



CRES NEWS

Newsletter of the Colorado Renewable Energy Society

VOL. 7, NO. 4

A Chapter of the American Solar Energy Society

April 2002

XCEL ENERGY'S DSM PROGRAMS FOR COLORADO
Topic for Next CRES General Meeting

Celebrating Colorado's Best Buildings

By Walt Kaesler, CRES Buildings Committee

Shown above is a model of last year's CRES Builder's Award winner, "The Farmhouse" by architects Julee Herdt and Steve Gates

It's the highlight at the closing of every CRES Conference...

After most other renewable energy stalwarts run out of gas at CREC meetings, members of the CRES Buildings Committee are still pouring over Trombe walls, natural ventilation towers, and buildings with innovative designs. With this year promising the largest turnout ever to a CRES annual conference, the awards gathering on Sunday, June 30 looks to be the best ever. Sunday, the final day of the upcoming conference at Colorado College in Colorado Springs, is one day about which we in the buildings community are getting most excited.

Every year, a number of Colorado's builders, architects, engineers, and even homeowners design buildings that take particular advantage of Colorado's exceptional solar resource. Through this award, CRES honors the best of these designs and encourages others to follow suit.

The award competition also recognizes innovative use of recycled materials and sustainable design. For example, one of last year's winners, the Franta-Simpson residence, made extensive use of recycled materials in the construction of a new home in Boulder.

Previous winners also give testimony to the value of the Colorado Renewable Energy in Buildings Award. For example, Don Sather won an award in 2000 for the Big Horn Center in Silverthorne's outstanding use of a variety of renewable design strategies. Says Sather, "Being a commercial establishment, we really appreciate the publicity we received in local newspapers about this award. The public is just beginning to identify with the idea of using sustainable buildings materials that we provide for sale at the Big Horn Center. This award helped us make the point when we were just getting started." To read more about last year's award winners, visit the CRES Web site at: http://cres-energy.org/activities_awds.html.

(continued on page 2)

All members are invited to attend our next CRES meeting which will begin at **5:30pm** on **Wednesday, April 24**. The meeting will be held at the NREL Visitor's Center in the *Denver West* complex, one block west of the Marriott Hotel. The most convenient way to get there is to take I-70 to exit 263. If you come by way of Colfax, turn north at the Marriott sign, midway between Simms and Indiana.

Our featured speakers will be **Heather Rae** of Xcel Energy of Denver and **Christopher Shroeder** of Nextant, Inc. of Boulder. They will provide an overview of the utility's demand-side management (DSM) programs. These programs provide financial incentives to reduce customers' summer peak electrical energy consumption. Rae and Shroeder will provide information to Xcel customers and others in the audience about how to take advantage of Xcel's DSM opportunities and where to obtain more information about DSM.

Heather Rae is a marketing executive in the Xcel Energy Retail Consumer Product Management Department. Previously she was a consultant to Xcel on competition in the Texas ERCOT market. She also worked as a consultant to Teletech, QwestDex, and a Midwest power company with respect to the California broadband market.

Chris Schroeder is a Project Manager with Nextant, Inc., a company that provides consulting services to Xcel for the design, implementation, and administration of several demand-side management program offerings. Chris has previously worked on developing and reviewing DSM programs for other major utilities in California, Texas, and Wisconsin.

Colorado Snap Shots

This column features meeting announcements, short news items, personality profiles, and other matters of interest to Coloradans

CALENDAR OF EVENTS

April 20... Boulder Earth Day Fair. 8:00am to 4:00pm, Boulder Central Park, Broadway and Canyon Road. Booths and exhibits on renewable energy and energy efficiency technologies. CRES will have a booth at the Fair.

April 20... Evergreen Earth Day Fair. All day at the lake at Evergreen. CRES will cosponsor a booth with the U.S. Department of Energy. Energy efficient hybrid cars will be exhibited.

April 26... ASHRAE Today. The Rocky Mountain Chapter of ASHRAE will present its 10th Annual Technical Conference & Vendor Expo from 7:30am to 4:30pm at the Doubletree Hotel at I-225 & Iliff. There will be sessions on Sustainable Design and Solar Water Heating in addition to many sessions on HVAC and other topics of interest to ASHRAE professionals. Registration fees are \$125.00 for a full-day; \$65.00 for a half day. For further information contact Brian Lynch at 303-228-3300 or bmlynch@trane.com.

May 1... Transportation Forum. The event will take place from 8:00am through lunch in the Baeresen Ballroom of the Tivoli Student Union on the Auraria Campus in Downtown Denver (9th and Auraria Parkway). The theme of the forum is "Transportation, A 21st Century Challenge...What can Business do?" Registration fee is \$10.00 payable at the door. For further information visit <http://colorado2.orgspringfirm.htm>.

May 29... "Imagine If..." Green Building Workshop. A one-day workshop beginning at 2:00pm (doors open at 1:30pm) will be convened at the historic Sheridan Opera House on Main Street in Telluride, Colorado. Randy Udall, Director of the Community for Resource Efficiency (CORE) and former CRES Board Member, will be one of several distinguished presenters. The meeting will stress the use of green building materials, energy efficiency, innovative building technologies and sustainable site design. Registration fee is \$30.00 (\$15.00 for students). For further information call 970-728-8701 or visit www.greenmediaworks.org

A Rebuttle to Senator Campbell's Energy Views

by Mark Stetz, former CRES President

Following is a letter sent by Mark Stetz to the Denver Post in response to a piece by Senator Ben Nighthorse Campbell (R-CO) that appeared in the March 8 issue. Although Mark's letter was never published, it provides a much more reasonable view of the energy situation in the U.S. today and how it should be addressed. CRES member Craig Cox also wrote an op-ed piece on this subject that was published in the Post earlier (check with him at coxraig@att.net). **As a RE advocate, all CRES members are encouraged to submit their views to the media in this way.**

Senator Campbell - in his March 8 letter - has set the tone for our energy policy debate and makes it clear that rational discussion has no place at the table. It is full of incorrect assumptions, hypocritical accusations, and the usual sniping. Let's consider some of his points. He has accused Democrats of crafting a partisan energy bill behind closed doors. Perhaps he feels that Vice President Cheney's energy task force would better serve as a model of openness. He argues that increasing CAFE standards would undermine the safety of SUV's. As safe as Ford Explorers with Firestone tires? And the safety of the rest of us who don't drive SUVs who are unfortunate enough to be in their way? He makes more silly points, but you get the idea.

The biggest lie is that "the output of greenhouse gases is directly attributed to economic output and growth." Wrong! Let me say this slowly so that you understand. *It is not the consumption of fossil fuels that drives the economy...., it is the services they provide that does.* As a nation, we use our energy resources extremely inefficiently and with reckless disregard for our future. The mantra of any successful business is to "do more with less." Yet this simple principle is treated with disdain by those who set energy policy. Any executive who ran his business the way we treat our energy resources - spending capital as if it was revenue, claiming that poor investments are necessary for growth, that waste is the key to success, and that we can always raise more capital if we look in the right places - would soon be filing for bankruptcy.

Less than one-half of the energy content of coal makes it to the electrical outlet; less than one-fifth that of gasoline moves the wheels of a car. Our energy-consuming society has tremendous room for improvement. Reducing fossil fuel consumption can be accomplished by rethinking how we use energy and what we use it for. "Doing more with less" will pay dividends by reducing the cost of doing business, reduce the trade imbalance, provide (not eliminate) jobs, and increase our national security. I say this not as a starry-eyed "environmental extremist" but as an engineer who makes a damn good living identifying opportunities for energy-efficient investments that typically provide returns-on-investment of 40% or more. To NOT change our ways is to tax ourselves for sloth and ignorance, sins we can no longer afford to commit.

BUILDING AWARDS - continued

NOTICE: **May 15** is the Deadline for the **Colorado 2002 Renewable Energy Awards**. This year, CRES will give awards in three categories:

1. Commercial and Institutional Buildings
2. Residential Buildings
3. Sustainable Communities

Renewable energy technologies include passive solar, solar thermal water or space heating, photovoltaics (PV), on-site wind power, geothermal heating and cooling, daylighting, natural ventilation, and other innovative design strategies. To be eligible, the buildings or communities must be located in the State of Colorado, and must be no more than three years old. Visit the CRES web site for more specific judging criteria and for full information required on the application for each entry. Go to cres-energy.org/awards_criteria.html.

Please mail your application to or contact me for further information at:
Walt Kaesler
24050 Genesee Village Road
Golden, CO 80401
Phone: 303-526-0924
Fax: 303-526-0921
e-mail: Wkaesler@aol.com

CRES CORNER

A Report by President, Megan Edmunds

This month there has been lots of legislative activity, some good, and some bad.

Renewable Energy in the Legislature

CRES helped several Colorado legislators propose a minimum clean energy requirement for Colorado in January, and our sources tell us the outlook for passage in the Senate is good. Unfortunately, a house committee quashed it after little discussion. A number of CRES members testified in favor. See Dave Bowden's write-up on the CRES Web site at: cres-energy.org/testimony.html.

SB-186, sponsored by State Senator Peggy Reeves (D-Fort Collins) would have instituted a systems benefit charge (SBC). The SBC is a small surcharge on electricity sold in the state to fund energy efficiency programs, weatherization of low-income households, and development and deployment of renewable energy technologies. Unfortunately, this was also killed in the Senate subcommittee on Business, Labor and Finance.

There is one piece of renewable energy legislation currently before the Colorado Senate. SB-180 is sponsored by State Senator Terry Phillips (D-Louisville), and would implement a renewable portfolio standard of two percent in 2004. The standard, also known as a minimum clean energy requirement, increases to 10% in 2010 and beyond.

Meanwhile, the U.S. Senate approved a renewable portfolio standard of 10% on a national scale. It is a landmark vote in support of renewable energy. The vote was on an amendment offered by Senator Jeff Bingaman (D. New Mexico) requiring investor-owned utilities to produce at least ten percent of their electricity from renewable energy sources such as solar, wind, biomass or geothermal by 2020.

Public Discussion

While Colorado political leaders square off in a partisan energy debate, other states are moving ahead with a minimum clean energy requirement. To date, 14 states have adopted such a policy or have launched a public discussion of its pros and cons. When it is done well, such a requirement can lead to significant increases in renewable power generation. For an explanation of whether such a policy would work for Colorado, see the CRES Web site at: cres-energy.org/initiatives_mce.html

The Massachusetts Energy Office just published a summary of public comments about such a requirement for that state. It's a good summary of the political positions that promoters and detractors take about this policy. See: <http://www.state.ma.us/doer/>

Awards and Such

The U.S. Environmental Protection Agency gave an Outstanding Achievement Award to E-Star Colorado last month. The award is a result of efforts begun in 2001 by E-Star Colorado to get builders to build to a higher level of energy efficiency in new homes. The program, creatively called *Getting Builders to the Next Level*, encourages building to a home energy rating of 86 points that qualifies for an Energy Star rating. More than 300 homes were built to that level in Colorado in 2001.

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

Membership Admin: Chris Crouse

Accountant: Terry Brennan, CPA

CRES MEETINGS

Unless otherwise specified, CRES meetings will be held at the NREL Visitor's Center at 5:30pm. (The NREL facility is located just off the "Denver West" exit of I-70, a couple of blocks past the Marriott hotel.)

April 24 - General Meeting-

Heather Rae of Xcel Energy will explain "Xcel's Demand-Side Management Programs." See Page 1 for further details.

May 22 - General Meeting -

John Long, President of SunFuels Biodiesel will speak on "Renewable Fuels for Diesel Engines."

June 28-30 - CREC-2002

CRES "HOTLINE"

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

CRES INTERNET NOS.

e-mail: **info@cres-energy.org**
Web Pg: **www.cres-energy.org**

RENEWABLE ENERGY BRIEFS

International Firm Takes Over Local Renewable Energy Company... Alpha Technologies, the world's leading supplier of power systems to the broadband communications industry, has announced that it has acquired Colorado-based **Altair Energy** to strengthen its participation in distributed power generation. Altair energy is an established, value-added integrator of photovoltaic and other distributed power generation systems. Altair executive, Kirk Stokes, was formerly a Board member of CRES.

First Bio-Waste Micro Turbine Generator to be Installed in Colorado... The Colorado Governor's OEMC and the Colorado Pork, LLC has announced that a 30kW micro turbine fueled by methane produced from animal waste has been installed in a rural Colorado hog farm. This marks the first time that a micro turbine has been used in the Americas to produce electricity from methane derived from an anaerobic digester at a livestock facility of any kind. "The goal of the micro turbine project is to provide bio-based energy solutions that improve rural economic benefits and Colorado's energy security," says Rick Rice, director of the OEMC. "OEMC intends to widely distribute the project results and strive to bring, and make known, this and considerable other energy technology to rural areas throughout Colorado."

ALERT - Concentrating Solar Power Program (CSP) is Threatened to be Zeroed out in 2003... The U.S. DOE is recommending that the CSP program be zeroed out in the 2003 budget that is now before Congress. The American Solar Energy Society (ASES) is strongly opposed to the cut and has issued an ALERT to its members urging them to protest to their Congressional delegates. Visit web site www.ases.org for details.

Fuel Cell Autos On the Near Horizon... Nissan Motor Co. has announced that it intends to launch its first fuel cell car by the end of 2005 (much sooner than many experts had expected). This accelerated program to produce a new generation of clean autos independent of fossil fuels, has been termed the *Nissan Green Program 2005*. The strategy calls for Nissan to participate in a government-backed initiative to test fuel cell vehicles on Japanese roads later this year.

In separate announcement, the Ford Motor Co. says that it is combining its latest hybrid-electric vehicle (HEV) technology with an advanced new fuel cell to create an all-new, highly efficient, zero-emission *Ford Focus*. The new Ford Focus fuel cell vehicle (FCV) is being hailed by Ford as one of the first hybridized fuel cell vehicles which combines the range and performance of hybrid technology with the overall benefits of a fuel cell.

FAMED SOLAR ENERGY WRITER/FRIEND PASSES ON

A fond farewell from Paul Notari and the many other CRES members who knew him

Long time solar enthusiast and good friend to many of us, **Dan Halacy**, died March 20 after a long bout with Alzheimers. Dan will be remembered most for his devotion and contribution to solar energy, as well as his wonderfully sunny disposition and warmth. His accomplishments were manyfold but locally he will be best remembered for his years of service at the Solar Energy Research Institute (now NREL), his many writings on solar energy, and his stint as the first editor of ASES's *SOLAR TODAY* magazine.

It is noteworthy that in his lifetime, Dan published 78 books, many on solar energy topics. For those interested, a complete history of Dan's life and deeds appeared in the April 10 issue of the Denver Post.

All of us who knew him will miss Dan Halacy. While his Alzheimers kept him out of circulation for the last several years and unable to participate in CRES activities, I'll vouch that Dan would have joined us in a heartbeat and been a leader in our organization. Good-bye Dan, we'll miss you dearly.

Colorado Renewable Energy Society

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