

# CONNECTING TO THE GRID

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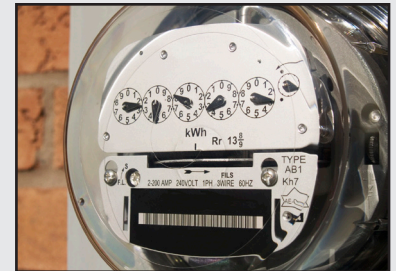
USDA survey shows an increase in farm-based renewables

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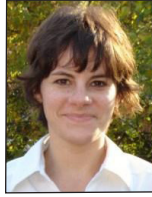


### ABOUT THIS NEWSLETTER

While customer-sited net metering and interconnection policies are primarily addressed at the state level, they are also becoming important on a regional basis. This newsletter has been designed to provide state-level policy updates and capture emerging regional trends. *Connecting to the Grid* is a free, electronic newsletter published each month by the Interstate Renewable Energy Council (IREC) and the North Carolina Solar Center at North Carolina State University. [Click here to subscribe.](#)

Please direct comments and questions about the newsletter to Laurel Varnado at [lvarnad@ncsu.edu](mailto:lvarnad@ncsu.edu).





## A DOCTOR, A LAWYER AND AN ENGINEER WALK INTO A BAR...



Chances are pretty good that only the lawyer can correctly explain indemnification. It's a good thing that renewable energy lawyers really understand it too, since indemnification provides an important consumer protection when it comes to grid interconnection.

In its purest form, indemnity is a means of shifting the ultimate responsibility for payment to the party who caused the injury. This means that if one party to a contract is sued, and not at fault, the other party must pay to defend the lawsuit and also (potentially) any settlement rendered against the other party. Not all states address this issue in their interconnection rules and some even allow the utility to require that customers must indemnify the utility but not vice versa (i.e., unilateral indemnification). Washington State's interconnection procedures, for example, allow utilities to require unilateral indemnification for systems up to 300 kW that are ineligible for net metering.

Jason Keyes, an attorney who represents IREC, explained it by providing three examples of how a mutual indemnification provision in an interconnection agreement might apply to a customer generator:

- 1) There is a voltage surge that damages your neighbor's computers. Your neighbor files a lawsuit against the utility and you - because you have a big photovoltaic (PV) array on your roof. It couldn't have been caused by your panels however because they haven't even been interconnected yet. You still have to defend against the suit, and the utility has to pay your legal expenses due to the indemnity clause, because there was no wrongdoing on your part. The utility will probably want to help you get out of the case and avoid paying your legal bills.
- 2) There is another voltage surge that damages your neighbor's computers again. He files a lawsuit against the utility and you. This time your PV array was up and running, but it isn't clear whether the voltage surge came from you or the utility and there's no way to find out. Both you and the utility end up paying and neither would owe indemnity to the other.
- 3) One of your modules blows off a roof and hits a car. The driver files suit against you and the utility - on the basis that it approved the interconnection and should have made it safe. The utility didn't do anything wrong and isn't responsible for the construction, just the interconnection. The utility still has to defend itself in court, and can ask you to pay for the legal expenses. It's probably in your interest to help the utility get out of the case quickly so that it doesn't incur big legal expenses that you would have to pay.

According to Cindy Burda, assistant general counsel for SunEdison, it is quite rare for a party to seek indemnification under an indemnity clause. Because it adds a measure of protection for both customer and utility, however, it's considered to be

“Indemnity clauses have been a tremendous problem for some of our government-sector customers”

# NOTE FROM THE EDITOR

among the best practices for interconnection procedures.

Indemnification provisions can be problematic for many government entities that are not allowed to contractually agree to any open-ended liability. Governmental entities are often limited by constitutional mandate from entering into certain contracts, due to restrictions on the use of public funds and public credit. The inability for government entities to sign a contract with an indemnification provision can be a major hurdle when the applicable standard interconnection agreement includes an un-signable indemnification provision. If the connecting utility is not willing to modify the contract, it could make the interconnection impossible. At the very least, it requires additional contract negotiation not required for other private customer-generators. “Indemnity clauses have been a tremendous problem for some of our government-sector customers,” Ms. Burda confirmed in a recent conversation. “It’s not always an issue but when it is, it can be a sizable one.”

States can mitigate, or even avoid entirely, such problems for government-sector customers by adopting standard interconnection agreements that include language exempting them from indemnification provisions. Doing so would ensure that government entities would be able to interconnect (as long as they are otherwise qualified to do so). Exceptions for government customer-generators do not exist in most current interconnection rules. IREC and others suggest they should be included. In a recent net metering rulemaking in Indiana, for example, IREC suggested this language as a way to address the issue: “*This indemnification provision is not applicable in the case of governmental net metering customers that are restricted from entering into indemnification provisions.*” A short sentence with simple easy-to-understand language can go a long way toward facilitating the interconnection process for a government facility that might not otherwise be able to invest in renewable energy.

So here’s to all the lawyers out there like the [Keyes and Fox team](#), who are continually working to streamline the interconnection process and shed light on important issues like indemnification. Cheers!

Regards,  
Laurel Varnado and  
Tommy Cleveland

“It is possible to mitigate, or even avoid entirely, such problems for government-sector customers with standard interconnection agreements that include language exempting them from indemnification provisions.”

# STATE NEWS IN DETAIL

## NORTHEAST STATES

### MASSACHUSETTS

The Massachusetts Department of Energy Resources has created a survey for previous interconnection customers in order to gain feedback to inform the current interconnection procedures revision process.

Respondents must have had experience interconnecting distributed generation systems in Massachusetts. Survey questions assume familiarity with the Massachusetts utility Interconnection Tariffs. Respondents may find it useful to have a copy of a tariff on hand during the survey (the tariffs for each utility are available at the Mass. DG and Interconnection website).

The DOER requests customers to [participate in the on-line survey](#) before 5 PM on Monday, April 11. The survey should take no longer than 30 minutes.

This survey is not limited to a pre-selected statistical sample, so all input is welcome.

Respondents willing to provide more detailed comment after the survey may do so through a supplemental

Excel spreadsheet that is available on the [DG and Interconnection site](#). This reply option is open through April 13.

This survey is one component of a comprehensive examination of Massachusetts' current DG Interconnection processes. Other steps include national research into "best practices," data from the experience of past DG applicants in the state, and technical solution sessions. The survey results and all other study components will be integrated into the final consultants' report. The report will also recommend ways to address challenges identified in this examination.

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Also, in a March 31, 2011 notice, the Massachusetts Department of Public Utilities noted the continued need for developing a system that provides an assurance of eligibility for proposed non-governmental net metering facilities. The current aggregate capacity for non-government facilities may not exceed 1% of a distribution company's highest historical peak load.

On March 23, the DPU held a technical conference to discuss proposed straw proposals related to developing a system that provides an assurance of eligibility for proposed net metering facilities. At this conference participants discussed possible criteria for providing an assurance of eligibility for proposed net metering facilities.

In view of the discussion, participants stated they would like an opportunity to revise their straw proposals. Accordingly, the DPU invites participants to file, by April 15, 2011, revised straw proposals for a net metering queue for proposed net metering facilities. To the extent feasible, the DPU is asking

participants to work together and file a single straw proposal per stakeholder group.

Source: [DPU Docket 11-11 Notice from March 31, 2011](#), [Notice of Revised Deadline](#)

### NEW HAMPSHIRE

The New Hampshire Public Utilities Commission has issued [proposed rules](#) that would increase the allowable net metering system size limit from 100 kW to 1 MW. These rules come as a result of [HB 1353](#), enacted in 2010. The proposed rules also raise the aggregate participation limit from 1% of a utility's annual peak demand to a number derived from multiplying 50 MWs by the utility's percentage share of the total 2010 annual coincident peak energy demand for New Hampshire.

The proposed rules define a small customer generator as one with a system under the current size limit (100 kW) and a large customer generator as one with a system between 100 kW and 1 MW.

Small generators must have a single meter capable of recording the customer's net energy usage and which measures both the customer's use from the utility and the production from the customer's generation facility. Small customers are not required to pay for the meter.

Large customers must have a bi-directional metering system that records bi-directional energy flow and records measurements instantaneously or over intervals of an hour or less. Large customers must pay for the installation of the meter.

For small generators, if net excess generation exceeds 600 kWh, the customer-generator may elect to receive an annual payment from the utility equal to the economic value of accumulated surplus (essentially the avoided cost plus a capacity value), otherwise the credits will roll over to the next month. Large customers may elect to roll credits over to the next month or receive the avoided cost and capacity value payment if they have experienced at least one billing cycle with surplus kWh during the year.

Renewable energy certificates associated with the customer-generator's facility remain the property of the customer until they are sold or transferred.

## MID-ATLANTIC STATES

### DISTRICT OF COLUMBIA

The DC PSC would like to hear from residential ratepayers regarding your concerns about understanding their utility bills. The Commission has made a number of proposals regarding new, revised and additional information to all D.C. consumers' monthly bills from PEPCO and Washington Gas.

Initial comments of the DC PSC's proposed revisions to monthly utility bills are due by April 25, 2011.

Please follow the following link to view the Notice in its entirety - [Formal Case No. 1078, In the Matter of an Investigation into the Adequacy of Billing Information on Monthly Utility Bills](#).

The initial proposals sent to the PSC do not address improving bill readabil-

ity for solar producers.

Source: [Solar Power in DC Blog](#) (There are 12 neighborhood cooperatives advocating for solar energy. These coops have joined together to form DC Solar United Neighborhoods (DC SUN).)

### VIRGINIA

On March 18, 2011, Virginia Governor Bob McDonnell signed [House Bill 1983](#), which increases the residential limit for net metering from 10 kW to 20 kW.

In addition, the bill requires that residential facilities larger than 10 kW must pay a monthly standby charge. These changes are effective July 1, 2011.

## MIDWESTERN STATES

### MINNESOTA

A record number of solar photovoltaic (PV) systems were installed in Minnesota in 2010, according to the Minnesota Utility Solar Integration Rankings compiled by the Minnesota Department of Commerce's Office of Energy Security (OES).

The 2010 rankings, designed to highlight utilities in Minnesota that are leading the integration of solar electricity into the grid, found a record 248 new PV systems were installed last year, nearly tripling the previous re-

cord of 76 PV systems in 2009.

"As a clean and abundant energy source, we are pleased to see real progress in solar energy systems in Minnesota," said Mike Rothman, Commissioner of the Minnesota Department of Commerce. "Our department is working hard to ensure that as one of the fastest growing forms of clean energy, solar will be part of Minnesota's energy mix into the future."

The growing number of solar installations in Minnesota has a broad impact on the state.

"More solar installations translates into more clean energy jobs being added to the state's economy, many in the growing number of Minnesota-based solar energy companies," Commissioner Rothman said. "Minnesota's air is also cleaner and our carbon footprint is more sustainable as a result of this growth in solar energy."

Installations of PV systems in 2010 totaled 1.8 megawatts (MW) of renewable energy. At present, Minnesota has 606 known PV installations with a total capacity of four megawatts – nearly double the known capacity in 2009 according to OES.

Source: [Hometown Source](#)

### SOUTHERN STATES

#### TENNESSEE

While power-purchase agreements (PPAs) are popping up throughout the U.S. as a means of financing solar projects with little or no up-front costs for the end beneficiary, things are a bit different in Tennessee. For that matter, they're different in all seven states served by TVA (the Tennessee Valley Authority).

TVA, a federal corporation, supplies electricity and other utility services to seven southeastern U.S. states. And its bylaws prohibit the agency from recognizing third-party power providers, said Jake Tisinger, sustainability coordinator for Knoxville, Tenn. "Their agreements don't allow anyone to sell power in the area unless you're a distributor," he said.

The city is developing a plan that will allow it to install a 90-kilowatt array on its convention center through a third-party (technically a fourth party) to help reduce the upfront costs of the system while reducing its energy costs.

"We can't have PPAs since we're in the TVA region," said Tisinger. "So this is our way to figure out how to have this third-party financing structure."

The system hasn't been installed yet, according to Tisinger. Contract issues are now being worked out.

But it will work like this: The city will pay \$250,000 in American Recovery and Reinvestment Act funds to install the system at the convention center. The installer will own the solar array and

will lease the roof space from the city.

The array will send electricity back to the grid, through the city's meter, which is serviced by the Knoxville Utilities Board as the local utility. The board administers the power, which is bought by TVA. Since it's going through the city's meter and not a third-party meter, TVA recognizes it. Finally, Knoxville transfers the generating credits produced by the system to the installer, Tisinger said.

Knoxville will use its experience to develop a model that other TVA cities and states can use to reduce the upfront costs of solar as well, Tisinger said.

"It's been a lot of number crunching, trying to figure out how it works best. As soon as it's up, we'll be ready to share with other states in the TVA region."

Source: [Clean Energy Authority](#)

#### TEXAS

After dozens of complaints from El Paso residents who have solar panels on their homes, El Paso Electric and the city will work together to create a net metering plan.

A local television station reported last week on one woman who found out that she owed the electric utility more than \$2,000 in bills for four months, despite selling the utility electricity she generates with her solar panels.

That resident is among quite a few who were outraged to find that even though they were being paid \$0.03 per kilowatt for the electricity they generated, they were among the general consumers being charged \$0.10 per kilowatt for

using the electricity.

The net metering plan will allow those who generate power to receive retail credit for a portion of the electricity they generate.

Source: [KVIA](#)

### WESTERN STATES

#### ARIZONA

Plenty of schools and school districts across the country are adding solar to their roofs under long-term power-purchase agreements (PPAs). But Tucson Electric Power's (TEP's) new Bright Roofs program would lease the space from school roofs to provide solar power to the grid, not the schools.

The company plans to lease school and other public facility rooftops to develop 11 megawatts (MWs) of solar capacity, which TEP would own, over the next three years.

"We saw an opportunity to make use of unutilized space in our service areas," said TEP spokesperson Joe Salkowski.

Under the program, schools and public facilities with at least 50,000 square feet of flat rooftop space, enough room for a 250-kilowatt photovoltaic array, are eligible.

At this point TEP hasn't signed any contracts (the program was announced this week), but some schools have already expressed interest. The Tucson Unified School District is considering putting solar on six of its high schools, according to the Arizona Daily Star.

Generally, it's easier to find locations for solar arrays on the outskirts of towns and

more difficult to find it in developed areas, according to Salkowski.

“This makes it easier to find space and generate lease revenues for them,” he said.

“One of the advantages of this program is that it gives us an opportunity to locate solar within our developed areas. Near where our load is, it can be helpful. We do have need of the larger systems we will be building just as a matter of scale. We need both,” Salkowski said.

The utility, which services the Tucson, Ariz., metro-area and some nearby unincorporated areas, is adding in more solar to meet the requirements of the state’s renewable energy standard, which will require utilities in the state to source 15 percent of their power from renewables by 2025.

The portfolio standard also includes a significant distributed generation carve-out. It requires, by 2012, 30 percent of a utility’s renewable energy to come from distributed sources not owned by the utility, making the Bright Roofs program ineligible under the carve-out. The company has been meeting those carve-outs, according to Salkowski.

Source: [Clean Energy Authority](#)

### COLORADO

Xcel’s Solar\*Rewards program was reinstated March 23, with a reduced up-front rebate and an extended performance-based renewable energy credit. The Colorado Public Utilities Commission approved the new version of the program March 18. It’s based on a compromise agreement among the stakeholders, giving the solar industry some predictability and addressing some of the program’s cash-flow and debt issues.

The Public Utilities Commission heard a full day of testimony, mostly supporting the agreement. After deliberating, the three

PUC members agreed to the settlement “with reservations.”

This has been a long, dry period for solar sales in Colorado. On February 16, Xcel Energy abruptly halted the successful Solar\*Rewards program. At that time, Xcel proposed dropping the rebate from \$2.00 per watt of installed solar power to \$0.25 per watt. Xcel shut down the rebate program to await a decision by the PUC.

Xcel claimed that the Solar\*Rewards program was too successful. The solar industry had far exceeded the expectations of the Xcel Solar\*Rewards program management. Because the program is funded by a 2% charge to Xcel customers, the rate of rebate applications exceeded the available funding, so Xcel needed to borrow to pay the rebates.

Source: [Summit County Citizen’s Voice](#)

### IDAHO

The Idaho Public Utilities Commission has denied most of a petition for reconsideration by the Northwest and Intermountain Power Producers Coalition (NIPPC) that asked the commission, among other things, to reverse its Feb. 7 order that temporarily reduced the eligibility cap for wind and solar projects that can qualify for commission-established rates.

On Feb. 7, the commission issued an order that said wind and solar project developers who want to be paid a rate published by the commission can be no larger than 100 kilowatts. Previously, projects up to 10 average megawatts in size could qualify for the published rate. Utilities can still be required to buy from renewable projects larger than that, but the rate is negotiated with utilities based on a least-cost planning model developed through a commission-approved Integrated Resource Planning (IRP) Meth-

odology. The commission modified the eligibility for its published rates in response to a petition by utilities that claims large-scale wind farms are breaking up their projects into smaller 10-MW increments in order to qualify for the commission rate.

NIPPC, which represented wind developers in this case, petitioned for reconsideration of the order and asked, among other things, that the commission require utilities to immediately implement changes to their IRP methodology and calculate a new rate to be paid small-power producers with projects larger than the previous eligibility cap of 10 aMW. That, the wind developers argue, would allow for an IRP-based negotiated rate that is more attractive to developers and would make it no longer necessary to break-up their projects to be small enough to qualify for the commission’s published rate. NIPPC also asked the commission to reinstate the 10aMW eligibility cap for wind and solar projects that seek to be paid the published rate.

The commission said NIPPC’s primary argument is with the 1995 commission-adopted IRP methodology used for larger projects, which was not an issue in this case. “Attacking the IRP methodology approved by the commission in 1995 and utilized for the past 16 years in an effort to stop the commission from reducing the eligibility cap for wind and solar projects represents a collateral attack of the commission’s final order adopting the IRP methodology,” the commission said. If NIPPC desired to challenge the IRP methodology, it could have petitioned the commission to open an investigation, the commission said. The commission intends to examine NIPPC’s issues regarding the IRP methodology in a subsequent case.

NIPPC also claimed the commission should have conducted a technical hearing before issuing its Feb. 7 order. The commission elected to handle the case through a process called “modified procedure”

that allows for written comments rather than hearings. NIPPC, as did most parties to the case, submitted initial comments and reply comments and actively participated in oral arguments. “NIPPC has not proven that its position could not be adequately presented in writing,” the commission said.

Finally, NIPPC asked that a number of documents and records that it cited in oral argument be included in the case record. The commission accepted some of those documents, but not all.

A full text of the commission’s order, along with other documents related to this case, is available on the commission’s Web site at [www.puc.idaho.gov](http://www.puc.idaho.gov). Click on “File Room” and then on “Electric Cases” and scroll down to Case No. GNR-E-10-04.

Source: [Idaho PUC Press Release](#)

## OTHER STATES

### HAWAII

The Hawaii Natural Energy Institute (HNEI, Honolulu, Hawaii, U.S.) at the University of Hawaii has released a report stating that with upgrades and new practices, the electrical grid on the island of Oahu can reliably integrate 25% electricity from wind and solar sources.

The Hawaiian Electric Company (Honolulu, Hawaii, U.S.) and General Electric Company (Fairfield, Connecticut, U.S.) were partners in the “Oahu Wind Integration Study”, which also provides strategies to enable this integration.

“Results of this study suggest that 400 MW of off-island wind energy and 100

MW of on-island wind energy can be integrated into the Oahu electrical system while maintaining system reliability,” states the report. “Integrating this wind energy, along with 100 MW of solar PV, will eliminate the need to burn approximately 2.8 million barrels of low sulfur fuel oil and 132,000 tons of coal each year.”

Source: [SolarServer](#)

## MISCELLANEOUS NEWS

### NREL SEEKING NEW (SOLAR) PURPOSE FOR EV BATTERIES

The U.S. Department of Energy’s (DOE) National Renewable Energy Laboratory (NREL), industry and academia are teaming to give batteries from electric drive vehicles (EV) a second life. NREL’s partner is an industry-academia team led by the California Center for Sustainable Energy (CCSE).

Possible secondary uses for lithium ion (Li-ion) batteries include residential and commercial electric power management, power grid stabilization to help provide reliable electricity to users, and renewable energy system firming — which in this case involves using batteries to make power provided to the grid by variable resources such as wind and solar energy more useable. To date, no one has comprehensively studied the feasibility, durability, and value of Li-ion batteries for second-use applications.

The project will begin with a comprehensive technical and economic analysis ad-

## UPCOMING EVENTS

### [10th Annual Southern BioProducts and Renewable Energy Conference](#)

May 10-11  
Biloxi, MS

### [ASES Solar 2011](#)

May 17-21  
Raleigh, NC

### [Intersolar](#)

July 12-14  
San Francisco, CA

### [Utility Solar Conference](#)

July 26 – 27  
San Diego, CA

### [Solar Power International 2011](#)

October 17 - 20  
Dallas, TX

Visit [IREC’s online calendar](#) for more details and events. If you have events you’d like to include in this newsletter, [contact us](#).



addressing all aspects of a battery's lifecycle in search of the best second-use strategies, followed by a comprehensive test program to verify findings, particularly battery lifetimes. For the field test, researchers will deploy aged EV batteries at the University of California (UC), San Diego's campus-wide electric power grid. The results of the study will:

- Provide validated tools and data on battery life to industry for battery reuse
- Recommendations for EV battery design and manufacturing practices
- Identify the necessary regulatory changes to encourage secondary battery use
- Assess the economic benefit of second uses

The cost of Li-ion batteries also currently affects the affordability of EVs for consumers. Researchers will do a technical and economic investigation to see if the potential for reusing Li-ion batteries could lead to consumers obtaining a cost credit for the remaining value of a used battery, potentially offsetting a portion of the initial cost to the EV buyer. It might be the case that while a battery no longer has sufficient power for an EV, it still has the capability to meet the needs of other less demanding applications.

Allocating used electric vehicle batteries to second-use applications also could benefit the environment by delaying the recycling or disposing of batteries, and by supplying a service that improves the efficiency and cleanliness of other industries.

## **MORE WHOLESALERS MARKETING SOLAR PRODUCTS DIRECTLY TO CONSUMERS**

The next time you need to pick up 48 rolls of toilet paper, five gallons of Dijonnaise and the complete works of Tim Conway on DVD, you might as well grab a 3.7-kilowatt solar system

while you're at it.

Costco is selling solar systems that range in size from this 3.7-kilowatt system for \$13,500 to an 800-watt job for \$3,600.

Need more power? Just go to Amazon, which has a 5-kilowatt system for \$19,999.

Installation and paperwork costs can account for close to 40 percent of the cost of a residential solar system. Professional installation would put the Amazon system at close to \$27,000, or close to what the system might cost from a traditional installer when tax and shipping are added. Many traditional installers are also moving toward solar leases, which require little or no money down. Advocates say leases represent a more cost-effective way for consumers to get into solar.

The hardware in these online deals costs around \$4 to \$3.50 a watt, or roughly on par with the market as a whole.

Costco's web site strongly recommends hiring a pro: "Professional Installation by Licensed Electrician or Solar Installer is highly recommended and/or required in some areas. Be sure to check local zoning codes and home owner associations prior to purchasing.

Still, there is a whiff of do-it-yourself to it. Consumers are buying and evaluating the products on their own and the site locks them into a single brand. Installers are recommended, but not required. The web site sports PDFs with instructions on laying out a system and an installation guide. The low sticker price also seems geared to entice bargain hunters. Amazon leans a little more toward do-it-yourselfing. There's nothing about building codes or what to do in the event of DC electrocution.

"This easy-to-install kit comes complete with 22 solar panels, an inverter, and rooftop rack system. Its array of 230-watt panels generates between 460 and 924

kWh of electricity per month for use in your home. As a bonus, this system is eligible for federal, state, and county incentives and rebates," the Amazon site says. "Should you decide to expand the array, connecting additional kits is easy. Combiners, cables, and fuses are not included."

Just sit back. It's easy!

Solar panel manufacturers have been trying to expand their sales and installation channels for the past few years. Other large manufacturers have struck deals with the national installation chains like SolarCity. Lowe's and Home Depot have also begun to market solar panels and installation services more heavily. But in all of these instances, there is a tighter nexus between the sale of equipment and professional installation.

Source: [Greentech Media](#)

## **SOUTH AFRICA CLEARS A PATH FOR DISTRIBUTED GENERATION**

The South African government recently endorsed an Integrated Resource Plan (IRP), which opens the way for Independent Power Producers (IPPs) to play an integral role in South Africa's energy challenges. This plan is likely to lead to a radically different energy mix for the country in the future. And it opens up major opportunities for the country's IPPs.

In September 2010, the SA Department of Energy published the request for information, which sought information from developers of co-generation and REFIT projects up to 2016. About 384 responses for 20,000 megawatts (MW) of the Renewable Energy Feed-in Tariff (REFIT) and 4,000 MW of co-generation were received. In capacity terms, this amounted to 70% wind, 15% photovoltaic and 10% concen-

trated solar power.

Although final details of the IRP are yet to be published, it is expected that up to 42% of new generating capacity, or more than 17,000MW, will come from renewable resources in the next 20 years.

Government has also approved the Independent System and Market Operator (ISMO) bill, which will assist at facilitating the participation by the IPPs. The new regulations establish rules and guidelines for an IPP bid programme and the procurement of an IPP for new generation capacity.

Source: [Business Live](#)

## **USDA SURVEY SHOWS AN INCREASE IN FARM-BASED RENEWABLES**

The number of solar panels, wind turbines and methane digesters on America's farms and ranches has increased significantly over the past decade and there are now 8,569 operations producing their own renewable energy, according to the results of the 2009 On-Farm Renewable Energy Production Survey released recently. Conducted by the U.S. Department of Agriculture's National Agricultural Statistics Service, this was the first-ever nationwide survey that looked at renewable energy practices on America's farms and ranches.

"These results indicate that farmers and ranchers are increasingly adopting renewable energy practices on their operations and reaping the important economic and environmental benefits," said U.S. Agriculture Secretary Tom Vilsack. "At USDA we are committed to natural resource conservation, prosperity and energy independence in rural America. This survey gives us a benchmark against which we can measure our future successes."

According to the survey results, solar panels were the most prominent way to produce on-farm energy. In 2009, farmers on 7,968 operations nationwide reported using photovoltaic and thermal solar panels. The use of wind turbines was reported by farmers on 1,420 operations across 48 states. The use of methane digesters was reported by 121 operations in 29 states.

Source: [USDA](#)

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