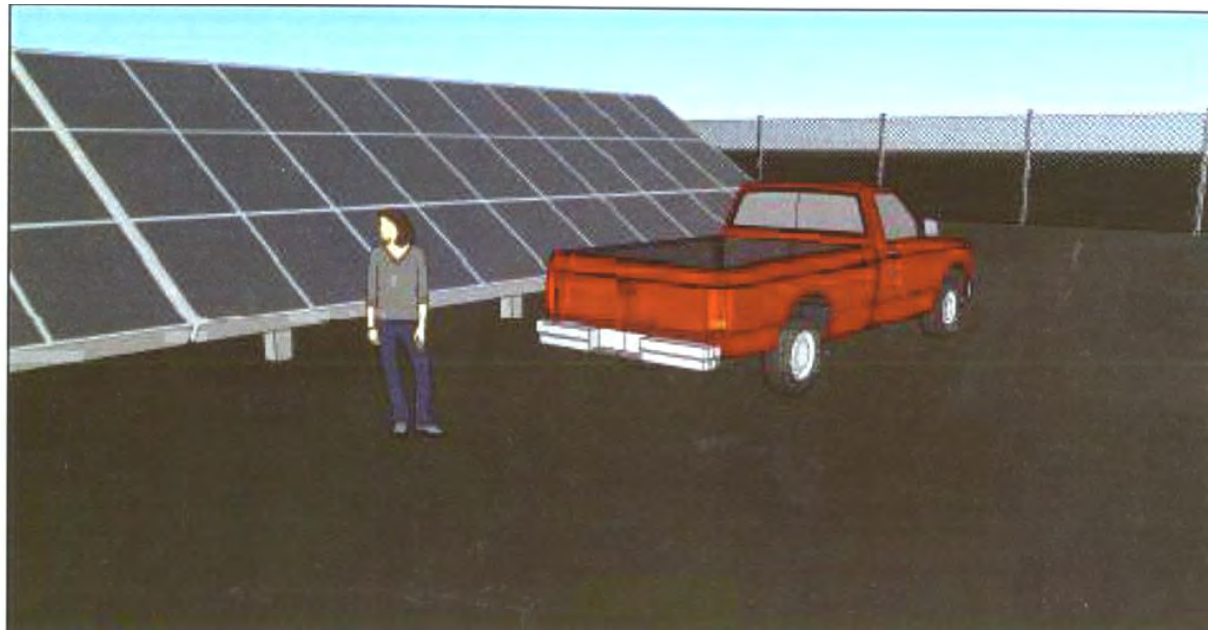
Front View of Modules, Inverters



Rear View of Modules, Inverters



View of Module Rock



Birds~Eye View of Modules



Special Conditions

Special Conditions that may be placed on the permit as the Planning Commission sees fit:

1. The permit holder shall comply with all governmental laws, rules, and regulations as they apply to the project. If any state permits are required, a copy of those permits must be submitted to the Murray County Environmental Services Office before operation can commence.
2. The conditional use permit may be reviewed annually to ensure the conditions are being met.
3. The Applicant must hold a pre-construction meeting, before the project may begin, with the following individuals or agencies invited to said meeting:
 - A. Township Chairman
 - B. Murray County Highway Engineer
 - C. Murray County Sheriff
 - D. Murray County Zoning Administrator
 - E. Area Hydrologist, Minnesota Department of Natural Resources
 - F. Minnesota Pollution Control Agency
 - G. United States Farm Service Agency
 - H. Murray County Soil & Water Conservation District
 - I. US Fish & Wildlife Service
 - J. Minnesota State Historical Society
 - K. Two Planning Commission Members: Chair and County Board Representative
 - L. Mn/DOT
4. All Solar Farm components and accessory facilities shall be removed within one year of the discontinuation of use/operation as per submitted Slayton Solar Farm Decommissioning Plan.
5. Prior to issuance of a zoning certificate, the applicant shall provide a plan, including but not limited to, the project summary, electrical schematic, and site plan to the town's local safety officials including the Murray County Sheriff, Slayton Police Chief, Slayton Fire Chief, and Murray County Ambulance. In addition, the applicant shall cooperate with local safety officials in developing an emergency response plan.

Summary

Important Factors Murray County Considered

- Siting
- Composition and placement of all components on the property
- Proximity to power grid
- Standards for Solar Farms and for Accessory Solar Energy Systems
- Decommissioning
- Federal, state and local permits required
- Safety standards for solar developments

Research, develop, and adopt renewable energy regulations that protect the health, safety, and general welfare of the citizens of the county.

Contact Information

Murray County Renewable Energy Ordinance:

www.murray-countymn.com/mc/index.php?option=com_content&view=article&id=49&Itemid=326

- ▶ **Jean Christoffels**
Murray County Zoning Administrator
(507) 836-1166
jchristoffels@co.murray.mn.us