



# CRES NEWS

VOL 9, NO 5

A Chapter of the American Solar Energy Society

MAY 2004

Topic of Next CRES Meeting...

## **31 Ways to Create Sustainable Neighborhoods**

### **Xcel Energy Plans for More Wind Power**

As reported in the May 1, 2004 edition of the Denver Post, Xcel Energy has disclosed plans to transform Colorado into **the third ranking wind-energy producing state in the country**. The utility has proposed to more than triple its wind power capacity from the current 240 megawatts to 740 megawatts by 2006.

Fred Stoffel, Xcel's vice president of policy development, noted that in the future Xcel will welcome all sorts of plans for expansion of its generation capacity including coal, gas, solar and wind energy. The company is currently negotiating with the Intermountain and Holy Cross Rural Electric Companies for joint ownership of a new 750 megawatt coal-fired plant soon to be constructed in Pueblo. Both expansions are part of an overall plan to add a total of 3,600 megawatts to its system in the next decade.

Xcel will seek competitive bids from private power producers, including solar and wind energy suppliers, for the remaining 2,300 megawatts of its expansion. "We will seek bids as soon as the PUC approves it," said Fred Stoffel. Wind energy prices today are competitive with coal and gas fired plants. Electricity produced from Xcel's Lamar wind farm today is priced at 3.26 cents per kilowatt-hour. This compares to 4 to 5 cents per kWh for new coal and 4.5 to 5.5 cents per kWh for natural gas.

"Wind is a hedge against price volatility in other fuels like natural gas," said Craig Cox, CRES Board Member and Executive Director of the Interwest Energy Alliance, a group that promotes wind energy. "What other conventional technology can you know the price of 15 years from now like you can with wind?"

Fred Stoffel said that Xcel would ask state regulators to approve its wind-energy request by June so that it can seek bids from private producers soon afterward. By then the federal tax credit on wind-energy production, which amounted to 1.8 cents per kWh and expired on December 31, 2003, could be reinstated. Xcel is not planning to build the wind farms itself, rather it will seek private producers to build them and sell them the electricity at wholesale rates. Stoffel noted that Xcel's model clearly showed the advantages of wind energy. He stated, "...wind is an economical choice for us." This is good news for wind energy in Colorado.

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All CRES members are invited to attend the monthly CRES meeting at **5:30pm** on Wednesday, **May 26** at the NREL Visitors Center which is located 2 blocks past the Marriott hotel in the Denver West Office complex (exit 263 from I-70, just north of Colfax between Simms and Indiana).

Following a short business meeting, authors Dan Chiras and Dave Wann will discuss ways existing neighborhoods can be "remodeled" to incorporate cohousing and intentional community themes and practices. Dan and Dave recently authored a book titled *31 Ways to Create Sustainable Neighborhoods*

The book describes how we can turn suburbia into Superbia! by connecting with our neighbors, living less expensively, increasing self-reliance, lowering fuel bills, eating healthier, attaining more free time, reducing stress, creating more child-friendly neighborhoods, and living a more environmentally friendly lifestyle.

Dan Chiras is a longtime member of CRES and a frequent presenter at CREC. He is also a green building and passive solar design consultant. Dave Wann has produced more than 20 videos and television programs and is author of six books including the highly popular book, *Affluenza: The All-Consuming Epidemic, Biologic, and Zen*.

**Coming Soon!**

**2004 National Solar Energy Conference**

**July 9 - 14  
Portland Oregon**

*Presented by the*  
**American Solar Energy Society**

## Colorado Snap Shots

*This column will feature meeting announcements, short news items, personality profiles, and other matters of interest to Coloradans.*

### CALENDAR OF EVENTS

**May 24 - 28... Renewable Fuels Workshop.** Discussing the fundamentals of creating a renewable fuels economy. Covering subjects such as biodiesel, ethanol, hydrogen, biogas, bio motor oil, electric vehicles, compressed natural gas, gas/diesel electric hybrid vehicle and other related topics. Presented by Solar Energy International. *Venue:* SEI facility, Carbondale, Colorado. *Fee:* \$550.00. For further information visit [www.solar.energy.org](http://www.solar.energy.org) or call Lori Stone at 970-963-8855.

**May 29... Sustainable Suburbs Workshop.** Presented by the U.S. Green Buildings Council and the Sustainable Futures Society. This is a follow-up to the Sustainable Suburbs Seminar presented by the USGBC in February. *Time:* 9:00am - 4:00pm. *Venue:* Harmony Village Common House, 1001 Cottonwood Circle, Golden, Colorado. For further information visit [www.sustainablecolorado.org](http://www.sustainablecolorado.org).

**May 29... Superbia! 31 Ways to Create Sustainable Neighborhoods.** Presented by the Sustainable Futures Society. Based on book by the same name by Dan Chiras and Dave Wann. *Time:* 9:00am - 4:00pm. *Venue:* Harmony Village Co-housing's Common House, 1001 Cottonwood Circle, Golden, CO 80401. *Fee:* \$60.00 per person; \$100 per couple - includes lunch and copy of book. For further information contact Dan Chiras at 303-674-9688 or [danchiras@msn.com](mailto:danchiras@msn.com).

**June 9 - 10... Fuel Cell 2004.** Presented by Fuel Cell Magazine in cooperation with the Colorado's Governor's Office of Energy Management. Two-day symposium focused exclusively on component and integration of fuel cells in stationary, automotive and portable applications. *Venue:* Marriott Denver Tech Center. *Fee:* \$995, includes daily luncheons and reception. For further details visit [www.fuelcell-magazine.com](http://www.fuelcell-magazine.com).

## DISH STERLING MAKES A COMEBACK

After several years of being out of the "spotlight" an old solar technology is being resurrected. On April 27, Sterling Energy Systems, Inc. unveiled its new "productionized" Dish Sterling solar power plant. This new 25 kW is now being manufactured at a modern new facility in Phoenix Arizona that employs the latest manufacturing methods to mass-produce the dishes. The dishes are actually re-designed versions of the 25 kW dishes originally designed and built by McDonnell Douglas in the 1980s.

The dish is of a revolutionary new design that features more standardized components, bolt down construction, more uniform structure, and galvanized steel components. The Schuff Steel Company has been contracted to manufacture the dishes. The objective is to reduce manufacturing cost by a wide margin enabling the dish power plant to be cost competitive with other forms of electric power generation.

The first dish produced will be shipped to Sandia National Laboratories in Albuquerque, N.M. for testing. Ten more dishes are then planned to be built and delivered to the Arizona Public Service Company in 2005. Another 40 are scheduled for release later next year for installation in Southern Nevada at a U.S. Department of Energy dish demo project. Schuff Steel will use the experience in producing these first few dishes to develop a high-volume production process (up to 50 dishes per day) to support the large scale deployment of solar dish systems expected to be installed throughout the Southwest U.S. in the next few years.

## NEW SOLAR TECHNOLOGY BREAKTHROUGH REPORTED

In a private laboratory in Palo Alto, California, scientists are designing low-cost solar cells that are being heralded as cost competitive with conventional energy sources. Martin Roscheisen, Chief Executive Officer of Nanosolar, Inc., states, "we're at the threshold of making solar electricity profitable." The secret is a dark purple liquid that is used to produce a photovoltaic film for solar panels that is inexpensive to produce and easy to apply.

The new company has attracted high interest among venture capitalists who are pouring large amounts into clean energy technologies in anticipation of a growing market for products that generate revenue without harming the environment. The high investment in Nanosolar, Inc is motivated by the Company's demo of the product and the caliber of scientists and management that make up the Nanosolar team.

## State Senate Defeats Energy Bill Again

In a late-evening vote on May 4, 2004, the Colorado Senate voted against a House amendment to SB168 that would have implemented a renewable energy standard for Colorado. This is the second time this year that such a bill was defeated. Advocates for the bill were disappointed but vowed to secure enough voter signatures to put a similar amendment on the ballot for this coming election.

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## CRES CORNER

### A MESSAGE FROM YOUR PRESIDENT - Dave Bowden

#### Renewable Energy Progress on Hold - Again!

How long will we wait?

Meaningful rules and regulations calling for greater generation from renewable sources have been enacted in 14 states. Yet, this spring, the Colorado legislature failed for the fourth time to enact a renewable energy standard, despite the best efforts of a very broad coalition and bipartisan political support (see news story on page 3).

Congress in Washington DC also failed late in 2003 to enact an urgently needed national energy policy, having been preoccupied by another war to ensure cheap oil and intense corporate lobbying to maintain the status quo. Energy legislation "progress" there perpetuates the mistakes of the past, as industry pushes for more coal and nuclear plants. Supporters of clean powered, energy independent America continue to wait for leadership on the critical issues of energy and national security.

The evidence calling for widespread changes in America's power use and generation is compelling. When will our government finally heed it's own studies - and act?

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**Consumer Expo to be Held In Conjunction with CREC 2004...** For the first time the CRES' Colorado Renewable energy Conference will be combined with the National Renewable Energy Laboratory's *Consumer Energy Expo*. The Expo will feature exhibits that highlight businesses and organizations that specialize in renewable energy and energy efficiency technologies, products and services. The conference and expo will take place on the University of Denver's campus, principally in the new Frank H. Ricketson, Jr. Law Building.

### SUBCHAPTER NEWS

**SECRES Members "Pitch In" at CRES' CWADE Booth...** On April 14 and 15, CRES displayed its mission and objectives at a booth at the 2004 Colorado Wind and Distributed Energy Conference (CWADE) which was held at the Doubletree Hotel in Colorado Springs. The theme of the two-day meeting was *Renewables for Rural Prosperity* and focused on the latest developments in wind energy and distributed generation technologies. The conference was well attended and a large number of participants stopped by the CRES booth. Our special thanks to all SECRES members who assisted in the CRES booth, especially Jerry Stevenson, Mark Robinson, Larry Barnett, Judy Fosdick, and Tim Oliver.

**N-CRES Hosts Meeting on Energy Savings Home Products...** On May 11 on the campus of the Colorado State University, N-CRES held a public meeting at which representatives of the Burnham-Beck & Sun and Sky Lights of Colorado presented an engrossing program on energy efficient appliances that homeowners can bring into their homes today. The discussion centered on small and large home appliances such as refrigerators, washing machines and water heaters. Solar tubes for day lighting and solar attic fans were also described.

#### CALL FOR SOLAR HOME TOUR ASSISTANCE

We have need for homes to be included on this year's *CRES Solar Home Tour* that will take place on October 3, 2004. We also need volunteers to serve on the Organizing Committee and as home guides. Please call Pat Grossman at 303-278-2893 and offer your home or assistance. **Thanks!**

### CRES NEWS

*CRES NEWS*, the official publication of the Colorado Renewable Energy Society, is published monthly except once each in the summer and winter.

The official CRES address is:

**P.O. Box 933  
Golden, CO 80402**

The address of the editorial office is:

**1050 S. Monaco Pkwy. Ste 77  
Denver, CO 80224**

**Editor:** Paul Notari

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### CRES MEETINGS

*Unless otherwise specified, CRES meetings will be held at 5:30pm in the NREL Visitor Center.*

**May 26... General Meeting -** Guest speakers will be Dan Chiras and Dave Wann who will discuss their recent book, "Superbia! 31 Ways to Create Sustainable Neighborhoods. **See Page 1**

**June 25 - 27... CRES Amnnull Conference.** Featuring Senator Tim Wirth, President UN Foundation, as the Keynote Speaker. With 5 tracks of concurrent technical and information outreach sessions, 12 workshops and 4 tours. See registration forms in this issue.

### CRES "HOTLINE"

303-806-5317

#### **CRES INTERNET NOS.**

e-mail: [info@cres-energy.org](mailto:info@cres-energy.org)  
Web Pg: <http://cres-energy.org>

## RENEWABLE ENERGY BRIEFS

**DOE Awards Contract Extension for NREL...** On April 13, 2004, Deputy Energy Secretary, Kyle McSlarrow, announced that the Midwest Research Institute (MRI) has been granted a four year extension on its contract to manage the National Renewable Energy Laboratory (NREL) that was originally awarded in 1998. MRI manages the laboratory in cooperation with the Battelle Memorial Institute of Columbus, Ohio.

NREL's annual budget is more than \$200 million, making the potential value over the remainder of the contract more than \$800 million depending on congressional appropriations. The laboratory has a permanent staff of around 1000 with another 200 or so visiting scholars and temporary contractors.

**Ford Unveils Energy Efficient Plant...** On April 27, 2004, the Ford Motor Company unveiled its new Dearborn Truck Plant that it touts as "a model of 21st-century, eco-friendly manufacturing." The building boasts a grass roof that insulates the factory, reducing heating and fueling costs dramatically. It also has 36 skylights and 10 glass-walled rooftop windows that direct sunlight to workers on the floor.

In addition, a system is incorporated that distills paint fumes into hydrogen-rich gas, which powers fuel cells that are expected to save Ford some \$100,000 a year in electricity costs. CEO Bill Ford promises to adopt the concepts in all future plants "if they play out from an economic standpoint as we believe they will."

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**plus Senator Tim Wirth's Keynote Address...**  
**and an array of Fun and Social Events**

*For further information visit our website: [cres-energy.org](http://cres-energy.org).*



**Colorado Renewable Energy Society**

P.O. Box 933  
Golden, CO 80401

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