



CRES NEWS

Newsletter of the *Colorado Renewable Energy Society*

VOL. 7, NO. 9

A Chapter of the American Solar Energy Society

September 2002

CRES BUILDING AWARD WINNERS TO ADDRESS NEXT CRES MEETING

2002 TOUR OF SOLAR HOMES

(Sorry-photo not available electronically.)

Shown under construction above is a "Habitat for Humanity" home sponsored and largely built by volunteers from the National Renewable Energy Laboratory. The finished home will be open to visitors on the 2002 Colorado Tour of Solar Homes.

On Saturday, October 5, CRES will host the **2002 Colorado Tour of Solar Homes**. Passive, active and photovoltaic powered solar homes will be on display within the Denver metro area, as well as in Aspen and the Roaring Fork Valley, Boulder, Colorado Springs, Durango, Fort Collins, Pueblo, and Silverthorne and the Blue River Valley. This event is part of the national Tour of Solar Buildings being conducted all over the country on this day by the American Solar Energy Society. Registrants for the Metro Denver tour are also welcomed to attend any of the free workshops being offered at the NREL Visitors Center in the morning and afternoon on the day of the tours (*see WORKSHOPS page 2*).

This year's Metro Denver tour will focus on Golden, Arvada, Westminster, and Coal Creek Canyon in the northwest part of the metropolitan area. Featured this year on the Metro Tour is a *Habitat for Humanity* home that was sponsored and largely built by the National Renewable Energy Laboratory (NREL) and which contains unique energy efficiency and solar features for low-cost residences. Also featured are the Apex Recreation Center and the Colorado School of Mines Center for Technology and Learning.

Those wishing to tour the homes in the Denver metro area can register on the day of the tour and pick up their tour guide and map at the NREL Visitors Center (just west of the Marriott Hotel in the Denver West office complex, 3 blocks east of Indiana on Colfax). The fee is \$10.00 per car. Tour homes will be open from 10:00am - 4:00pm; registration will begin at 9:00am. For details on the other tours, visit the CRES website; cres-energy.org.

All CRES members are invited to attend the monthly CRES meeting at **5:30pm** on Wednesday, **September 25** at the NREL Visitors Center to hear and see the winners of the **CRES Renewable Energy in Buildings** awards explain and display their winning entries. The NREL Visitors Center is located 2 blocks past the Marriott hotel in the Denver West complex (exit 263 from I-70, just north of Colfax between Simms and Indiana).

Featured will be these award winning structures:

●Institutional Buildings:

Colorado School of Mines Center for Technology and Learning in Golden.

Poudre School District Facility Services Building in Fort Collins

●Commercial Buildings:

Xilinx, Inc. Headquarters in Longmont

Shumei International Institute in Crestone

●Residential Buildings:

McStain High Plains Environmental Center in Loveland

Levi Residence in Boulder

●Exemplary Building:

Harmony Library in Fort Collins.

Representatives from each of the award winners will be on hand to display photos and/or models of the winning buildings, to explain the intricacies of their designs, and to answer questions. Last year this renewable energy building award review was one of the most popular CRES meetings of the year. All members are encouraged to attend and to participate.

Colorado Snap Shots

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

CALENDAR OF EVENTS

Sept. 19... Building Green: Gaining Resources to Meet Economic and Environmental Needs. Fort Collins, Colorado. Price is \$50.00. For further details visit web site <http://fcgov.com/green>.

Sept. 20-22... 4th Annual Sustainable Communities Symposium. Crested Butte, Colorado. Presented by the High Country Citizen's Alliance. For further details phone 970-349-7104 or visit web site <http://hccaonline.org>.

Sept 26 - Oct 6... Colorado University Solar Decathlon Solar House to be Displayed on National Mall. A multidisciplinary team of students and faculty from the University of Colorado at Boulder will participate in the national *Solar Decathlon* being staged in Washington DC over the week. The event is a national competition among university student teams to design, build, and operate a small home office building powered solely by solar energy. The students will erect their solar structure on the mall along with the buildings of all other contestants. During the competition, a solar decathlon website - solar.colorado.edu - will provide daily updates from DC. Winners will be announced on the last day of the competition.

Oct. 15-19... Energy Week. Featuring the *Solar and Energy Efficiency Conference and Expo*. Presentations, seminars, and other events will take place at the Montrose, Colorado, City Pavilion. Sponsored by the U.S. Dept. of Energy Million Solar Roofs Initiative and the Western Area Power Administration. Presented by the Delta-Montrose Electric Association. Expo exhibit space sales and sponsorships are currently being solicited. For further information contact Tom Polikalas at 970-240-1245 or tpolikalas@dmea.com.

NEWSITEM

Xcel Energy has confirmed that it is pulling out of a Colorado coalition that is planning to build a 1,200 megawatt coal-fired power plant. Xcel spokesman, Steve Roalstad, said the company feared a coal plant might conflict with the state's long-term energy resource plan which could call for less coal use.

STALLED WIND FARM AT LAMAR MOVING FORWARD AGAIN

Ever since Enron went into bankruptcy earlier this year, the status of the new wind farm scheduled to be built in Lamar Colorado has been "up in the air." Xcel Energy, which had already awarded the contract for the construction of the farm to the Enron Wind Corporation in midyear 2001, abrogated the agreement on the grounds that Enron no longer existed as a viable company. However, shortly after the fall of the parent Enron Corporation, the Enron Wind subsidiary was purchased by General Electric Power systems. Since then, negotiations have been carried out between Xcel and GE to determine whether the wind farm contract would or should proceed.

On August 29, the Sierra Club announced that Xcel and GE had reached an agreement to proceed with the 162 megawatt wind energy farm. The Sierra Club, as well as several other concerned groups including CRES, had been encouraging Xcel for many months to go ahead with the project. To everyone's delight, Xcel gave notice in late August that they indeed had reached agreement with GE and would proceed with construction pending settlement of some minor issues with the PUC.

"Colorado families can breathe a little easier with Xcel Energy's agreement because wind power is a zero emission resource -- it produces no pollution," said Susan LeFever, Director of the Rocky Mountain Chapter of the Sierra Club. "This is a huge win because it means the cost of wind power has come down to be competitive with other sources of energy," commented Susan Innis of the Land and Water Fund of the Rockies.

The Lamar wind project will help diversify Xcel's resource base from almost total reliance on fossil fuels. While the *Windsorce* program, highly supported by CRES and other groups, has been successful in getting some 56 megawatts of wind energy on line, it is wholly supported by Xcel customers who have agreed to pay a premium for each unit of energy the *Windsorce* wind energy farm produces. On the other hand, the price of energy from the new wind farm at Lamar will be included in the regular customer's rate base and therefore will cost consumers nothing additional.

ENERGY EFFICIENCY WORKSHOPS

The Colorado Energy Science Center (CESC), in partnership with the CRES Tour of Solar Homes, is offering a series of workshops open to all tour registrants. The workshops will be held in the auditorium of the NREL Visitors Center on Saturday, October 5th, the day of the tours. The workshops are free to all tour registrants. They will be held at the following times and will address the following topics:

Energy 101 for Homeowners:

10:00 AM	Energy Efficiency/Solar	Paul Kriescher, Lightly Treading
10:15 AM	Solar Hot Water	Damian Vippu, Industrial Solar Tech.
10:30 AM	Sustainable Design	TBA
11:00 AM	Energy Efficiency/Solar	Paul Kriescher, Lightly Treading
11:15 AM	Solar Hot Water	Damian Vippu, Industrial Solar Tech.
11:30 AM	Windows: The Basics	Sue Reilly, Emermodal Engineering
12:00 PM	Energy Efficiency/Solar	Paul Kriescher, Lightly Treading

Residential Energy Efficiency:

12:30 PM	New Home Choices	Doug Swartz and Steve Andrews
1:30 PM	E-Star Home Energy Ratings	E-Star Colorado

Small Scale Renewable Energy:

2:00 PM	Solar Hot Water	Damian Vippu, Industrial Solar Tech.
2:30 PM	Solar Electric Power	David Petrov, RMS Electric
3:00 PM	Geothermal Heating/Cooling	Monte Schmidt, Valley Heating and AC
3:30 PM	Small Scale Wind	Jim Green, NREL

CRES CORNER

A Report by President, Megan Edmunds

Colorado Energy Assistance Foundation (CEAF) Leads National Energy Campaign

The Colorado Energy Assistance Foundation (CEAF), the National Fuel Funds Network, and the Governor's Office of Energy Management and Conservation (OEMC) are working with the Ad Council, creators of Smokey Bear, to launch a national public service advertisement campaign for energy efficiency and conservation. Together, they have raised over \$850,000 for this campaign, through partners such as the Department of Energy, The Home Depot, The North American Insulation Manufacturers Association, and so far, energy offices from thirteen states.

This three-year campaign is expected to get millions worth of public service advertising across the country. It will target children in the first and third year and adults in the second year. For more information contact Maria Finley of CEAF at 303.825.8750 or Rick Grice at OEMC at 303.894.2383.

Rebuild Colorado Creates New Paths to Efficiency

OEMC has created the Rebuild Colorado program to help building owners identify potential savings from energy efficiency. It is part of a national partnership organized by the U.S. Department of Energy to promote energy efficiency in buildings, especially those belonging to state and local government agencies by giving them access to bond financing, energy service performance contracting, and technical assistance.

Energy performance contracting can be very attractive for local governments because the energy savings pay for the upgrades financed over the lifetime of the upgrade. Then agencies such as school districts do not need to ask for tax increases to finance energy efficiency projects. Agencies win by permanently lowering their taxes and taxpayers win by keeping levies low.

If you are interested in learning more, Rebuild Colorado has a newsletter and a Web site at: www.colorado.gov/rebuild.

Northern Colorado Chapter of CRES

A group of CRES members in the Fort Collins and Longmont area are forming a Northern Colorado Subchapter of the Colorado Renewable Energy Society. They held their first meeting in late August with more than 20 people attending! If you are interested in learning more, contact CRES board member Peggy Plate by phone at 1.800.472.2306 or by e-mail at plate@wapa.gov.

Salute to Rudd Mayer

A number of CRES members attended the memorial celebration for Rudd Mayer on August 19. Rudd passed away at the age of 58 from complications from Hodgkin's disease, from which she had suffered for most of her life. It was a sad but wonderfully beautiful ceremony in Chautauqua Park in Boulder to honor a wonderful woman.

Rudd had been the primary reason that *Windsource* has grown to become one of the best utility green pricing programs in the country, now with more than 25,000 subscribers. Through her work at the Land and Water Fund (LAW) of the Rockies, Rudd had single-handedly signed up many of them.

Rudd's family is establishing a memorial fund in her name at the LAW Fund to purchase a wind turbine. If you would like to contribute, send your donations to the LAW Fund, 2260 Baseline Road, Suite 200; Boulder, CO 80302.

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**

**Phone or Fax: 303-377-0711
e-m: paulnotari@cs.com**

Editor: Paul Notari

Officer/Directors :

President: Megan Edmunds
Vice President: Thom Johnson
Secretary: Ron Larson
Treasurer: Paul Notari
Past President: Jimmy Jones

Directors at Large:

Dave Bowden, Maria Finley,
Pat Keegan, Tim Olsen, Peggy
Plate, Sue Reilly, Larry Sherwood,
Mike Tierney, Carol Tombari,
Morey Wolfson

Honorary Director:

Harold (Hub) Hubbard

Staff (contracted):

Exec. Director: Sheila Townsend
Member Records: Pat Grossman
Accountant: Terry Brennan, CPA

CRES MEETINGS

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

September 25...General Meeting - A review of the *CRES Colorado Renewable Energy in Buildings Awards*. See page 1 for details

October 23...General Meeting - The guest speaker will be John Nielsen, Energy Project Director for the Land and Water Fund. He will speak on "The Western Energy Board and Renewable Portfolio Standards in the West."

CRES "HOTLINE"

Phone: **303-806-5317** (call toll free
or **1-888-806-5317** if outside
FAX Metro Denver)

CRES INTERNET NOS.

e-mail: info@cres-energy.org
Web Pg: <http://cres-energy.org>

RENEWABLE ENERGY BRIEFS

Earth Summit Report... Not many positive actions came out of the *World Summit on Sustainable Development* that just concluded in Johannesburg, South Africa. According to Tom Turner of *Earthjustice*, "It could have been worse, but not much." On the bright side though, on the last day of the summit, Russia, China, and Canada all agreed to ratify the Kyoto Protocol which should be enough for it to take effect despite U.S. resistance. Also, Secretary of State Colin Powell did state that "the U.S. is in favor of renewable energy.....and of reduced greenhouse gas emissions," perhaps signalling a new attitude by the administration toward energy policy in the future.

FERC Releases New Initiative to Restructure Power Markets... On July 31st, the Federal Energy Regulatory Commission (FERC) released details on its new power market restructuring initiative. The proposal is being hailed as a "transforming event" which will permanently change the manner in which the power industry does business. FERC characterized its proposal as an "aggressive step" that reflects the Commission's determination that it "is no longer in the public interest" to maintain the *status quo*. Instead, the Commission believes it is necessary to institute "sharp changes" in the manner in which it regulates the industry.

In the brief period since the Commission issued its proposed new market rules, many in the electric power industry have focused upon FERC's proposed steps to ensure nondiscriminatory access to transmission. While important, the FERC's proposed actions to improve access to transmission are only part of a much broader effort to restructure the industry. Over time, FERC's proposal is likely to affect virtually every aspect of how the industry does business, with far-reaching implications for industry structure, prices in wholesale markets, and the value of generating units throughout the U.S. For complete details of the proposal, please contact Andy Weissman by e-mail at aweissman@energyvg.com.

Disappointment at SMUD... The Sacramento Municipal Utility District (SMUD) solar program is experiencing a severe setback. It recently lost its longtime leader, Donald Osborn, and has now exceeded its budget by almost two times. The utility had planned to spend \$3.2 million in 2002 to help homeowners, businesses, government offices, and nonprofits install PV panels in efforts to reach a goal of producing an additional 2 megawatts of solar power this year. Now it appears that the utility will spend twice that amount to reach just 60% of its goal. Utility officials say they are still determined to salvage the program, but others are doubtful of a revival. Because SMUD was such a leader in the field, there is concern that this turn of events may do sizeable harm to the image of solar electricity as a viable energy technology.

Private Company to Launch Fuel Cell Cost Reduction Research ... The Pacific Fuel Cell Corp. of Tustin, California announced that it has signed an agreement with the University of California to research and build a fuel cell prototype based upon Pacific Fuel Cell's proprietary carbon nanotechnology. The main purpose of the project is to significantly reduce the amount of platinum needed for fuel cell operation, a major impediment to the economical use of fuel cells in automotive and stationary applications. Matching funds are being provided by the State of California.

Glucose Solution, a Possible Source of Hydrogen for Fuel Cells... A research team at the University of Wisconsin at Madison says that they have found a relatively easy way to extract hydrogen from a glucose solution. The research, shortly to be published in the science journal *Nature*, found that heating a sugar solution to 392 degrees Fahrenheit and passing it over a platinum-based catalyst releases hydrogen. Full details can be obtained by visiting http://enn.com/new/wire-stories/2002/08/08292002/reu_48294.asp.

Colorado Renewable Energy Society

CRES News Editorial Office
1050 S. Monaco Pkwy. #77
Denver, CO 80224