

KANSAS SOLAR ELECTRIC CO~OPERATIVES

K-SEC PHASE I DEMONSTRATION 2006-08

105 KS COUNTIES 100 kWp SOLAR ELECTRIC

Produce + Install + Maintain 10.5 MWp
BI-PV Solar Electricity Generators by 2008

KS RANKS #1 RENEWABLE RESOURCES

'...goal to help ensure that Kansans have low cost, reliable and sustainable energy, produced in-state, to fullest extent possible'

PHASE I SOLAR DEMONSTRATION

\$21 M 10.5 MWp SOLAR BI-PV 2008-2058

+ \$9 Million for 3 Inverters over 50 Years

+ \$12 M for 3 Battery Back-Up Systems

Homeland Security to subsidize material for batteries

+ 10 M 20 MWp BI-PV Manufacturing Museum =

\$42 Million BI-PV Demonstration 2008 to 2058

HOW WILL WE DO THIS?

- Each County a K-SEC Cooperative 100 kWp
- 5 People incorporate 100kWp BI-PV Capacity
- + 20 Homes 250 SF BI-PV Rooftops

+ 5 Comm. 1,000 SF BI-PV Solar Systems
= 100 kWp X 105 Counties = 10.5 MWp

1% BI-PV Solar Electricity DEMO for KS
Kansas Solar Electric Buildings Registry

K-SEC PHASE II = 2009 to 2018

1,000 MWp BI-PV by 2018

Residential Photovoltaics

*Building Awareness and Momentum for an
Alternative Energy Source*

Design | Build Business Magazine

By Eileen M. Smith, M.Arch. Dec. 2003

<http://www.rdbmagazine.com/FEATURES/2003-12/residential-photovoltaics.asp>

30,000 SF BI-PV Solar Roof
Georgetown University in Washington, DC

Solar BI-PV
*Natural
Clean*
30,000 SF
BI-PV Roof
Installed on
Intercultural
Center 1984



Generates
One MWh
*Non-polluting
Fuel-Free*
Electricity
Daily
\$57,000
Yearly

Would you rather have *clean fuel-free
solar BI-PV* generate your electricity
or *fuel-driven \$\$ polluting coal plants?*



Two 600 MWp COAL-FIRED PLANTS proposed
Holcombe, KS to Pollute Kansans for Colorado!

Kansas Solar Electric CO~OPERATIVES

Non-Profit Renewable Energy Cooperative
Founder & Director Eileen M. Smith, M.Arch.
Post Office Box 2 Lawrence, KS 66044
www.geocities.com/Solar_Electric_Cooperatives
Solar_Cooperatives@yahoo.com (785) 856-8001

Founder & CEO Since 1992
SOLAR DEVELOPMENT COOPERATIVE
For profit Design & Consulting Firm
1996 to 2004 at 3535 East Coast Highway #216
Corona del Mar, CA 92625
www.geocities.com/Eureka/1905

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KANSAS



SOLAR ELECTRIC CO~OPERATIVES

N.E.W.S. Letter Vol. 2 No. 3 April 2006

1,000 MWp Solar Electricity by 2018
Building-Integrated Photovoltaic [BI-PV]

RURAL KANSAS BI-PV SOLAR
DEMONSTRATIONS

PHASE I 10.5 MWp BI-PV by 2008
10,000 SF BI-PV Solar Surface @ County

HAPPY EARTH DAY!

PHASE I ACTION GOALS:

- GOAL 1:** KS Solar Electric Buildings Registry
@ County List Homes & Bldgs. Potential BI-PV
- GOAL 2:** Kansas Solar Electric Co~operative
in each County of Kansas per KS House Bill 2018
- Five people incorporate renewable cooperative
 - Install, monitor & manage 100 kWp BI-PV

BOOK: 'ElectriCity® BEYOND THE CURVE OF
DEREGULATION' CD released April 2005

c. **WHY FORM LOCAL
Neighborhood Energy
Watch Solution
Groups
N.E.W.S. Groups**

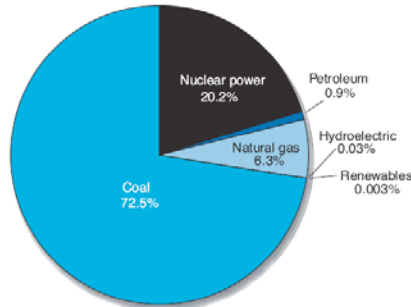


Figure 6—Kansas electricity production by fuel source, 2000 (EIA, *Electric Power Annual 2000*, vol.1, DOE/EIA-0348(2001/1), August 2001).

Kansas State Energy Resources Coordination Council
<http://www.kansasenergy.org/2003EnergyPlan2.pdf> pg14

KS ELECTRICITY PRODUCED 2000

72.5% = COAL-FIRED STEAM

0.003% = RENEWABLES

KS 18th IN NATION COAL MERCURY TOXINS

WESTAR'S JEFFREY CTR RANKS 5TH IN US

IN 2005 SIX NEW COAL PLANTS PROPOSED

FIVE [5] IN KS ONE [1] IN MO = 40%

ENVIRONMENT & COAL-RELATED DECISIONS

http://www.kansasenergy.org/coal_projects.htm

CONSUMERS CAN MONITOR

DECISIONS VIA THE INTERNET



**Burning Coal = Mercury +
Carbon Pollution & Particulates**

- ✓ Damages Fetuses
- ✓ Brain Damage
- ✓ Crop & Water Pollution
- ✓ Airborne Contaminants Coal

Contributes to Respiratory Ailments, Asthma,
Heart Disease, Kidney Disease, Cancer, Birth
Defects, Acid Rain & Global Warming!

COAL-FIRED PLANTS LOOK BAD +SMELL BAD & ARE
BAD FOR YOUR HEALTH & HEALTH OF YOUR FAMILY!

**KANSAS SOLAR ELECTRIC
BUILDINGS REGISTRY**

Solar_Cooperatives@yahoo.com

- Each KS County Establish Solar Registry
- Three-ring Notebook County Seat City Hall
- Put Homes and Office or Public Buildings on the Registry to Reveal Solar Market
- Homes 100 to 1,000 SF S to SW Facing Roof
- Sm. Comm 300 to 1,000 SF S, SW or Flat Roof
- Large Comm. 1,000 to 50,000 SF Roof
- Include the following information:

(1) A description of the property with a title of the structure, if any. _____

(2) St. Address of structure, if known. _____

(3) Other descriptive information about the location including cross streets, important features. _____

(4) Approximate size of south-facing or flat rooftop that would accommodate BI-PV solar electricity. _____

(5) Contact Name, Address, Phone and/or E-mail if available. _____

(6) If Available, Property occupant's name, address, phone and/or E-mail. _____

(7) If Available, Property owner's name, address, phone and/or E-mail. _____

(8) Donations and/or Comments Help Form and Manage the Registry. _____

**KANSAS SOLAR ELECTRIC
CO~OPERATIVES**

Form the first K-SEC in your County:

KS House Bill 2003 = 5 people

<http://www.dsireusa.org/documents/Incentives/KS04Rb.pdf>

Not-for-Profit Cooperative List of Forms

http://www.kssos.org/forms/forms_results.asp?division=BS#Corporations%20Not%20For%20Profit

Not-for-Profit Articles of Incorporation

http://www.kssos.org/forms/business_services/CN.pdf

KS Electric Cooperative Annual Report

http://www.kssos.org/forms/business_services/EC.pdf

Kansas Business Center ~ Agencies

<https://www.accesskansas.org/businesscenter/index.html?link=resources>

Solar Companies Listed With KS Dept Revenue

<http://www.accesskansas.org/srv-corporations/keywordSearch.do>

APRIL 2006 MESSAGE FROM FOUNDER

JOIN K-SEC TO CELEBRATE EARTH DAY @ DAY!

Kansas counties are forming 105 Kansas Solar Electric Co~operatives across the state this summer. Each of the five board members will bring \$200 to the position with \$100 to go to statewide K-SEC Cooperative and \$100 to go to county Cooperative for incorporation costs. For \$200 you can be one of the 525 official Kansas Solar Electric Co~operatives charter members.

We landed on our feet for our move from the office just in time for Earth Day 2006 in Lawrence, Kansas. We are seeking a location for the headquarters of the statewide K-SEC office starting May 1, 2006. Statewide suggestions are welcome. (785) 856-8001 Thanks to Barb and Gerald Gruber for assistance.

Stephan Brown, Extension Agent in Brown County was the first to join as a statewide K-SEC board member. As director of the Brown County Extension Office he is involved in educating and assisting the rural community. We are hoping to have three more K-SEC board members signed on by May 1st and will incorporate as soon as that is accomplished.

Rural communities are negotiating their interests in establishing the first BI-PV Manufacturing Museum.

Eileen M. Smith, M.Arch. Founder & Director