Solar Fiesta 2010 Review
By Mary McArthur and Janet Bridgers

For all of you who participated in Solar Fiesta 2010, we thank you for your time and energy. Exhibitors and sponsors, we thank you for your financial support!

We continue to believe that the Solar Fiesta is the most cost-effective way for New Mexico companies in renewable energy, energy efficiency and sustainability to mix it up with people who are their most likely customers. This year, as in the past, we presented an attractive, well-organized event with a great list of workshops and presenters. Weather was great! Menaul School was beautiful, attendees were enthusiastic, and we came out financially in the black.

That being said, the Solar Fiesta Committee faced numerous challenges this year, and we’re discussing them here with you frankly. The biggest one, of course, was the state of the economy. We experimented by presenting two major events this year - the other being the International Green Ideas Show in April - which delayed our concentration on the Solar Fiesta. Our choice of the weekend after Labor Day resulted from a conflict at Menaul School for our preferred weekend and from our desire to avoid major local events in late September. That choice resulted in crowding us on the front end.

We moved to Menaul School this year for two major reasons—its location is closer to major freeways, and we enjoyed more participation by school personnel. Site challenges included developing a new ticketing system and a less-than-optimal layout of outdoor exhibit booths on two lots. Positive feedback from many attendees and exhibitors indicated the grass and mature trees contributed significantly to the ambience of the show.

While PNM, Unirac, Inc., and Array Technologies, Inc. were major contributors to the event, we lost a critical sponsor due to cutbacks in NM State Government. This affected our publicity budget, so we emphasized word-of-mouth efforts by e-mail.

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The NMSEA SunPaper

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The NMSEA SunPaper
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Albuquerque, NM 87106
(505) 246-0400 (888) 886-6765 info@nmsea.org

Preference is given to articles on solar energy topics (PV, passive, technology, performance histories, incentives, cost
benefits, etc.), but we will also consider other renewable
energy subjects as space allows. (No .docx formats, please.)

Advertising Rates

All advertising is in black and white, and photos and graphics must
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Text-only ads may be provided in MS Word (.doc) format
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Feb SunPaper. Circulation is typically 800. The size requirements
and prices for individual ads are as follows:

<table>
<thead>
<tr>
<th>Ad Size</th>
<th>Jan/Feb</th>
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<td>Full Page</td>
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Catching The Next Solar Wave

With the sun setting for winter solstice, we will be at
the end of another year and perhaps the end of another
“wave” for NMSEA. The first wave of solar energy awareness
began in the early 1970’s with mostly passive
solar and some basic water heating. By 1980 solar photovoltaics (PV), although still very expensive, was just
beginning to be mass produced, when the Vietnam war
debt came due, causing interest rates to go through the
roof. The Middle East helped create oil shortages and
high prices, and Iran was holding our embassy staff hostage, situations perhaps manipulated by the political party opposing President Carter. Reagan became President, and
that was the end of the first wave.

The second wave grew out of the hard-core grass-
roots progressive movement of the early 1990’s. I believe
that throughout this second wave NMSEA has made
a good impact on the education and awareness of solar and
renewable energy. The progress of renewables was
stymied around 2000 because some of the larger
corporations meddled in our political process, allowing
the “Grand Oil Party” to gain power and again make
some misguided decisions for war. We needed imported
foreign oil from regimes that did not have America’s best
interest at heart. In spite of these obstacles, NMSEA
continued to slowly grow and evolve until the second
wave encountered “cross currents.” America and the
world began to slide towards a painful economic collapse
at the same time Obama was elected President in a
landslide with a promise of great hope for starting us on a
much-needed new path. (My message in the September
SunPaper covered how we handled that. See also p. 9.)

As Gary Vaughn so well pointed out in his letter to
the board and chapters, whereas NMSEA was pretty
much be the only serious educator and “cheer leader” in
solar and renewables for decades, we are now surrounded
by organizations doing on a large scale what we do on a
very small scale. Gary mentioned the Los Alamos Lab’s
new “SunChaser-like” van planned to cover a 90-mile
radius of schools and events, and that Explorica is greatly
expanding their hands-on energy-related demos for kids. The Natural History Museum has started sponsoring a
“Solar Sunday” once a month, and Sandia Labs is now
offering free teacher training with grad school credits in
alternative energy and related topics. And then along
came the WEB - the fast moving web. That’s a wave in
itself. As solar has become more mainstream and more
people are interested, of course others are going jump
into the new market to provide their interpretation of a renewable future. For the most part more involvement in renewables is a good thing, but don’t think all of the new “educators” are going to be as pure or ideal as NMSEA. In fact, most of them will feel they have to give more than equal time to the necessity of coal, oil, and nuclear. After all, that’s where the big money’s coming from. So are we done?.....

Whether its capitalism or nature’s way, when too many others seize on your good idea, to survive you must improve your product, your technique, or as in nature “morph,” as Gary puts it. We may not be able to make a big enough splash to create a wave, but we can certainly keep the ripples going and get our board ready to catch the next great wave. Who knows; with all the storm clouds on the horizon and climate change looming, this coming wave may be the big Kahuna. Then our work will be done.

So, for the next step of forming new strategies for NMSEA going forward, we are encouraging members and guests to attend our year-end event to be held at O‘Neill’s Pub in Nob Hill (Central at Washington SE) on Dec. 2 from 6:00 until 9:00pm. For a $20 donation, you will have a selection of free appetizers, and you will be able to purchase a full dinner and drinks from a cash bar. We are planning to have a guest speaker, and I would like to propose that we have a session of 5-minute strategy presentations by members and guests. Each presenter must reserve their slot by emailing an outline of their talk to solpwr@plateautel.net by Nov. 29. As time is limited, early submission will ensure an available time slot.

Sincerely,
Monte Ogstad
NMSEA President

P.S. Although well-meaning, the suggestion again of taking “Solar” out of NMSEA and replacing it with “sustainable” - when the state of New Mexico is symbolized by the sun Zia and has almost 300 days of high energy sun - should only happen when hell freezes over!

“Sustainable” is relative.
“Solar” is ABSOLUTE.
networking, and other grassroots approaches. New additions were the low-cost use of six small billboards ("pony panels") and the donation of a Solar Fiesta ad on a digital board by Lamar Advertising. The result were as follows:

- Attendance was 1,230—72% of last year, 55% of 2008.
- Our usual robust array of 41 workshops drew a headcount of 670 with an average class size of about 17. This, too, was roughly 54% of previous years.
- The total number of volunteers/speakers/exhibitors was comparable to last year (over 350), but there were more booth workers and fewer NMSEA volunteers this year. Kudos to our Volunteer Coordinators for better scheduling.
- We had 15 fewer exhibits (75) than 2009, but several larger exhibits helped booth income to be close to comparable.
- We appreciate the donations of solar panels by Schott Solar and Positive Energy, Inc. that figured prominently in our Silent Auction.

- The combination of reduced expenses, sponsorships, booth income, and NMSEA booth sales helped us to ultimately finish in the black and we’re extremely grateful for that.

And what does all of this mean for the future? With months of planning and organizing and hundreds of hours of volunteer effort, we must show a decent profit to justify the enormous amount of work the Solar Fiesta requires. But how, going forward, can we ensure the event's profitability and usefulness? That boils down to the question “how can we attract new folk to take advantage of this educational gold mine?”

We’d like your input on what we’re doing well and what can be improved, with an eye toward keeping the event affordable for exhibitors and attendees. With the plethora of events in the area year-round, how can we make this one more valuable to you and the community around us?

While focus in other areas keeps us from doing a formal survey, we appreciate your input regarding the Solar Fiesta. Please take a few moments to brainstorm and communicate your thoughts to us via mail to the main office or by e-mail to info@nmsea.org.
Academy's energy costs and carbon footprint, fully funded by companies outside the school.

The $5 million array will provide the Academy with more than 2 million kilowatt-hours annually, one-quarter of the school's annual electricity use, approximately. The Academy will serve as a "solar host" for the array that will be financed and constructed by third-parties, capturing the tax incentives available only to for-profit companies. The non-profit school will recognize substantial savings by paying a low price for the electricity compared to what would be paid for grid power. Annual savings to the Academy are expected to increase over the twenty-year life of the project providing a predictable and stable economic hedge against rising electricity costs. Beyond twenty years, the Academy will own the array that is expected to continue to produce electricity for many more years.

Conversations about building a solar array on campus land began in December, 2007 when parent Mike Mattioli visited with Head of School Andrew Watson to talk about how solar hosting agreements can assist non-profit organizations otherwise unable to benefit from the tax credits and incentives that are moving this technology forward. What followed was close to three years of creative thinking and planning to structure a power purchase agreement between the Academy and Rockwell Financial Group (an independent finance company specializing in energy project finance). Other companies involved include Consolidated Solar Tech (Mr. Mattioli's company), Conergy (a leading global renewable energy company with two New Mexico offices), Mosher Enterprises (an Albuquerque company), Schott Solar (a German company with an Albuquerque manufacturing plant), and Unirac (an Albuquerque company that designs and builds the mounting racks for the solar modules).

Academy Treasurer Gary Gordon '79 and Business Manager for Finance and Facilities Pam Scanlon were instrumental in working with these companies to develop the project. Public Service Company of New Mexico (PNM) will continue to provide regular service to the Academy, and interface with the solar facility. Even when the school is on holiday, however, the array's electricity will be used entirely on campus. Unlike some solar systems, none of the electricity will be sold to the grid. Once the array is operational, Draker Laboratories will provide close monitoring of energy production and carbon footprint reduction.

Because construction costs for the array won't impact the Academy's annual budget, cost savings can go to (Continued on page 6)
(Here Comes the Sun, Continued from page 5)

supporting school life, including other sustainability projects. Construction of the solar array will place the Academy at the forefront of a technology that is growing rapidly in the United States, and the facility will serve as a model for other independent schools and non-profit organizations across the country. It is difficult to imagine a project with as many positive outcomes, from the environmental and economic impact it will make on the Academy and the region, to the educational opportunities it will provide for students and community members. Watch for more news and photos as construction of the solar array is completed, as well as for information on a start-up celebration to be held in January, at the school’s website: www.aa.edu.

**Albuquerque Academy Solar Array At A Glance**

Capacity: 1.15 megawatt photovoltaic array comprising 5,096 non-reflective panels
Footprint: Approximately 5 acres
Annual output: Approximately 2,181,000 KWH per year
Academy grid power replacement: An average of 25%
Electricity cost: Contractually certain for 20 years
Six local companies involved in project.

**Participating Companies:**

Rockwell Financial Group,
Consolidated Solar Technologies,
Conergy, Mosher Enterprises, Schott Solar,
Unirac, Draker Laboratories

**PNM Advisory Group Meetings**

By Maurice Wildin

The Public Advisory Group for PNM's long-term planning process meets on the first Wednesday of each month. This group advises the Integrated Resource Planning organization at PNM, which is responsible for preparing a report to the Public Regulatory Commission with recommendations on how to match demand and supply on PNM's electrical distribution system for the next 20 years. The current process started in September, and it will continue through next June. Information pertinent to the process, including summaries of the first two meetings, documentation, and meeting times, may be found at the web site www.pnm.com/irp.
Eva Thaddeus is an educator with 10 years of experience in elementary school classrooms. She’s worked with NMSEA, she’s been heavily involved with the Sierra Club Global Warming Committee, and she’s served on the Governor’s Climate Change Advisory Group in New Mexico.

The 125-page hard cover book is aimed at kids ages 9 and up and is the latest addition to the UNM Press Worlds of Wonder Science Series. It includes color photos and info-packed illustrations of many of the alternative energy technologies that are being researched and developed in our state.

Eva devotes 23 pages to nuclear power, 20 pages to solar, including PV, thermal, concentrating strategies, and wind, 19 pages to energy conservation strategies, 13 pages to geo-thermal, 8 pages to biofuels, and 4 pages to hopeful future developments, such as carbon sequestration and commercializing hydrogen.

Overall, it’s a successful effort to present a “fair and balanced” (in the real sense) picture of the state of energy research and development in New Mexico. Eva includes interviews with a wide range of researchers from scientists at Los Alamos National Laboratory and Sandia National Laboratories (SNL) to solar architect Ed Mazria, Zomeworks’ Steve Baer, and solar-powered farmer Don Bustos. She doesn’t shy away from addressing global climate change, pollution, locally-sourced food, and the quest for more efficient ways of using energy.

A few notable quotes:

**Marshall Berman, SNL:** “…an estimated 5,000 coal miners die every year on the job, 25,000 people in the United States alone die yearly of respiratory illnesses related to air pollution from coal,” and “more uranium comes out of coal stacks in a year than is used in nuclear power plants.”

**Steve Baer, Zomeworks:** “Big money has so much influence over society that they are able to slant things toward needing more electricity, bigger homes, bigger cars. At Zomeworks, we’ve always specialized in making passive devices, ‘passive’ meaning you don’t have to hook up any wires to it.” (One or two other classic Steve Baer

This book for kids, now available in the NMSEA office, is a good introduction to photovoltaic (PV) solar power. It starts with the importance of the sun to all life, particularly to photosynthesis in plants, the oxygen cycle, and weather patterns. However, from the start I wondered if the illustrations, all in the artistic style of the cover, aren’t a bit childish for the intended 9-12 age group. Furthermore, some are not particularly clear, such as the screen-looking thing and silver/grey globs on the cover, which are meant to be a PV panel and silicon crystals, respectively. One “painting” shows a vertical clothesline placed oddly under an overhead view of a swimming pool. I think kids past 7 years old would rather see photos of the real thing, rather than simplistic paintings of technology. Other readers may disagree. The text itself is frequently at a level above 12 years, in my opinion, but that makes it a challenging read, and that’s good.

Unfortunately, I have to question a number of technical points, though perhaps they are not important to the overall story line. One problem follows from defining the “direct” use of the sun’s energy as “using it as soon as it shines,” like solar warmth and the evaporation of water. The authors say it is “indirect” use when we eat plants or burn wood that grew in the sun. But, then they call solar thermal systems – heating water – and PV “indirect” uses, also. In fact, the conversion of sunlight to heat and electricity are just as direct as evaporation or the warming of the skin. (A solar energy classic by Farrington Daniels was titled Direct Use of the Sun’s Energy.) Perhaps that classification is not really pertinent, but if they are going to use that terminology, they should get it right. They also refer to electrical “tension” and “volts” when the words “potential” and “voltage” are more appropriate in the context.

The authors also say that solar thermal and PV are “two newer, more efficient ways” to use solar energy – as opposed to drying clothes in the sun! How can you compare those efficiencies and why would you? They say PV cells convert sunlight to electrical current, but it would be more accurate to say they create electrical potential. The current only flows when you hook them
Solar Energy Investments
Closing share prices compared to the DOW index (approximate, rounded):

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<th>Date</th>
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<th>Market Vectors, Solar Energy ETF (KWT)</th>
<th>Dow Jones Industrial Average ($INDU)</th>
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<tr>
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<tr>
<td>10/25/09</td>
<td>$155</td>
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<td>9,882</td>
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Selected prices provided for relative information, only; NMSEA does not recommend specific investments. All investments involve risk, so invest cautiously.

Opinions apparently didn’t survive the final pre-publication review.)

Ed Mazria, Architecture 2030: “The reality,” says Mazria, “has changed – and architecture needs to change along with it…. Here’s how we’re going to turn this thing around.”

Part textbook and part friendly chat, this book should help to introduce students (and adults) to the important role that New Mexico plays in meeting tomorrow’s energy challenges.

(Need Clean Energy?)

(POWERING THE FUTURE, CONTINUED FROM PAGE 7)

NMSEA Board Meeting Nov. 13

The next meeting of the NMSEA Board of Directors will be on Saturday, November 13, at the NMSEA office, 1009 Bradbury Dr. SE, Albuquerque, 87106, from 12:00 noon to 3:00PM with a potluck before at 11:30AM. Members welcome. Call 505-246-0400 by Nov. 9, if you have an item for the agenda.

Art Gallery
Artificial Turf
Building Products
Carpet
Cleaning Services
Closet Organization/Waitbeds
Countertops
Doors
Energy Audits/HERS Ratings
Fishing
Furniture
Granite
Green Building
Home & Building Design
Insulated Concrete Forms
Landscape Maintenance
Landscaping/Xeriscaping
LEED Information
Lighting and Fans
Plaster
Polished Concrete
Roofing – Metal & TPO
Skylights
Solar – Passive
Solar – Photovoltaic
Sprinkler Repair
Stucco
Synthetic Grass
Tile
Water Features
Water Purification
Windows
Wood & Vinyl Flooring

ONE STOP SHOP

NM Design Center
GREEN STREET
4801 Alameda NE, ABQ
It’s difficult to know where the solar energy movement is going these days. While systems have not spread as far and wide as many of us had hoped a few years ago, there are many more installations today. PNM, the electric utility for most of New Mexico, has supported the growth of a solid PV (photovoltaic) industry. NMSEA can take some credit for political advocacy and solar tax credits, the training of this industry and the rise of training courses in more schools, the education of the general public, and a greater popular awareness of renewable energy (RE). Over the past 35 years NMSEA has been successful with the SunChaser program in the schools and our solar training classes. We, along with other prominent groups, have been successful in promoting the political movement in our State. The result has been very significant tax incentives at both State and Federal levels and a growing industry here and nationwide. Events like our Solar Fiestas have been held to inspire members of our community to buy solar, to support government incentives for the industry, and to support NMSEA in its efforts, too. To some extent, we have already fulfilled our mission.

However, there is still some uncertainty about the additional growth of PV systems on the PNM grid and elsewhere throughout the State, passive solar is non-existent in housing developments, there is strong opposition to RE in some political corners, and a change in government leadership could mean a decline in support.

First, let’s acknowledge that solar energy systems are not much like any other product on the market. They aren’t essential like a refrigerator, television, or the vehicle you drive to work. (Aren’t we affluent?) And they still cost a lot more than your typical refrigerator or television – more like a car. From a marketing standpoint, there is no obvious need for solar PV, hot water systems, or passive solar, and there are easy substitutes – keep paying those utility bills. All incentives to buy are emotional – we ought to buy solar to reduce pollution and to protect against possible higher electricity and natural gas prices. But there are still relatively few people with real “disposable” income or the ability to borrow money for solar energy systems, especially recently. And no one really knows how steep energy prices will rise in the future. So, to make solar energy happen – to get a significant number of installations up and running – we have needed a political movement to support the fledging solar industry.
Not all solar panels are created equal

...nor are all solar dealers.

SunPower is up to 50% more efficient and 100% better looking.

Before you buy you should ask these questions:
- Do they guarantee the AC (Kwh) Energy production for the next 10 years?
- Is there a money back guarantee on that production? If not, you’re in the wrong store.

Only CST guarantees 100% of the energy production or we will write you a check annually for any shortfall, or add additional solar panels to guarantee your AC (Kwh) production. You are making a decision based on a financial production model so, what good is it if they don’t guarantee your production?

Before you invest, see why we install more solar than anyone else in New Mexico.

Web: goCSTsolar.com (505) 792-6359
Visit our showroom @ 5225 Pino Ave NE (I-25, Just South of Paseo Del Norte)
Appreciation for Solar Fiesta
“Rays of Sunshine”
By Mary McArthur, Fiesta Chair

Please give many, many thanks to the people who planned and implemented this year's Solar Fiesta at Menaul School with enthusiasm and style!

TJ Scarberry of the Grounds team had the most challenging position. A new site layout (many drafts), site challenges (power lines, two lots), the Fire Marshal's office and the Zoning Dept - he handled it all with aplomb.

Jim Barrera, Gates/Tickets, was challenged with an open campus. Though lessons were learned, his in-car ticket sales system worked very well.

Janet Bridgers, Sponsorship/Exhibits, had a challenging year with the current economy and supporting exhibitors with the new space.

Mandy Scarberry, NMSEA Booth, took on sales, the rain barrel raffle, T-shirts, silent auction (all which helped our bottom line) and literature.

Athena Christodoulou, Workshops, compiled a robust array of classes and walked miles between classrooms.

A change from the Grounds team, Dave Patterson joined forces with Wendy Schumann to coordinate volunteers most effectively.

Robert Nelson, Publicity, extended our Fiesta dollars via many forms of networking.

And others who handled their tasks fabulously: Allan Davies (Website), Barb Menicucci (Financials), Deena Klein (Solar Flea Market), Gary Vaughn (SunChaser), Monica Canaris (Solar Bake-Off), Monte Ogdahl (Electric Cars), Rick Shoudt (Sound), Ron Herman (Fiesta Guide), RP Bohannan (Badges).

The people listed below gave a portion of their weekend, whether a few hours or 30, to sell tickets, guide attendees, bake cookies, work the NMSEA booth, make signs, move chairs and tables, set up and take down canopies, sell tickets, handle AV, proctor workshops, announce events, direct parking and transport power stations and solar ovens. (Yea! No bumpers this year!)

Carlos Aguayo
Tony Baca
Elizabeth Bell
Marlene Brown
Ezra Bussman
Mary Byrd
Gordon Chandler
Tim Cox
Chris Ehram
Wayne Evelo
Odes Armijo-Caster
David Barbour
Jenny Beyss
Joe Burwinkle
Dave Byrd
Jay Campbell
Jose Cortes
Dave Dobry
Alexander Evelo
Brian Fick

(Continued on page 12)
(Appreciation, Continued from page 11)

Josh Gallegos  Jeffrey Granger
David Griggs    Bill Gross  
Sharon Gross    Ed Heller  
Gary Hendel     Lisa Hendel  
Jane Hicks      Alan Hill  
Larry James     Jason Jones  
Numair Latif    Barbara Leonard  
Judy Lopas      Gwen Maitreya  
Angel Marquez   Ragan Matteson  
Joanne McEntire Brian McKinney  
JR McKinney     Anne Monette  
Amy Noles-Raney Jim Palmer  
Ballen Penina   Elaine Prine  
Mike Prine      Darion Putnam  
Aaron Ranstron Derek Roff  
John Rudmin     Don Sekinger  
John Serna      Gayle Simmons  
Claire Simons   Steven Stephens  
Andrew Stone    Eli Stone  
Kaye Summerhays Leonard Tom  
David Torres    Michael Torres  
Penny Truitt     David Trujillo  
Karlis Viceps   Ron Webb  
Craig Wentz     Theresa Westbrock  
Maurice (Bud) Wilden Frank Wilson  
Jerome Witschger Jake Woodfin  

And thanks to Menaul School - particularly Lindsey Gilbert, Tonya Wright, David Cook, Jack Thayer and Michael Potvin - for their enthusiastic support of our event!
into a system. Just because this is a kids book, there is no excuse for this kind of sloppy language in an introduction to a technical subject. Throughout the book there are phonetic guides to some of the technical words, but I found that at least two of them differ from common pronunciations and – worse – from dictionary phonetics.

They also state that fossil fuels contain energy from the sun that was captured centuries ago, when in fact that process occurred millions of years ago, according to scientists. That is a huge error, and one can only guess why no one caught that in pre-publication reviews.

Their mention of better warmth and light from the southern sun ignores seasonal changes, which is an important system design consideration. At least a brief mention of the sun’s seasonal path would be enlightening, though their artwork would not lend itself well to that kind of precision.

The cost of PV systems per unit of power output (watt) is not evaluated even in the simplest sense by these authors. Even a 9-year-old should be told that these systems are expensive, even though the sunshine is not. The need to reduce costs is mentioned several times, but I object to the glib claim on the back cover that the sun’s energy is free, when costly methods of conversion are needed to put it to use.

And, the authors’ description of the process for forming silicon crystals is a bit jumbled, though their liquid candle wax example is apt.

Finally, in the Fun Facts the authors’ claim that “Solar power is reliable, with no outages.” How can anyone claim that, when a passing cloud causes an outage and the sun doesn’t shine at all at night? Even children understand that. I object to this kind of deception. Of course, batteries help solve this problem, but they can’t solve it for extended periods and they add considerably to the system cost.

I think a book about an important technology should be technically clear and correct, and I am surprised that the expert contributors from Dow Corning and Hemlock Semiconductor didn’t see to it that this book was top quality, even if it is just for kids.

The editors of Solar Today overlooked these shortcomings in their review and claimed it is “a clear and lively short course” (Solar Today, May 2010, p. 10). But I think if they were reading it to a child, they might find it not so clear and lacking engaging graphics.

On the positive side, the explanation of electricity in general is pretty good, and I am glad that they explain the need for a closed loop for electricity flow. I like that the authors’ included a career section, some “Fun Facts,” a glossary, and three lesson plans for teachers and parents who want to seriously help their kids learn with “hands on” science.

However, there are still those who don’t share our emotional investment in RE. There are many who say the pollution concerns from fossil fuels are not significant; we can just clean up here and there, let the winds blow, and the waters flow. They claim that any global warming that might be occurring is not a worry, and there is just not much to do about it anyway.

Rush Limbaugh calls global warming “crap... it’s fake science,” when in fact the overwhelming number of scientists say it is a growing threat. Sarah Palin says “we can’t say with assurance that man’s activities cause weather changes,” when it’s long-term climate change that is the concern. Sean Hannity says “Global warming is a crock,” and Glenn Beck says the arctic ice is returning, when in fact it is still far below average.

An op-ed piece in the Albuquerque Journal on September 29 of this year by Ken Barbe, a manager at Manzano Energy Partners, asked that we “Don’t Penalize the Energy Sector.” By that he meant the fossil fuels industry, of course, not the renewable energy sector. Barbe claimed that the “punitive, politically driven policies” of Obama are driving us to “the brink of disaster.” He says that cutting subsidies and tax credits for oil companies and extending RE tax incentives will eliminate 154,000 jobs and cost us hundreds of billions in economic output. Barbe calls RE “flashy, unproven” and fears such policies will cripple oil and gas companies that power our prosperity. He points out that more than 80% of our power comes from fossil fuels. (Most of the rest comes from nuclear plants.)

Well, I’m not an expert on these matters, but it seems like 154,000 jobs are small compared to the millions lost as the result of policies during the previous national administration. Furthermore, that many jobs and more have been and will certainly be created by a growing RE industry. Yes, some workers in the fossil fuels industry may have to find new jobs. But that industry can’t be suffering much with recent record profits. Neither are consumers suffering from extremely high energy prices, like we did in 2007; prices have been quite stable during the first half of the Obama administration, in spite of his advocacy for RE.

Most renewable energy involves basic technologies that are well-proven; certainly solar is. (And solar is flashy!) They are just not fully market-proven and government supported, whereas fossil fuels have been privileged competitors for a long time. That’s the whole point of a political RE movement – it’s based on considerations other than market prices.

By the way, the cartoon featured with the Barbe editorial showed an electric car being powered by a dirty

(Continued on page 14)
NMSEA Board of Directors Election
By Jim Barrera

Keep an eye on your mailbox! Ballots for the NMSEA Board of Directors election have been mailed out to all current members. Ballots must be returned to the NMSEA office via mail or in person by Friday, November 12, 2010. The newly-elected Board Members will be sworn in at the final regularly scheduled NMSEA Board Meeting of the year at 11:30 a.m. Saturday, November 13, 2010, at the NMSEA office conference room. The new Board will then elect from among themselves the President, Vice President, Secretary, and Treasurer to serve for the upcoming year. All current NMSEA Members are welcome to attend board meetings. The candidates running for 2011-2012 Board seats are all past members of the Board and are as follows: Barbara Menicucci, Mars DeLapp, Carl Axness, Monte Ogdahl, Robert Nelson, and Janet Bridgers.

The continuing NMSEA Board Members with another year of service are Gary Vaughn, Jim Barrera, R.P. Bohannan, and Lisa Silva. If you don't receive your ballot by next week, please call or stop by the office to verify your membership status and receive a replacement ballot.

 Rows of PV panels on the roof of a Costco store in Albuquerque
Join the
New Mexico Solar
Energy Association!

Be a part of a creative, innovative organization dedicated to bringing renewable energy and sustainable building to New Mexico!

Keep informed of what’s happening through our bi-monthly newsletter, the SunPaper! Actively support education for kids and adults and learn of workshops and classes where you can learn about photovoltaics, hot water, green building, solar rights and all the wide range of sustainable living and building practices.

Name: __________________________________________

Company or Affiliation: __________________________________________

Address: __________________________________________

City, State, ZIP Code: __________________________________________

Phones: ______________________ (W) ______________________ (H)

Email: __________________________________________

Any special solar interests? __________________________________________

How did you hear about us? __________________________________________

☐ Yes, I would like to volunteer on occasion!

NMSEA Membership Dues

☐ Individual and Family, 1 year $30
☐ Business, 1 year $75
☐ Individual Lifetime $250
☐ Business Lifetime $400
☐ Teacher/Student/Senior (62 & up) $10
w/ copy of ID (circle one)

NMSEA Chapter Options

All NMSEA members are invited to participate in our local chapters around the state. When you register, you will be placed in the chapter nearest to you geographically, or you may contact the office to change your chapter, if you desire. (Note: members are not limited to the chapter in their area and are welcome to visit other chapter events.)

Check if you would like to be affiliated with and/or donate an additional amount to any of the following chapters or to the main office general fund:

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<thead>
<tr>
<th>Affiliation</th>
<th>Donation</th>
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<tr>
<td>Alamogordo Chapter</td>
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ASES Membership

NMSEA is a chapter of the American Solar Energy Society, and we encourage our members to join ASES as well. ASES members receive SOLAR TODAY magazine, Solar Action Network (SAN) alerts, the Sunbeam e-newsletter, discounts on publications, and more! Five percent of your ASES dues are dedicated to special outreach programs including ASES Legacy Schools, library gift subscriptions and the purchase of Green Tags.

For more information and for ASES business membership categories, please visit www.ases.org.

If you join or renew ASES at the Professional level and join or renew NMSEA, deduct $10 from your ASES dues (as indicated below). If you join or renew ASES at the Basic level and join or renew NMSEA, deduct $5 from your ASES dues.

☐ Professional $89
☐ Senior Professional (proof required) $45
☐ Basic $39
☐ Student (proof required) $35
☐ Supporting $125
☐ Contributing $250
☐ Lifetime $1200
☐ SOLAR TODAY Subscriber only $29

ASES Options

☐ Do not rent my name
☐ I do not wish to receive Solar Action Network Alerts
☐ I do not wish to receive the Sunbeam on-line newsletter
☐ I do not wish to be listed in the on-line Membership Directory

NMSEA Dues $ _________ + ASES Dues $ _________ (- discount $ _________) + Donation $ _________ = Total $ _________

Payment options: ☐ Check or money order enclosed ☐ Visa ☐ MasterCard

Credit Card # ______________________ Exp. Date: _________ Signature ______________________

Credit Card Billing Address (if different from above)

Mail this form with payment to: NMSEA, 1009 Bradbury Dr. SE #35, Albuquerque, NM 87106.

For more information, please call 505-246-0400 or 888-886-6765 or visit www.nmsea.org.

NMSEA

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Nov/Dec 2010
Mission Statement
We promote clean, renewable energy and sustainability in New Mexico through education, empowerment, collaboration and advocacy. Your tax-deductible donation is urgently needed to continue our work benefiting the citizens of New Mexico.

Vision Statement
We envision a thriving, bio-diverse earth, with civilization powered by clean, renewable and sustainable energy from the sun.

Coming Events

Nov. 3 Public Advisory Group, PNM long-term planning meeting, first Wednesdays of each month. See www.pnm.com/irp for details.

Nov. 11 Sustainable Las Vegas (chapter) meeting, 5:15 PM, NMHU Donnelly Library, Rm 325. Joaquin Karcher on “The most affordable approach to Zero Energy Homes.” Call 505-454-3920 for more info.

Nov. 13 Board of Directors Meeting, Saturday, NMSEA office, 1009 Bradbury Dr. SE, Albuquerque, 87106. Members welcome. Meeting is 12:00 noon to 3:00PM; potluck before at 11:30AM.


Dec. 2 **NMSEA Strategy Discussion, year-end event,** O’Neill’s Pub at Nob Hill, Central at Washington SE, from 6 PM to 9 PM. $20 donation includes a selection of appetizers; dinner menu and cash bar available. Guest speaker. Reserve your time for a 5-minute strategy presentations by sending your talk outline to Monte at solpwr@plateautel.net by Nov. 29 - or just come to meet other members and support NMSEA!