



## NMSEA Organizational News

By Gary Vaughn, President

Welcome to 2015! Not bad for a civilization that was supposed to end in 2000. NMSEA is plunging into 2015 with the usual list of challenges plus a few extras. Here's a quick summary of the latest organizational news.

NMSEA's Annual Meeting was held at the legendary *Zomeworks* in Albuquerque on Saturday December 13. The turnout was excellent and included NMSEA pioneers Steve and Holly Baer. The NMSEA Board of Directors election was completed at the annual meeting. Janet Bridgers was re-elected to the Board, and we now have two new NMSEA Board members – Allen Hill and Elena Kayak.

Long-time Board member and NMSEA stalwart Barbara Menicucci managed to “retire” from the NMSEA Board of Directors after being an active Board member for over 16 years. We presented Barbara with a special gift (no, it wasn't a watch) at the annual meeting to commemorate her extraordinary service to our organization.

The 2015 Executive Board was elected by the Board at the January 8 Board meeting:

President: Gary Vaughn

Vice President: Janet Bridgers

Vice President: Julie Stephens

Secretary: Jim Barrera

Treasurer: Janet Bridgers

Ragan Matteson has been our NMSEA office secretary and/or office manager for many years. NMSEA can no longer afford to pay even a part-time office manager, so Ragan won't be the “official voice” of NMSEA as of the end of January. Fortunately for us, Ragan is still willing to volunteer her talents to support NMSEA's mission. Starting in February, the NMSEA office will be manned by volunteers, so if it takes us a little longer to respond to phone messages, email inquiries and such, please understand.

Printed newsletters are rare these days. Almost all ASES state chapters, along with many other non-profits, have already switched to electronic newsletters. NMSEA has held out a lot longer than most organizations, but the

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## Edward Mazria, AIA, Honored with 2015 Kemper Award

For Immediate Release: December 11, 2014  
David Moore, Architecture 2030

Washington, D.C. and Santa Fe, NM – The Board of Directors of the American Institute of Architects (AIA) bestowed the Edward C. Kemper Award on Edward Mazria, AIA, for catalyzing the architecture community to address climate change through the design of decarbonized, sustainable, and resilient built environments. Named in honor of the AIA's first executive director, the award is given annually to an architect who has contributed significantly to the profession through service to the AIA.

In his 40-year career, Mazria has been at the center of the sustainable design or green building movement, pushing a grassroots revolution to get architects, planners, public officials, developers, and decision-makers to see how buildings and infrastructure affect the environment, why architecture and planning matters, and the key role architects must play in driving positive change. Through research, compelling imagery, and tireless public presentations, he made it clear that architecture and planning are the gateway to true long-term global sustainability. Mazria founded Architecture 2030 in 2006 and issued the 2030 Challenge: a measured, achievable

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## New Mexico Solar Energy Association

### NMSEA Board of Directors

President: Gary Vaughn  
Vice-Presidents: Janet Bridgers, Julie Stephens  
Secretary: Jim Barrera  
Treasurer: Janet Bridgers  
Members at Large: Angela Arriaga, Athena Christodoulou, Lloyd Goding, Alan Hill, Elena Kayak, Rolf Nitsche.

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### The SunPaper

Editor: Ron Herman, [rhermansolar@aol.com](mailto:rhermansolar@aol.com)  
Send all letters, comments, and articles to the Editor, or to the NMSEA office, by the ad due date given below. 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.

### Advertising Rates

Advertising copy may be in black and white or in color. Photos and graphics must have a resolution of at least 250 dpi in JPEG, TIF, or PDF format. Text-only ads may be provided in MS Word format. Ad copy must be e-mailed to the Editor by February 21 for the March/April issue. Note that future publications will be available only at our website and by e-mail to members, which is currently about 200. Size requirements and prices for individual ads are as follows:

		<u>Mar/Apr</u>
Full Page:	9½" H X 7" W	\$122.00
Half Page:	4¼" H X 7" W	\$66.00
Quarter Page:	4¼" H X 3½" W	\$36.00
Biz Card:	2" H X 3½" W	\$20.00

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Solar Energy Association

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Chapter Vice-president:  
Larry Mapes

# PNM's First Steps Toward an Electric Vehicle Fleet

By Rolf Nitsche, NMSEA Board Member

NMSEA board members were invited to join PNM's presentation announcing the conversion of their fleet to electrical vehicles (EV) on November 18<sup>th</sup>, 2014, in Albuquerque. See photo at right. PNM is moving to EVs for their local transportation and maintenance vehicles. This includes a first fleet of seven Nissan Leafs and hybrid utility trucks (six pickups and ten bucket trucks). PNM has also installed the first charging stations at their facilities.

From this initiative PNM will learn how to manage and support charging stations for EVs in their electrical grid besides reducing emissions and operating costs for

the vehicles. Electrical and hybrid vehicles are a very reasonable alternative for shorter commutes in an area with a good electrical charging infrastructure. Besides a presentation and test rides in PNM's new cars, PNM also introduced a new cloud-based management tool to plan and optimize scheduling, including live tracking of all PNM's vehicles and the work of their field crews.

A tour of the PNM command center for the low voltage local electrical distribution network was offered and showed the state-of-the-art control room. Normal operations and special events are managed there by experienced operators to secure the power supply to PNM's customers. There is a lot of behind the scene work going on to secure the electricity supply when a storm knocks down a power line that needs to get repaired as fast as possible, while keeping everyone involved safe. ☀



*(Organizational News, Continued from page 1)*

time has finally come. **This will be the last regular issue of the SunPaper to be printed on dead trees and delivered by snail-mail (a collector's item!).** On the plus side our carbon footprint will plummet, and we will no longer be constrained by the printer's requirement that the format be in multiples of eight pages.

The electronic SunPaper will be quickly delivered to your in-box in full color with active "links" to additional on-line information and to advertisers' websites. NMSEA members are automatically subscribed to the electronic SunPaper. Other NMSEA "aficionados" can subscribe by going to the Subscriptions page at <https://nmsea.wildapricot.org>

**All NMSEA Members - please make sure that we have your current email address, so that you will continue to receive the SunPaper and other benefits electronically.** Drop us an email, leave a phone message, or best of all update your own membership info by going to the Members page at [www.NMSolar.org](http://www.NMSolar.org).

The new NMSEA email Blast, as well as the electronic NMSEA SunPaper will be sent from [NMSEA@wildapricot.org](mailto:NMSEA@wildapricot.org) If your email security is set on "paranoid," you may have to add this address to your "approved" list.

Watch for updated local chapter info and events to appear on the dedicated NMSEA Chapter pages at [www.NMSolar.org](http://www.NMSolar.org). Just click on the "NMSEA Chapters" link on the homepage.

One of the "extra" challenges that NMSEA will face in 2015 is PNM's renewed "War on Solar." The 2014 PNM Rate Case documents have been filed with the NMPRC. If PNM manages to get anything close to what it's proposing, NM's residential and small business and community solar system installations will plummet, and NM's fast-growing solar PV companies will be driven out of business. You'll be hearing A LOT more about this in the coming months (starting with a related article in this issue of the SunPaper, page 4). ☀

## Energy/Utility Investments

Closing share prices compared to the DOW index:

<u>12/19/14</u>	<u>10/24/14</u>	<u>12/20/13</u>
First Solar (FSLR):		
\$45.03	\$56.44	\$55.87
Market Vectors, Solar Energy ETF (KWT):		
\$65.98	\$70.10	\$69.69
PNM Resources:		
\$29.20	\$27.97	\$23.83
Dow Jones Industrial Average (\$INDU):		
17,805	16,805	16,221
Crude Oil//barrel (NYMEX futures)		
\$56.52	\$81.01	\$99.32
Natural Gas/mmBtu		
\$3.46	\$3.62	\$4.42
Gasoline/gal		
\$1.56	\$2.18	\$2.78

NG and gasoline are national averages. Selected prices provided for relative information, only; NMSEA does not recommend specific investments. All investments involve risk; invest cautiously.

## PNM's War on New Mexicans

### By Gary Vaughn, NMSEA President

In the Nov/Dec 2014 issue of the NMSEA SunPaper, I reviewed PNM's 2014 IRP (20 year plan). I said that the real test of PNM executives' apparent change in attitude about renewable energy would be the 2014 PNM Rate Case. Well, those official documents (more than 11,000 pages of them) were submitted to the NMPRC in mid-December. What have we learned so far from wading through those documents? The title of this article pretty much sums that up. Here's a quick review:

#### Higher Rates for Residential and Small Business Customers – Lower Rates for PNM's Buds

It shouldn't surprise anyone that PNM's electricity rates will be going up. But what might surprise you is that PNM's residential and small business customers will see a whopping 17% rate INCREASE, while some of PNM's best corporate customers will see their electricity rates GO DOWN. You haven't heard PNM executives mention a 17% rate increase have you? They like to use much lower "estimates." But the 17% rate increase is clearly stated in the formal 2014 Rate Case documents.

PNM executives have decreed that PNM's favorite big business customers have been "unfairly subsidizing" PNM's struggling residential and small business class customers. Furthermore, according to PNM executives, the NMPRC's past practice of applying PNM's rate increases evenly to all PNM customers is simply unacceptable and must be corrected immediately. PNM's new plan will squeeze more \$\$ out of the New Mexicans who are least able to pay, in order to reward PNM's best customers and, of course, to reward PNM executives.

#### Decoupling

Like many electric utilities, PNM bills their customers based on how much electricity their customers use. That income compensates the utility for the actual cost of generating the electricity and for the actual cost of the grid infrastructure (power lines, poles, transformers etc) that it takes to deliver that electricity. And of course the utility must cover their overhead costs, plus make a reasonable profit. When customers use less electricity for any reason, including energy efficiency, utility revenues go down, and utility profits suffer. Various "decoupling" proposals allow utilities to recover their grid costs separately from what they charge per kWh of consumption.

But the devil is in the details. PNM is proposing to increase the amount that all residential customers pay no matter how much electricity they use from \$5.00 to \$12.80. This isn't part of the electricity rate increase, but a separate unavoidable additional fee. For the average PNM residential customer that \$7.80 extra monthly charge amounts to about a 9% bill increase. For those residential customers who use less than the average amount of electricity, the percentage increase due to this extra fee will be much higher than 9%. And what additional benefits or services will PNM provide to residential customers in return for this extra fee? None.

#### Undercutting Net Metering

Net Metering allows a solar PV system owner to take full credit for the electricity that they generate and send to PNM's grid. That credit can be saved up (banked) and used to cancel out the cost of electricity that the PV system owner buys from PNM.

Under PNM's 2014 rate case proposal, a solar PV system owner will no longer be able to "bank" excess PV system production and apply that against future months' electricity

bills. PNM will pay for any excess unused PV system electricity each month – but only at an "avoided fuel cost" rate of 3 cents per kilowatt hour instead of the retail rate that PNM charges for electricity, roughly 12 cents per kilowatt hour. PNM will then turn around and sell that excess PV electricity back to the PV system owner's neighbors at the full retail rate, thus earning a minimum of 9 cents per kWh return on the customer's PV system investment (and much more during "peak" times).

#### Discounting REC Credits

PNM currently gets to subtract all of the electricity that a customer's PV system generates from the total amount of solar electricity that NM's Renewable Energy Portfolio Standard (RPS) requires PNM to supply. In return, PNM pays the system owner a fee, called a REC payment, for all of the electricity that a customer's PV system generates. That REC payment has declined significantly over the past eight years to 3 cents per kWh. The REC payment will bottom out at 2.5 cents per kWh by the end of 2015.

PNM has promised to expand the solar REC program by increasing the total REC program capacity limits so additional PV customers will be able to sign up. But PNM only wants to make REC payments for the portion of PV electricity that is net-metered, i.e. that is credited against the customer's monthly electricity bill. If a customer's system generates more electricity in a month than that customer can apply against the month's bill, "PNM shall receive from Customer, without cost, all RECs associated with such Excess Energy."

#### The Return of the PV Interconnect Rate Rider

Just as PNM promised, and several experts predicted, the PV Interconnect Rate Rider is back with a vengeance, but under a brand new name. PNM is proposing a "Distributed Generation (DG) Interconnection Fee" that will be levied on new residential and small business owned solar electric and wind generation sources that are connected to PNM's grid. This new fee will be based on the size of the generation system rather than the amount of electrical energy actually generated. And PNM has proposed to impose this fee in stages rather than all at once.

Starting January 1, 2016 a new residential or small business PV installation will be charged an extra \$6.00 for every one-thousand Watts (1 kW) of installed PV panels. For example, if you install 4 kW of PV panels on your roof, you'll pay PNM an extra \$24 per month. That works out to a minimum of 4 cents per kWh of average electricity production.

According to the Albuquerque Journal (12/12/14), "Gerald Ortiz, PNM vice president for regulatory affairs, said that even with the [*\$6.00 per kW DG Interconnect Fee*] charge those [*PV*] customers would only see their financial benefits or savings from net metering drop by about 30%." What VP Ortiz didn't mention to the Journal is that PNM wants to increase this DG fee from \$6.00 to \$16.73 for every kW of installed panels as soon as possible. That works out to a minimum of 11 cents per kWh of average electricity production.

How did PNM executives come up with the \$16.73 per installed kW that PV system owners "owe" PNM? They simply told their staff to create a spreadsheet! Why isn't PNM charging the "full amount" that PV customers owe PNM? PNM executives call it the "Principle of Gradualism;" the new monthly DG fee of \$6.00 per kW of installed PV is just the beginning.

#### Higher Profits for PNM

NM statutes require that the NMPRC allow PNM to "recover" every penny of its qualifying expenses from PNM customers, PLUS guarantee PNM a 10% profit. Under almost

## Reply to Buchholz Letter And Some History

By Mark Chalom, Architect

all scenarios, PNM cannot lose money on the deal, no matter what. For managing such a "high risk" enterprise, PNM executives are paid high 6 or even 7 figure salaries (plus benefits). In a state with the highest poverty rate in the country, and with the worst performing economy, it's really hard to manage a state-sanctioned monopoly that "only" earns a guaranteed 10% profit, so PNM executives are asking the NMPRC to increase PNM's guaranteed profit to 10.5%.

### PNM's Strategy

If you add the impact of PNM's proposed DG Interconnect Fee to the impact of PNM's Net-Metering program changes to the impact of PNM's REC program changes, and then you add in the additional \$10.73 DG Interconnect Fee that PNM wants to impose in the future, you soon realize that **PNM is actually plotting to charge its residential and small business solar PV customers far more for the privilege of doing business with PNM than those customers would pay if they simply junked their own PV systems and bought PNM's dirty electricity.** Oh, by the way, PNM's allies in the NM State Legislature will soon be introducing bills to roll back New Mexico's Renewable Energy Portfolio Standards altogether.

PNM management's strategy is clear – eliminate or nullify all financial benefits for residential and small business owned PV and wind systems; put NM's fast-growing PV companies out of business, no matter how many jobs are lost; increase and reallocate PNM's electricity rates and fees to provide the maximum possible benefit to PNM; and reward PNM executives with a higher guaranteed profit (and bonuses).

### What Can NMSEA Members Do?

Tiny NMSEA against mighty PNM. Bring it on! You can:

- 1) Get the word out about PNM's outrageous proposals. Different "angles" will appeal to different folks.
- 2) Make the most of your Facebook and Twitter connections.
- 3) Call and email PNM about the error of their ways.
- 4) Submit op-eds to your local newspaper.
- 5) Collaborate with other like-minded organizations to multiply our "impact."
- 6) Contact your PRC Commissioner and make your opinion clear. PRC Commissioners are elected, and they only listen to their own constituents. (PNM lobbyists contact almost every PRC Commissioner almost every week.) Find your Commissioner at: <http://www.nmprc.state.nm.us/index.html>.
- 7) Attend NMSEA local chapter meetings and brainstorm ways to counter PNM's misleading PR campaign. Cartoons and slogans and creative video clips can be amazingly effective.
- 8) Stay tuned! NMSEA will be working hard to keep you informed. ☀

### ABQ Chapter Meetings

You are invited to join us on the 4th Tuesday of odd-numbered months starting on January 27 for a couple of hours of "energy" and education. NMSEA monthly Chapter Meetings in Albuquerque are FREE and open to the public. The topic for the January meeting will be the proposed PNM solar access charge and the current state of storage solutions for PV. We meet at 6:00 PM at the REI store, 1550 Mercantile Ave NE, 87107. We have a variety of speakers and expert-led discussions at each meeting. Come hang out with other concerned citizens to learn how you can do your part, as we all transition toward a more sustainable lifestyle. Share your project successes with us! Experts and novices are all encouraged to attend. We hope that you will join us!

It was nice to read the SunPaper and the comments from the Buchholz Family in Los Alamos (Nov/Dec SunPaper, p. 13.). I understand the frustration mentioned by them. I too have been frustrated by the direction solar energy has taken. Most subdivisions in New Mexico still specifically discourage or disallow solar clothes lines. Santa Fe's new Green Code mentions passive solar, but gives no credit for it. The new energy building codes also talk the talk, but if you want a building permit, you need to provide an energy analysis provided by the federal government. This analysis will give you the same performance number whether your passive solar windows face south, north, east or west. This is unacceptable in 2014.

PV is subsidized up to 40% by our tax money. Passive solar does not get financial credit; why is it not supported by the government? Passive solar is so simple and so economical, but it still needs subsidies to spread.

The Buchholz were so pleased with their simple air collectors. Yes, no real storage system, no thermostats, inefficient air collectors; but they worked and continued to work all these years. It sounds like the tortoise and the hare fable. Good for them, they win. They bet on a very simple idea that the sun shines, heats the box, and that heat can then be pumped into the room. It has been doing that every year since the early 80's.

I just read the book *Let it Shine* by John Perlins. This book summarizes the 6,000 year history of solar energy. It was amazing to see invented gadgets from the 18th century now with real applications, such as the Zomeworks Passive Tracker. Being a part of the solar revolution of the 70's and 80's, I very much enjoyed reading about the early solar movement here in New Mexico and the unique relationship between the national labs and the young architects and hippies who developed simple passive systems that worked. No collectors, no pumps, no tanks. A very different approach to achieve heating and cooling by just the way you designed and orientated the home. I remember the time when I worked with architects David Wright and Bill Lumpkins. Bill was the real driving force behind the passive solar adobe movement. Bill designed his first passive solar adobe in 1935 and has done others throughout his career. David was his intern, and I was David's. Later I worked and studied under Bill Lumpkins as well. New Mexico had its honorable place in the 6,000 year history of solar throughout the world. Even many of us were considered, and I quote, "the lunatic fringe" for this far out approach, which dominated the early part of the state's solar history. We look backwards to go forward. "The lunatic fringe" may have to be the next T-shirt I design and wear with pride. And hats off to the forward thinking Buchholzs.



(Edward Mazria, Continued from page 1)

approach to incrementally reducing fossil fuel consumption in new buildings and major renovations by the year 2030, by which time all new buildings and major renovations should be completely carbon neutral.

The 2030 Challenge was immediately endorsed by the AIA, which used it as an impetus to create new task forces and continuing-education requirements. In 2009, the AIA issued the complementary 2030 Commitment, which helps firms track their progress towards meeting the challenge and offers tools for developing sustainability actions plans for firms' internal operations.

This year, Mazria presented the Roadmap to Zero Emissions to the United Nations Framework Convention on Climate Change (UNFCCC), detailing a clear path to zero emissions in the built environment by 2050. Subsequently, the International Union of Architects (UIA), with member organizations representing over 1.3 million architects in 124 countries worldwide, committed to these targets at their 2014 World Congress with unanimous adoption of the 2050 Imperative, a declaration to eliminate CO2 emissions in the built environment by 2050. As important, all of the regional Architect Councils of Europe, Asia, the Americas and Africa also signed on to the declaration, something that is unparalleled in the 65-year history of the UIA.

Born in Brooklyn, N.Y., Mazria earned an architecture degree from the Pratt Institute and continued with graduate studies at the University of New Mexico. He built a successful practice in New Mexico, becoming an expert on passive solar building design and energy efficiency. During the oil embargos of the 1970s, Mazria closely examined the energy consumption of his buildings – long before any widespread understanding of climate change existed. His projects were bright and airy, filled with natural light, and always attuned – through building form, orientation, and materials – to their climate and ecology. In the early 2000s, while reviewing research on climate change and carbon emissions for a series of workshops at his firm, Mazria noticed that all of the projections at that time did not include a Building Sector – as if, to researchers, Building Sector energy consumption and emissions did not exist. Mazria discovered that those projections were not telling the true story. Our risk of irreparable environmental harm had not been mitigated between the 1970s and the early 2000s, but had metastasized – and he wanted to let architects know.

Mazria looked at how energy consumption is measured in the U.S. Typically, in 2002, energy consumption was broken down into four categories: industry (35 percent), transportation (27 percent), residential (21 percent), and commercial (17 percent). In many cases at that time there were five Sectors – industry, transportation, electricity, residential, and commercial buildings – with buildings at an even smaller percentage. Mazria saw a common theme across several of these categories: these represented buildings, spaces, and materials that were, for better or for worse, designed and

specified by architects. He combined the residential and commercial categories, and placed building materials and a percentage of the industrial category designed by architects in this new group. By redrawing a few lines on a pie graph, Mazria had created the most important statistic in the sustainable design movement: buildings account for nearly half (48 percent) of all U.S. energy consumption.



Ed Mazria photo by Jamey Stillings

#### About Architecture 2030

Architecture 2030 is a 501(c)(3) nonprofit research organization with a mission to rapidly transform the built environment from the major contributor of greenhouse gas (GHG) emissions to a central part of the solution to the climate and energy crises. Architecture 2030 pursues two primary objectives: the dramatic reduction in global fossil fuel consumption and GHG emissions of the built environment by changing the way cities, communities, infrastructure, and buildings, are planned, designed, and constructed and; the regional development of an adaptive, resilient built environment that can manage the impacts of climate change, preserve natural resources, and access low-cost, renewable energy resources. Website: [architecture2030.org](http://architecture2030.org). Twitter: @arch2030. Facebook: Architecture2030.

#### About The American Institute of Architects

Founded in 1857, members of the AIA consistently work to create more valuable, healthy, secure, and sustainable buildings, neighborhoods, and communities. Through nearly 300 state and local chapters, the AIA advocates for public policies that promote economic vitality and public well being. Members adhere to a code of ethics and conduct to ensure the highest professional standards. The AIA provides members with tools and resources to assist them in their careers and business as well as engaging civic and government leaders, and the public to find solutions to pressing issues facing our communities, institutions, nation and world. Visit [www.aia.org](http://www.aia.org).

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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 electronically 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: \_\_\_\_\_

Phone: (H) \_\_\_\_\_ (W) \_\_\_\_\_

Email: \_\_\_\_\_

Any special Solar interests? \_\_\_\_\_

\_\_\_\_\_

Yes, I would like to volunteer on occasion!

How did you hear about us? \_\_\_\_\_

**NMSEA Chapters**

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: NMSEA 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 (by default) to the main office general fund:

Affiliation	Donation
<input type="checkbox"/> Alamogordo Chapter	\$ _____
<input type="checkbox"/> Albuquerque Chapter	\$ _____
<input type="checkbox"/> Las Vegas Chapter	\$ _____
<input type="checkbox"/> Los Alamos Chapter (LASE)	\$ _____
<input type="checkbox"/> Santa Fe Chapter	\$ _____
<input type="checkbox"/> Taos Chapter	\$ _____
<input type="checkbox"/> Silver City Chapter	\$ _____

Dr. Wm A Gross RE Education Fund \$ \_\_\_\_\_

**NMSEA Membership Dues**

<input type="checkbox"/> Individual / Family, 1 year	\$40
<input type="checkbox"/> Business, 1 year	\$100
<input type="checkbox"/> Individual Lifetime	\$325
<input type="checkbox"/> Senior (65 & up) /Discounted, 1 year	\$20
<input type="checkbox"/> Teacher / Student (with certification), 1 year	free



**Combined NMSEA & 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, discounts on ASES Conferences, publications, and more! For more info about ASES and ASES membership benefits, please visit [www.ases.org](http://www.ases.org)

ASES is offering a discount on ASES Membership & Combined ASES & NMSEA Membership if:

you JOIN on-line using the ASES website at [www.ases.org/join](http://www.ases.org/join)

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If you are or wish to become a member of ASES, please take advantage of this discount & join/renew via the ASES website.

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For more information, please call **505-246-0400** or visit [www.nmsea.org](http://www.nmsea.org).

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**Mission Statement:** We promote clean, renewable energy and sustainability in New Mexico through education, empowerment, collaboration and advocacy.

Please consider investing your time and/or money toward solar energy education through NMSEA.

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

## Coming Events

- Jan. 27, 2015 **Albuquerque Chapter Meetings**, Fourth Tuesdays at REI, 1550 Mercantile NE, 6:00 to 8:00 PM, odd numbered months, only. Topic: proposed PNM solar electric charges and current PV storage solutions.
- March 3 **Board of Directors Meeting**, Tuesday, NMSEA office, 1009 Bradbury Dr. SE, Albuquerque, 87106. Meeting at 6:00 PM, starting with potluck dinner at 5:30. Members welcome.