

Hello All!

This is the July edition of "Under the Sun," the monthly e-newsletter from the Arizona Solar Energy Association.

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### 1. Net Metering (meters runs backwards) for APS solar Customers

Net Metering refers to the way in which utilities buy solar electricity from their customers. When selling electricity to the grid with net metering, the meter spins backwards. TEP and SRP already voluntarily had some form of net metering, but this forces APS and the others to do it to. Homes and businesses that have solar electric power plants on their property typically do not have any form of storage; the electricity flows in real time. If the customer is not using that power (say a homeowner is not home during the day), it flows back on to the utility grid, and his neighbor will most likely use the solar generated electricity.

HOW IT WAS: solar "sold" to APS was worth \$0.03 / kWh on ET-1 (average)  
(ET-1 is the 9 to 9 plan, where it's cheaper at night. It's APS' most popular residential rate)

Up until now, APS was only paying the "avoided cost" for that electricity to the solar customer, which is somewhat LOWER than the WHOLESALE rate for it...a pretty crummy deal.

HOW IT IS NOW: solar "sold" to APS now worth \$0.13 / kWh on ET-1 (average)

Fortunately, now with Net Metering, APS compensates residential and commercial solar customers with a full retail rate credit. Even if you're on a time of use plan, where it's more expensive during the day, they will buy solar generated electricity at the expensive rate, if that is the time you sell it (with APS, that's during the day, so most of what you sell is bought at the higher price). There is even monthly rollover, so you can save up for summer. However, at the end of the year, APS will zero out any left over credits, with no compensation to the customer.

This is a 3 year pilot program, after which, APS will approach the ACC and try to raise rates to "get their money back" for this program.

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### 2. APS raises rates

The headlines read that the increase was 6.8%. However, for residential customers, it was closer to 10%. They had asked for a 20% increase, and got a total of 6.8%. So, they'll be back soon for another stab at you...I mean 'it.'

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### 3. ASEA Chair Resigns

I guess that's me. As much love as I have for the grass-roots solar movement in Arizona, and as important as it is to me, I never planned to be chair this year at all. With the elections being continuously delayed, I ended up staying chair for most of this year, despite other commitments and plans for my life. I don't regret a second of it. It's been fun, rewarding, and a great learning experience for me. I really enjoyed working with all the other people, all who selflessly dedicated their time and efforts for the most noble of causes. I wish I could stay on, as this is core for me,

but with my full-time day job in solar electricity, and heading a statewide non-profit organization dedicated to solar, I'd say I'm a bit burnt out (pun intended). However, I will continue my work in the for-profit sector, and I will continue to be a strong contributor to this e-newsletter.

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#### 4. Local Solar Events

July 19 - City of Scottsdale Solar Lecture. July Topic: Passive Solar and Sustainable Building - Basic design considerations and strategies for appropriate desert buildings, new and existing. A how-to/what-to-do guide to improving conditions and sustainability in the desert. Location: Scottsdale Granite Reef Senior Center, 1700 N. Granite Reef Rd. This monthly event is free. 3rd Thursday, 7:00-9:00 p.m. For more information call Dan Aiello at 602.952.8192 or City of Scottsdale at 480.312.2245. Scottsdale, AZ

July 25 - ASEA Sedona Chapter Meeting (4th Wednesday of the month). 7:15 p.m. Sedona Winds Retirement Home, 405 Jacks Canyon Rd. For more information, contact Bill Buckner, realtorbill@earthlink.net or (928) 203-1018, Sedona, AZ

August 2 - City of Scottsdale "Green Building" Lecture, 7:00 - 9:00 p.m. Topic: TBD, Scottsdale, AZ

August 16 - City of Scottsdale Solar Lecture. August Topic: Active Systems/Equipment Primer - Presentations on solar power generation and solar water heating - large scale and small. Also economics and incentives for going solar and sustainable. Location: Scottsdale Granite Reef Senior Center, 1700 N. Granite Reef Rd. This monthly event is free. 3rd Thursday, 7:00-9:00 p.m. For more information call Dan Aiello at 602.952.8192 or City of Scottsdale at 480.312.2245. Scottsdale, AZ

August 21 - Tour the STAR Center, 8:30 a.m. Third Tuesday of each month. Reservations required. Call Janet Crow (602) 250-4990 for reservations, Tempe, AZ

August 22 - ASEA Sedona Chapter Meeting (4th Wed. of the month). 7:15 p.m. Sedona Winds Retirement Home, 405 Jacks Canyon Rd. For more information, contact Bill Buckner, realtorbill@earthlink.net or (928) 203-1018, Sedona, AZ

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#### 5. Energy Legislation Roundup & Congress Scorecard (mostly from Beth Troncone with SWEEP; scorecard from AZLCV)

##### SUCCESSFUL BILLS IN 2007 LEGISLATION

HB 2496 - Schools; Energy and Water Savings (Contracting Mechanism for Schools) (SRP)  
Increases energy efficiency and reduces utility (energy and water) costs in schools by creating a utility savings contracting mechanism to enable energy and water saving projects.  
Reduces utility costs in schools by creating an energy and water savings contracting mechanism to allow utility cost savings accounted for in the Maintenance & Operations portion of school budgets to pay for the capital investment in energy or water saving measures. This enables schools to use funding from utility companies to implement energy and water saving measures.

Passed House, Senate and is signed by the Governor.

HB 2494 - Energy; Water; Savings Loan Fund (Striker: grant fund for schools)  
Develops a grant fund for cost-effective energy and water saving projects in existing schools, to reduce utility costs in schools. (Priority in House majority platform)  
Develops a grant fund of \$2.5 million to assist existing school facilities in implementing energy and water saving projects. Fund to be administered by the School Facilities Board, with technical assistance provided by the Department of Commerce Energy Office.

Passed the House, Senate, and is signed by the Governor.

HB 2491 - Solar Energy Tax Credit; Application (technical correction)

Clarifies that the commercial solar energy tax credit may be claimed by a third party.

Technical correction to the commercial solar energy tax credit that passed last year. Clarifies that the tax credit may be claimed by a third party, such as the developer of the solar project.

Passed House, Senate and is signed by the Governor.

Solar is now HOA OK!!! (aka SB1254)

There has been a law on the books in AZ for nearly 30 years that's purpose was to stop Home Owners' Associations from prohibiting the use of solar energy devices. Since there has been so much time wasted and money spent on lawyers fees, and since technology has changed since then, the wording needed to be updated, and it was. This bill passed the State House and Senate UNANIMOUSLY!

How it was:

HOAs couldn't "effectively prohibit" the use of solar. This language did not stop lawyers and HOAs from harassing people or making it expensive, difficult, and time consuming.

How it is now:

HOAs can't "increase the cost or decrease the production" of solar energy devices. If it's a matter of pure aesthetics, they can have a say in it, but they can't start with the whole, "you need to shield it, put it on the ground, paint it, or put it on the north side of your home, etc." Finally they'll shut up!

HB 2638 – Local Energy Plans (Cajero-Bedford) (Susan Culp, Sonoran Institute)

Amends ARS Title 9: Cities and Towns - 9-461.05 and Title 11: Counties 11-821, relating to City and County plans, adding a new energy section to:

- Encourage and reward efficient use of energy in the community;
- Assess policies and practices that provide for greater use of renewable energy sources.

The Growing Smarter Oversight Council, recommended this change in its 2006 report.

Passed the House, Senate, and is signed by the Governor.

#### UNSUCCESSFUL BILLS IN 2007 LEGISLATION

HB 2493 – Energy Production; Tax Credit (Combined Heat and Power) (Southwest Gas)

Provides a state tax credit to encourage efficient combined heat and power (CHP) systems.

Provides a tax credit (1.5 cents for each kWh produced) for the production of electricity from efficient and clean Combined Heat and Power systems (CHP), which generate electricity and thermal energy from a single fuel source (previously labeled “cogeneration”). CHP systems can also be used to provide dedicated power to essential services in case of a grid emergency.

Includes caps of \$2 million total annually and \$100,000 per installation. Includes language allowing the tax credit to be claimed by a third party, such as the developer of the CHP project, for example, if the customer is a non-tax paying entity.

Passed House Committees; in the House money box (initial budget), but removed from draft budget during week of 4/16 (working to get it reinstated in House budget). Died in the Budget process.

HB 2497 - Public Buildings; Energy Savings Goals

Reduces state utility costs by increasing the energy savings goals for state facilities.

Increases the energy savings goals in ARS 34-451.C (10% reduction in energy use per square foot of floor area by 2008, and 15% reduction per square foot of floor area by 2011) by adding a provision to increase the energy savings percentage to 20% per square foot of floor area on or before July 1, 2015. In addition, clarifies that 34-451.E (requirement to purchase cost-effective Energy Star or FEMP-designated products) applies to all state agencies, universities, community colleges, and schools, and not solely to the state building systems currently listed in 34-451.C. Changes the Energy Office annual reporting date to October 1 (from July 1).

Passed House Committees, but on the House money bill list; not in the money box. Apparently it is stalled partly as an issue in the budget discussions between the Governor and the House. Died in the budget process.

HB 2495 - Schools; Energy Performance Standards (SFB Standards, Consider LEED)  
Increases energy efficiency and reduces utility costs in new schools.  
Implements energy and water performance standards (to be approved by the School Facilities Board) that all new school projects approved after June 30, 2007 must meet. Requires that the School Facilities Board consider Leadership in Energy and Environmental Design (LEED) standards for new schools. The amendment in WA provides a funding mechanism (5% of the base cost of a new school) and caps any increase in cost at 5% of the base cost.

Passed House Committees, but on the House money bill list; and not in the House money box. Existing schools (HB2494) considered a higher priority by House leadership. Died in Budget.

HB 2691- Renewable Energy Enterprise Zones  
Uses the existing enterprise zone system to create incentives for the installation of new large solar generation and renewable system manufacturing. Adds language to the enterprise zone statute to create Renewable Energy Enterprise Zones (ARS Chapter 41, Chapter 10, Article 2), and rewards power producers and manufacturers that locate and operate in enterprise zones in Arizona.

Did not move forward in the House. Didn't get past first read.

The Arizona League of Conservation Voters released their 2007 Arizona Legislative Session scorecard just the other day. It is available in full on their website, but I have taken the stats and included it at the bottom of this email for your convenience. Please take a look at the whole thing here: <http://www.azlcv.org>

District 1 86%  
Sen. Tom O'Halleran, R (Sedona) 99%  
Rep. Lucy Mason, R (Prescott) 70%  
Rep. Andrew Tobin R (Paulden) 89%  
District 2 100%  
Sen. Albert Hale, D (Window Rock) n/a  
Rep. Ann Kirkpatrick, D (Flagstaff) 100%  
Rep. Albert Tom, D (Chambers) 100%  
District 3 36%  
Sen. Ron Gould, R (Lake Havasu City) 18%  
Rep. Trish Groe, R (Lake Havasu City) 19%  
Rep. Nancy McLain, R (Bullhead City) 71%  
District 4 56%  
Sen. Jack Harper, R (Surprise) 48%  
Rep. Tom Boone, R (Peoria) 69%  
Rep. Judy Burges, R (Skull Valley) 51%  
District 5 67%  
Sen. Jake Flake, R (Snowflake) 59%

Rep. Jack Brown, D (St. Johns) 77%  
Rep. Bill Konopnicki, R (Safford) 66%  
District 6 44%  
Sen. Pamela Gorman, R (Anthem) 30%  
Rep. Doug Clark, R (Anthem) 46%  
Rep. Sam Crump, R (Anthem) 57%  
District 7 61%  
Sen. Jim Waring, R (Phoenix) 61%  
Rep. Ray Barnes, R (Phoenix) 57%  
Rep. Nancy K. Barto, R (Phoenix) 66%  
District 8 68%  
Sen. Carolyn Allen, R (Scottsdale) 91%  
Rep. Michele Reagan, R (Scottsdale) 63%  
Rep. John Kavanagh, R (Fountain Hills) 51%  
District 9 49%  
Sen. Robert Burns, R (Peoria) 47%  
Rep. Rick Murphy, R (Glendale) 46%  
Rep. Bob Stump, R (Peoria) 54%  
District 10 74%  
Sen. Linda Gray, R (Glendale) 56%  
Rep. Jackie Thrasher, D (Glendale) 100%  
Rep. James Weiers, R (Phoenix) 66%  
District 11 79%  
Sen. Barbara Leff, R (Paradise Valley) 73%  
Rep. Mark Anthony DeSimone,  
D (Phoenix) 97%  
Rep. Adam Driggs, R (Phoenix) 66%  
District 12 54%  
Sen. Robert Blendu, R (Litchfield Park) 58%  
Rep. John Nelson, R (Glendale) 54%  
Rep. Jerry Weiers, R (Glendale) 49%  
District 13 94%  
Sen. Richard Miranda, D (Tolleson) 81%  
Rep. Steve Gallardo, D (Phoenix) 100%  
Rep. Martha Garcia, D (Phoenix) 100%  
District 14 99%  
Sen. Debbie McCune-Davis, D (Phoenix) 97%  
Rep. Chad Campbell, D (Phoenix) 100%  
Rep. Robert Meza, D (Phoenix) 100%  
District 15 92%  
Sen. Ken Chevront, D (Phoenix) 86%  
Rep. David Lujan, D (Phoenix) 91%  
Rep. Kyrsten Sinema, D (Phoenix) 100%  
District 16 94%  
Sen. Leah Landrum Taylor, D (Phoenix) 99%  
Rep. Cloves Campbell, Jr., D (Phoenix) 96%  
Rep. Ben Miranda, D (Phoenix) 86%  
District 17 99%  
Sen. Meg Burton Cahill, D (Tempe) 97%  
Rep. Ed Ableser, D (Tempe) 100%  
Rep. David Schapira, D (Tempe) 100%  
District 18 35%  
Sen. Karen Johnson, R (Mesa) 29%  
Rep. Mark Anderson, R (Mesa) 51%  
Rep. Russell Pearce, R (Mesa) 26%  
District 19 55%

Sen. Chuck Gray, R (Mesa) 60%  
Rep. Kirk Adams, R (Mesa) 53%  
Rep. Rich Crandall, R (Mesa) 51%  
District 20 58%  
Sen. John Huppenthal, R (Chandler) 61%  
Rep. John McComish, R (Phoenix) 57%  
Rep. Robert Robson, R (Chandler) 57%  
District 21 57%  
Sen. Jay Tibshraeny, R (Chandler) 84%  
Rep. Warde Nichols, R (Chandler) 40%  
Rep. Steve Yarbrough, R (Chandler) 46%  
District 22 28%  
Sen. Thayer Verschoor, R (Gilbert) 37%  
Rep. Andy Biggs, R (Gilbert) 23%  
Rep. Eddie Farnsworth, R (Gilbert) 25%  
District 23 91%  
Sen. Rebecca Rios, D (Apache Junction) 97%  
Rep. Barbara McGuire, D (Kearny) 80%  
Rep. Pete Rios, D (Hayden) 97%  
District 24 85%  
Sen. Amanda Aguirre, D (Yuma) 70%  
Rep. Lynne Pancrazi, D (Yuma) 84%  
Rep. Theresa Ulmer, D (Yuma) 100%  
District 25 75%  
Sen. Marsha Arzberger, D (Willcox) 76%  
Rep. Manuel Alvarez, D (Elfrida) 77%  
Rep. Jennifer Burns, R (Tucson) 71%  
District 26 92%  
Sen. Charlene Pesquiera, D (Oro Valley) 87%  
Rep. Pete Hershberger, R (Tucson) 90%  
Rep. Lena Saradnik, D (Tucson) 100%  
District 27 99%  
Sen. Jorge Luis Garcia, D (Tucson) 97%  
Rep. Olivia Cajero Bedford, D (Tucson) 100%  
Rep. Phil Lopes, D (Tucson) 100%  
District 28 100%  
Sen. Paula Aboud, D (Tucson) 100%  
Rep. David Bradley, D (Tucson) 100%  
Rep. Steve Farley, D (Tucson) 100%  
District 29 97%  
Sen. Victor Soltero, D (South Tucson) 97%  
Rep. Linda Lopez, D (Tucson) 100%  
Rep. Tom Prezelski, D (Tucson) 94%  
District 30 64%  
Sen. Tim Bee, R (Tucson) 61%  
Rep. Marian McClure, R (Tucson) 63%  
Rep. Jonathan Paton, R (Tucson) 69%

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That does it for this edition.

Ben Marcus  
Past Chairman - Arizona Solar Energy Association



...let go of your anchors and your wings if you have to