



Agenda

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AMENDED
(Moved # 19 from Informational)
PUBLIC UTILITIES COMMITTEE
MEETING
CITY COUNCIL CHAMBERS
WEDNESDAY, APRIL 3, 2013
REGULAR MEETING – 5:00 P.M.

1. CALL TO ORDER
2. ROLL CALL
3. APPROVAL OF AGENDA
4. APPROVAL OF CONSENT AGENDA
5. APPROVAL OF MINUTES FROM THE MARCH 6, 2013 PUC MEETING

INFORMATIONAL ITEMS

6. PNM Presentation – Updates on PNM's renewable portfolio, community solar gardening, and community engagement. (Nick Schiavo)
7. Status Update on 3rd Party Water Conservation Studies. (Laurie Trevizo)
 - a. Demand Elasticity Study.
 - b. Residential End Use Water Study.
8. Water Conservation Marketing Outreach Update. (Laurie Trevizo)
9. Water Conservation Commercial Process Efficiency Rebate. (Laurie Trevizo)
10. 2012 City of Santa Fe Water Usage – Gallons per Capita Day (GPCD) Report to OSE. (Alan Hook)
11. Allocation of water credits and review of the 2012 Annual Water Report for final approval on the PUC meeting of May 1, 2013. (Alan Hook)

Public Utilities Committee – 4/3/13

Public Utilities Committee – 5/1/13 (For approval)
City Council – 5/29/13

12. Update on Voluntary River Conservation Fund. (Dale Lyons and Brian Drypolcher)
13. Recycling Art/Public Awareness program with Santa Fe Public Schools and Environmental Services Division to increase awareness and involvement in recycling throughout the City of Santa Fe. (Randall Marco)
14. Update on the Collections Process for Delinquent Utility Billing Accounts. (Peter Ortega and Kathy Valdez)
15. Automatic Meter Reading (AMR) Evaluation Matrix. (Peter Ortega and Richard Chavez)

CONSENT – INFORMATION ITEMS

16. Status Report on the Environmental Services Division. (Cindy Padilla)
17. Update on Current Water Supply Status. (Victor Archuleta)
18. Drought, Monsoon and Water Resource Management Update. (Rick Carpenter)

CONSENT – ACTION CALENDAR

19. Update of an Emergency Repair Contract with Sub Surface Company for the installation of 2,500 feet of 24 inch diameter temporary bypass pipeline for the total amount of \$250,000.00 Exclusive of NMGR. (Mike Gonzales and Bill Huey)

Public Utilities Committee – 4/3/13
Finance Committee – 4/15/13
City Council – 4/24/13

20. Request for approval of award of a contract for RFP # '13/25/B for the construction of the Cerro Gordo Water Main, Phase 3 project. (Dee Beingessner)

Public Utilities Committee – 4/3/13
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City Council – 4/24/13

21. Request for approval of Amendment No. 3 for PSA 11-1102 with Lee Wilson and Associates, Inc. to increase funding for the Northwest Well Permit application for the total amount of \$45,000.00 exclusive of NMGR. (Claudia Borchert)

Public Utilities Committee – 4/3/13
Finance Committee – 4/15/13
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22. Request for approval to purchase two of three Compressed Natural Gas refuse and recycling collection units; one (1) Front-Loading, one (1) Automated Side Loading from Bruckners/Amrep for RFB '13/20/B for the total amount of \$532,066.00. (Cindy Padilla)

Public Utilities Committee – 4/3/13

Finance Committee – 4/15/13

City Council – 4/24/13

23. Request for approval to purchase eleven thousand (11,000) recycling bins for Phase II Annexation from Cascade Engineering for the total amount of \$60,815.00. (Cindy Padilla and Lawrence Garcia)

Public Utilities Committee – 4/3/13

Finance Committee – 4/15/13

City Council – 4/24/13

DISCUSSION ITEMS AND ACTION ITEMS

None

MATTERS FROM THE PUBLIC

MATTERS FROM THE CITY ATTORNEY

ITEMS FROM STAFF

MATTERS FROM THE COMMITTEE

NEXT MEETING: WEDNESDAY, MAY 1, 2013

ADJOURN

PERSONS WITH DISABILITIES IN NEED OF ACCOMODATIONS, CONTACT THE CITY CLERK'S OFFICE AT 505-955-6520, FIVE (5) WORKING DAYS PRIOR TO THE MEETING DATE.



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Wednesday, April 3, 2013**

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DISCUSSION ITEMS AND ACTION ITEMS

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MATTERS FROM THE PUBLIC

None 28

MATTERS FROM THE CITY ATTORNEY

None 29

ITEMS FROM STAFF

None 29

MATTERS FROM THE COMMITTEE

None 29

NEXT MEETING: WEDNESDAY, MAY 1, 2013

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ADJOURN

20

**MINUTES OF THE
CITY OF SANTA FE
PUBLIC UTILITIES COMMITTEE
Wednesday, April 3, 2013**

1. CALL TO ORDER

A meeting of the Public Utilities Committee was called to order by Councilor Christopher N. Calvert, Chair, at approximately 5:00 p.m., on Wednesday, April 3, 2013, in the Council Chambers, City Hall, Santa Fe, New Mexico.

2. ROLL CALL

MEMBERS PRESENT:

Councilor Calvert, Chair
Councilor Bill Dimas
Councilor Carmichael A. Dominguez
Councilor Christopher M. Rivera
Councilor Ronald S. Trujillo

OTHERS PRESENT:

Brian Snyder, Public Utilities Director
Stephanie Lopez, Public Utilities
Marcus Martinez, Assistant City Attorney
Melessia Helberg, Stenographer

There was a quorum of the membership present for conducting official business.

NOTE: All items in the Committee packet for all agenda items are incorporated herewith to these minutes by reference. The original Committee packet is on file in the Public Utilities Department.

3. APPROVAL OF AMENDED AGENDA

Mr. Snyder asked to pull Item #12 from the agenda and postpone it to the May PUC Committee.

MOTION: Councilor Dominguez moved, seconded by Councilor Trujillo, to approve the Amended Agenda as amended.

VOTE: The motion was approved on a voice vote, with Councilors Dominguez, Rivera and Trujillo voting in favor of the motion, no one voting against, and Councilor Dimas absent for the vote.

4. APPROVAL OF CONSENT AGENDA

MOTION: Councilor Trujillo moved, seconded by Councilor Dominguez, to approve the following Consent Informational Calendar as amended, and the Consent Action Calendar as presented.

VOTE: The motion was approved on a voice vote, with Councilors Dominguez, Rivera and Trujillo voting in favor of the motion, no one voting against, and Councilor Dimas absent for the vote

Councilor Dimas arrived at the meeting

CONSENT – INFORMATIONAL CALENDAR

- 16. STATUS REPORT ON THE ENVIRONMENTAL SERVICES DIVISION. (CINDY PADILLA)
- 17. *[Removed for discussion by Councilor Trujillo]*
- 18. DROUGHT, MONSOON AND WATER RESOURCE MANAGEMENT UPDATE. (RICK CARPENTER)

CONSENT – ACTION CALENDAR

- 19. UPDATE OF AN EMERGENCY REPAIR CONTRACT WITH SUBSURFACE COMPANY FOR THE INSTALLATION OF 2,500 FEET OF 24 INCH DIAMETER TEMPORARY BYPASS PIPELINE FOR THE TOTAL AMOUNT OF \$250,000.00, EXCLUSIVE OF NMGR. (MIKE GONZALES AND BILL HUEY) Public Utilities Committee 04/03/13; Finance Committee 04/15/13; and City Council 04/24/13
- 20. REQUEST FOR APPROVAL OF AWARD OF A CONTRACT FOR RFP #13/25/B FOR THE CONSTRUCTION OF THE CERRO GORDO WATER MAIN, PHASE 3 PROJECT. (DEE BEINGESSNER) Public Utilities Committee 04/03/13; Finance Committee 04/15/13; and City Council 04/24/13.
- 21. REQUEST FOR APPROVAL OF AMENDMENT NO. 3 FOR PSA 11-1102, WITH LEE WILSON AND ASSOCIATES, INC., TO INCREASE FUNDING FOR THE NORTHWEST WELL PERMIT APPLICATION FOR THE TOTAL AMOUNT OF 45,000, EXCLUSIVE OF NMGR. (CLAUDIA BORCHERT). Public Utilities Committee 04/03/13; Finance Committee 04/15/13; and City Council 04/24/13.
- 22. REQUEST FOR APPROVAL TO PURCHASE TWO OF THREE COMPRESSED NATURAL GAS REFUSE AND RECYCLING COLLECTION UNITS: ONE (1) FRONT-LOADING, ONE (1) AUTOMATED SIDE LOADING FROM BRUCKNERS/AMREP FOR RFB '13/20/B, FOR THE TOTAL AMOUNT OF \$532,066.00. (CINDY PADILLA). Public Utilities Committee 04/03/13; Finance Committee 04/15/13; and City Council 04/24/13.

23. **REQUEST FOR APPROVAL TO PURCHASE ELEVEN THOUSAND (11,000) RECYCLING BINS FOR PHASE II ANNEXATION FROM CASCADE ENGINEERING FOR THE TOTAL AMOUNT OF \$6 0,815.00. (CINDY PADILLA AND LAWRENCE GARCIA). Public Utilities Committee 04/03/13; Finance Committee 04/15/13; and City Council 04/24/13.**

MOTION: Councilor Trujillo moved, seconded by Councilor Dominguez to amend the agenda to consider the previous approval of the Agenda, to hear Item #17 from Consent after #5 Approval of Minutes, and to approve the agenda as amended.

VOTE: The motion was approved on a voice vote, with Councilors Dominguez, Rivera and Trujillo voting in favor of the motion, no one voting against, and Councilor Dimas absent for the vote

5. **APPROVAL OF MINUTES FOR THE MARCH 6, 2013, PUC MEETING**

MOTION: Councilor Dominguez moved, seconded by Councilor Rivera, to approve the minutes of the meeting of February 6, 2013, as submitted.

VOTE: The motion was approved on a voice vote, with Councilors Dominguez, Rivera and Trujillo voting in favor of the motion, no one voting against, and Councilor Dimas absent for the vote

Councilor Dimas arrived at the meeting

CONSENT DISCUSSION

17. **UPDATE ON CURRENT WATER SUPPLY STATUS. (VICTOR ARCHULETA)**

Victor Archuleta reviewed the Weekly Water Report for the week of March 21, 2013, which is in the Committee packet. Please see this document for specifics of this presentation.

Councilor Trujillo said this is probably the third year we will have to cancel the kids fishing derby.

Mr. Archuleta said yes, noting there is not a lot of runoff, noting the tributaries in the canyon are zero and there is no runoff at all.

Chair Calvert said the reservoir is already lower than it was last year.

Councilor Trujillo said he just wanted to be clear, commenting it is unfortunate, but he does understand.

INFORMATIONAL ITEMS

6. PNM PRESENTATION – UPDATES ON PNM'S RENEWABLE PORTFOLIO, COMMUNITY SOLAR GARDENING AND COMMUNITY ENGAGEMENT. (NICK SCHIAVO)

A power point presentation *PNM Update to the Santa Fe Public Utility Committee*, dated April 3, 2013, is incorporated herewith to these minutes as Exhibit "1."

A copy of *PNM Update: Solar Energy 2013*, entered for the record by PNM, is incorporated herewith to these minutes as Exhibit "2."

A copy of *PNM Update: Renewable Energy 2013 Plan*, entered for the record by PNM, is incorporated herewith to these minutes as Exhibit "3."

Matthew Jaramillo, Local Government Liaison, PNM, introduced **Pat O'Connell, Director of Planning and Resources, PNM**, **Sayuri Yamada, Director of Government Affairs, PNM**, and **Amy Miller, Environmental Stakeholder Engagement Manager, PNM**, all of whom will be assisting in the presentation. Mr. Jaramillo noted there were 3 handouts, Exhibits "1," "2," and "3."

Mr. Jaramillo and Ms. Miller presented information from Exhibit "1." Please see Exhibit "1," for specifics of this presentation.

The Committee commented and asked questions as follows:

- Chair Calvert asked, regarding the survey PNM is going to conduct, what model they will be commenting on.

Ms. Miller said they won't be getting into specific models as much as testing the concept against traditional rooftop solar, and testing certain price points. For example, to participate as a member in Kit Carson Electric Cooperative is to make an up-front investment, and commit to a contract over so many years and then receive a credit on the bill for that participation. They are looking at other models which don't require a big up front investment, but rather a subscription over time so it is more affordable for a customer. They will test some of those customer participation models, but not in extreme detail. They want to see what the interest is around such a product, what the driver is, is it cost, is it commitment to environment and peoples' financial tolerance – would they rather make an up-front investment, or how can it be made more affordable for customers.

- Chair Calvert asked if the RECs are involved.

Ms. Miller said they are modeling it in a few different ways, and whether it would be part of the renewable standard or not, and that decision hasn't been made, but they are looking at different ways. She said in the rooftop customer solar program, there are costs subsidized by other non-

rooftop customers in the program. She said they are looking at issues of subsidization and what would be the best way to move this product forward in the community and regulatory environment.

- Chair Calvert said if people provide power on rooftops, maybe PNM doesn't have to expend funds on big capital projects, so in the long run, it will save the ratepayers some money, commenting there is more than one way to look at this.

Ms. Williams said, "In some ways, but there are still fixed costs that are in place that provides power when solar isn't producing, so it's reaching that balance."

- Chair Calvert said but those things already are in place.

Ms. Williams said, "As it is structured today, non-PVC customers are subsidizing PV customers.

- Chair Calvert asked, "How is that."

Ms. Williams said, "Because those fixed costs are not being fully recovered by the rooftop PV customers that are interconnected."

- Chair Calvert asked, "Why is that, and how is that. In other words, they're paying for the fees that other people are paying on their bill, right."

Ms. Williams said, "Yes, but that customer charge does not take into account all the fixed costs of the system. And so there have been a variety of different models, decoupling and other models where the Commission has tried to address this, but none of it has been resolved successfully at this point."

- Chair Calvert asked Ms. Williams if she sees the need for legislation or action at the PRC to enable this.

Ms. Williams said not necessarily legislation, but PNM is a regulated utility, "So yes, parts of it will go the Commission, absolutely."

- Chair Calvert asked if this will be done with PNM's cooperation.

Ms. Williams said, "We would be going to the Commission with a proposal regarding a project, so yeah."

- Chair Calvert noted it says, "Visit sites. Met with external Santa Fe consultant." He asked who is the external Santa Fe consultant.

Ms. Williams said it is Tom Parker who is with an engineering firm, CDM in Albuquerque, who did most of the remediation design around that landfill, because he had the historical knowledge when it was closed, in the early 1990's.

- Chair Calvert asked the current REC on rooftop solar.

Ms. Williams said they pay a 4-cent REC, but the payback on rooftop solar for an average home is about 7-8 years right now, because panel price is down significantly as well as federal and state tax credits.

- Chair Calvert asked if the 4 cents will decrease over time.

Ms. Williams said yes, it has decreased.

- Chair Calvert asked if it will go lower than 4 cents.

Ms. Williams said, "Yes, and I don't have that right in front of me, but we reached an agreement in our last renewable plan with representatives from the solar community about what those REC payments would be."

- Chair Calvert said as RECs become smaller and smaller for rooftop solar and such, then that's not the main issue, because it's not going to amount to a whole lot in the future, in terms of the person who owns the panel. In one model for community solar, the person actually purchases a panel, or two panels or multiples of panels, so if they don't get the RECs, does that facilitate this process or consideration for you.

Ms. Williams said she doesn't understand what Chair Calvert is saying.

- Chair Calvert said, One of the advantages of having rooftop solar for an individual who puts it on the roof, is not only do they get to spin the meter backward, but they get RECs on top of that, right."

Ms. Williams said, "Right."

- Chair Calvert said, if they don't get the RECs, which allows PNM to count it toward its portfolio, is that something which is favorable in your consideration for this concept.

Ms. Williams said, "We are looking at it a variety of different ways, so it may not necessarily be used for RPS compliance. The way some other utilities have done it, is that works into the financial modeling, so any tax credits that the utility gets, if there's a sale of RECs, that ends up being reflected in the total customer cost for participation in the facility."

- Chair Calvert asked the timeline associated with a use.

Ms. Williams said they would like to have a draft of the survey within the next week and will be meeting with Nick Schiavo when he gets back, as well as Craig O'Hare, and hopefully would like to have the survey done within about a month, and then bring that back to senior management with the results. She said they would like to move fairly quickly on that. She said they met with Research & Polling this morning to get that moving forward.

- Chair Calvert asked, if the polling is positive in terms of moving forward, how quickly do you foresee something actually happening.

Ms. Williams said, "I can't make a promise around a timeline, but I can say we're putting a lot of resources behind it. One of the things that we're hearing talking to utilities, is the toughest part of it is getting your IT and billing systems to accurately reflect what this program is, but again, it would have to go through regulatory approvals, and things like that, so I don't have an exact timeline to tell you, other than we are working on it very hard. We're very committed to it."

Sayuri Yamada presented information regarding Santa Fe Community Engagement. Please see Exhibit "1" for specifics of this presentation.

- Councilor Dominguez thanked PNM for this presentation to PUC. He said we aren't the PRC, but have heard clearly from our constituents that they are interested in renewable energy, and the reality is that PNM is a part of our everyday lives. He asked Ms. Yamada, in terms of contributions to the community, are the contributions part of the rate base.

Ms. Yamada said no, this is money contributed by corporate and shareholders to the community – none of the initiatives are paid by the ratepayers.

- Councilor Dominguez said then no funds from his bill goes to community involvement, and Ms. Yamada said this is true.
- Councilor Dominguez said on page 3, Mr. Jaramillo talked about "Innovative battery storage pilot projects," and said at the Mesa del Sol projects there are 8 battery containers, with 60 batteries in each container. He asked how much space that takes.

Mr. Jaramillo said the site size approximately 4.9 acres just for the battery storage facilities and solar panels.

- Councilor Dominguez asked what makes it innovative – the technology or what.

Mr. Jaramillo said it's the first of it's kind, it is learning how to deploy batteries optimally and using the smart grid technology to figure out a way to smooth out the electricity usage. He said if you look at solar panels when there is cloud coverage no energy is generated, so the batteries kick in during cloud coverage to make it more smooth rather than peak and trough.

- Councilor Dominguez said we could spend a lot of time talking about how the details work, but he would like to keep it to general questions. He said in his presentation, Mr. Jaramillo talked about diversity and a mandate from the PRC, and on page 4, he talks about renewable activities, "All renewable RFP issued in November 2012." He asked if anyone from Santa Fe submitted an RFP on the renewables.

Ms. Miller said the latest all renewable RFP for 2015 renewable requirements was issued in November, due on January 31st. She said no sites in Santa Fe were submitted as part of the RFP. She said, "That works a couple of different ways within our company. Sometimes we have a lot of private landowners that just contact us on a regular basis. They're got this great piece of land near Alamogordo, are you guys looking to site a renewable. Other communities work directly with renewable developers and say, we're got a good wind site, or we've got a good solar site and that developer will bid that site into our RFP. So that works a few different ways, but no Santa Fe sites at this time, were bid into this RFP."

- Chair Calvert asked if there is anything in the pipeline under a previous RFP.

Ms. Williams said she is unsure.

Pat O'Connell said this is the 3rd of their renewable RFPs and they have had no sites for utility scale.

- Councilor Dominguez asked what is utility scale.

Mr. O'Connell's response here is inaudible because he was not at the microphone.

- Councilor Dominguez asked, "Big, like what."

Mr. O'Connell's response here is inaudible because he was not at the microphone.

- Councilor Dominguez said how much space, in terms of a site.

Mr. O'Connell said it is in the range of 50 acres. He said, "On this update, it says we have a run down of each, 60 acres. So really what you're looking for is a large tract of flat land with good access to electric [inaudible]"

- Councilor Calvert said Santa Fe has been responding to the RFP's for smaller scale, like at our wastewater treatment and such.

Mr. O'Connell said yes. One of the ways we're meeting the current requirements in our RFP is buying RECs from a small hydro carrier in the Santa Fe water system.

- Councilor Dominguez said he doesn't know the details of how the utility runs. He said, it seems to him, that because the constituency is talking about renewables all the time, he imagines the City is paying attention to some of these RFPs, irregardless of scale, and hopes we continue to do that.
- Councilor Dominguez asked, in terms of resources, how much has PNM spent on utility scale solar, so far.

Mr. O'Connell said PNM has had 3 RFP's for a utility scale solar project. The first two RFP's are complete and the first one of the projects is on line. He said the second is a project that is being built right now. The third will begin planning in June, and will begin construction next year. The two projects, one complete, and one underway, are a total of \$134 million which has been spent on solar which helps meet our RPF standards, and becomes part of the generation portfolio that serves all of PNM's investments.

- Councilor Dominguez said PNM has a lot of experience in a lot of these things, and said the City needs to pay attention to what is going on in the world of renewables. He said this presentation has been educational for him, and looks forward to a continuing dialogue with PNM. He said the constituents talk about renewals on a constant basis. He said PNM is part of our every day lives, and we need to make sure this Committee is as educated as possible on these issues. He thanked the Chair for bringing forward this presentation.
- Councilor Rivera thanked the Chair for this presentation, commenting he would like to do this annually. He said PNM talked about what it does locally, but on national level, PNM has sent its people to help on a national level for major events, such as Hurricane Sandy and Hurricane Katrina. He appreciates that they are available to assist nationally, which speaks highly on PNM, and is a reflection on the State and City as well..
- Chair Calvert said he received an item in the billing that he didn't like, because of what was implied by the picture on the front. It says, "Important information about a fee that appears on your PNM bill this month," with a picture of a fluorescent bulb, indicating it has to do with a conservation program, but it has nothing to do with anything like that. He said the literature, at the least, is misleading. He said, "The subject matter explained on the back, has to do with a case that rubbed us the wrong way as well. One where PNM put in an undersized infrastructure from the start already underground, and when the people in the area complained about outages, and you were responding and wanting to upgrade, we had to pay for the upgrade for that underground. It was already underground, it was just a matter that it was inadequately sized from the start, and we ended up having to pay extra to upgrade to what it should have been from the beginning. So this piece of information doubly troubling. So I think in terms of relations with the community and with governmental entities, this wasn't your strongest effort right here."

Chair Calvert continued, "The other is the same thing, is literature here about electricity savings programs. And one of the ones that we tried to take advantage of initially here in the City was when we started our Green Building Code. We put in initially, just a requirement to have a HERS

rating. And at the time, PNM was offering a rebate for HERS rating. And as soon as they found out that the City required it, they ruled us ineligible for the rebate. And so I think again, not your finest foot forward in terms of relations with the community and with local government."

- Councilor Dominguez said he appreciates the Chair bringing that information up, and thinks it's important for these folks to hear where we're it is that we're coming from, as the representatives of their customers and our constituencies."
- Chair Calvert said if we have concerns or complaints we need to voice them and let PNM know in certain areas it may be doing great and in other areas not so much. It is all part of a continuing communication and dialogue to be sure the community we both serve gets the best service and product that they can.

Ms. Yamada said she agrees with him, and this is helpful information. She said this one of the purposes of being here, because PNM wants a two-way dialogue, noting the Committee listens to your constituents on a daily basis. She wants to hear any information you can share on how PNM can serve its customers better and they would appreciate that.

Chair Calvert thanked PNM for its presentation, and he will reschedule it again as soon as it is needed.

7. STATUS UPDATE ON 3RD PARTY WATER CONSERVATION STUDIES. (LAURIE TREVIZO)

a) DEMAND ELASTICITY STUDY

Ms. Trevizo presented information from her Memorandum of April 3, 2013, to the Public Utilities Committee, which is in the packet. Please see this Memorandum for specifics of this presentation.

Councilor Calvert said, regarding the table in page 1, Landscape and Fire, he didn't know there was such a category, and asked if it is a separate billing category.

Ms. Trevizo said it is irrigation, classified as IRR in the billing system, and fire is also classified within the billing system as well.

Chair Calvert said when the City has done a rate analysis he's never heard these mentioned, and they usually talk about single family, multi-family and commercial.

Mr. Snyder said in recent years, when we do a development or a new service, we break up the irrigation from the residential or commercial classification, so there is an irrigation meter, similar billing allotments. It's based on meter size, for example, a 5/8 meter 7,000 during off peak and 10,000 gallon allotment during on-peak season. It is basically to pull the irrigation out of the residential, commercial or multi-family components.

Chair Calvert said you aren't trying to pull landscape out of single family residential, and you're talking about common area in a residential development or something of that naturel.

Mr. Snyder said this is correct, and in a residential development it would be a common area, and in a commercial development it would be a common area, open space that they wanted to irrigate or the landscaping around a building – those kinds of things.

Chair Calvert asked where Parks fit in.

Mr. Snyder said they under the commercial classification. He said from a billing standpoint, it is all based on meter size, it doesn't matter what classification it falls into.

Chair Calvert said he assumes the classifications broken out for a reason to get information, in terms of what's essential for a development versus what be considered non-essential.

Mr. Snyder said that is the intention. However, in the last 3 years we've had approximately 3,000 new connections, versus 3,600 existing connections. He said to go back in time and change the classifications is difficult when they are intermixed, but moving forward that is the intention – to break out certifications so we can better understand the usage patterns better.

Councilor Rivera asked what makes up the fire component of it.

Mr. Snyder said, typically, that is the backflow prevention device. It's typically a zero read meter, but the commercial building where they are installed pay a monthly service fee, and then we also read the meter. If there is flow through the meter, then the backflow prevention system is not working correctly. He said that is to break that out so we know they're building a monthly service fee, but we're not billing them a volumetric charge unless the system isn't working properly, or if somebody tied into the plumbing on the fire system side of it.

Councilor Rivera asked if it is measured if there is a large fire, or doing hydrant testing and flushing hydrants.

Mr. Snyder said they do not flow hydrants typically through meters in that we're trying to build up velocities in the line, so they are scouring the inside of pipes of dirt and debris. He said we estimate that flow and try to incorporate that into various annual water reports and such. He said that is non-revenue water. He said, for construction activities that require potable water, and we have fire hydrant meters, those are separate, not part of the billing system, and are billed separately to the entity that leases or rents the meter for that use, and are metered from the hydrant.

Chair Calvert said, in terms of an actual fire, nobody is going to be metered or charged for that water use.

Mr. Snyder said this is correct.

b) RESIDENTIAL END USE WATER STUDY.

Ms. Trevizo presented information from her Memorandum of April 3, 2013, to the Public Utilities Committee, which is in the packet. Please see this Memorandum for specifics of this presentation.

Chair Calvert said most of this is status update. He said in 1999, we had certain results, so they are trying to validate to see if those things still hold or things have changed, such as in the Average Daily Use chart on page 12. He said it appears, relatively speaking, everything is holding except clothes washer and show might be changing positions, in terms of rank in usage. He said this is what they're trying to validate if the relative order of things is still the same, which is the main point of this study.

Ms. Trevizo said yes. She said this is their example for Denver, noting they are based out of Boulder and have easy access to Denver and Boulder utilities. She said there is a huge difference between the 1999 water usage for things like toilets versus the 2012 usage in Denver. She said we would expect to compare to the analysis similar to this, noting we won't get this level of detail for Santa Fe because Denver paid money for the study. She said Santa Fe offered in-kind services. She said Aquacraft went ahead and put data loggers on their meters to determine water use in the home, so they got real time data – every time a toilet was flushed it picked up the read. She understands the measure was very low, so they could pick up things like a 1.28 flush for toilets, those kinds of things.

Ms. Trevizo said she spoke with Aquacraft about having them perform a study like this in the future for Santa Fe, which is a possibility.

Chair Calvert said Denver's climate isn't too dissimilar to that of Santa Fe, and it could be instructive in terms of items, such as a washing machine, where technology is the main driver, and you will get better results as opposed to a shower which is mostly behavioral. He said the best results probably will be where you put in better technology where, even if the habits don't change, you still will get good results.

Ms. Trevizo said this is correct. She said the results of the study will help Santa Fe to better determine what conservation programs we want to implement in the future where we would get the biggest bang for our buck.

Councilor Rivera said they called 100 random customers.

Ms. Trevizo said they did for the Demand Elasticity Study.

Councilor Rivera said that seems to be a small sampling for a city the size of Santa Fe.

Ms. Trevizo said with both of these studies, Santa Fe is contributing in-kind contribution and all of the funding comes from outside sources, and they've acquired funding through other means, and believes it is a function of the available funds they would like to spend for the survey sample.

Chair Calvert said another way to ask that question back to the people, is did they deem those 100 calls as a statistically valid sample size in conducting a survey.

Ms. Trevizo said she will go back to the researchers and ask that question.

Ms. Trevizo said to Councilor Rivera's question, with the Residential End Use Study in the packet it says, 'The Residential End Use Study was a mail out survey,' and on page 10 and into page 11 it shows how many surveys were mailed to our customers and the number of responses they received. 332 surveys were mailed out and 159 responded to the survey.

Chair Calvert said Santa Fe had one of the better response rates to the Residential End Use Study, and Ms. Trevizo agreed.

Councilor Rivera said then it wasn't done by phone, but by mail.

Ms. Trevizo said this is correct, it was a direct mail survey.

Chair Calvert said Councilor Rivera's question referred to 7(a) [formerly 8(a)], and he said it was 7(a).

Chair Calvert said the ones Ms. Trevizo just discussed were 7(b) [formerly 8(b)].

8. WATER CONSERVATION MARKETING OUTREACH UPDATE. (LAURIE TREVIZO)

Ms. Trevizo presented information from her Memorandum of April 4, 2013, to the Public Utilities Committee, which is in the packet. Please see this Memorandum for specifics of this presentation.

Chair Calvert said this is an update, which is more concise and gets the point across in a short amount of space in terms of what is happening and when, and you can see what has happened and what is going to happen.

Ms. Trevizo said that is correct. She has provided examples of the articles that were submitted and the ads we submitted to the different print media. There is also an article written about Santa Fe from *The St. Paul Pioneer* in St. Paul, Minnesota and they are noticing they have water issues, and the people aren't clued into how to conserve water, so they are looking to us for some guidance.

Chair Calvert said he isn't trying to take business away from the publications, but placing ads in some of these might be "preaching to the choir." He said the readership of some of the publications already are participating, whereas those you are trying to reach may not be reading the publications.

Mr. Snyder said he agrees. However, part of the strategy on that is they also are the same people which often criticize us for not advertising and not doing outreach. It has a dual purpose to make them aware and if they are, they don't criticize us.

Chair Calvert said he would rather be spending money to make people aware than counteracting criticism.

Councilor Dominguez said this is some outreach to those users downstream, irrigators that aren't using the best irrigation techniques available. He asked if we shouldn't cast the net further and start to talk to people beyond just those in the City who have heard this year after year after year, and will continue to do they best they can do to conserve water. This is his comment.

Chair Calvert the best place for that is the plan on which Claudia Borchert is working to have a discussion on those issues. He said we are willing to do our part to help, but they have to help on their end as well.

Councilor Dominguez's question here is inaudible because his microphone was turned off.

Chair Calvert said, "I don't know. It's a regional publication, but I don't know the boundaries of their region, so I don't know."

Responding to Councilor Dimas, Ms. Trevizo said "The Bad Flapper" is a persona taken on by her in 2011 for a campaign for *Fix a Leak Week*, and we encouraged residents to change their flappers in their toilet, because bad flappers are the number one cause of silent leaks. She said Joe Abeyta plays the commercial often, noting there is a commercial associated with that. She said it was played March 18-24, 2013, and in the movie theaters here in town.

9. WATER CONSERVATION COMMERCIAL PROCESS EFFICIENCY REBATE. (LAURIE TREVIZO)

Ms. Trevizo presented information from her Memorandum of April 3, 2013, to the Public Utilities Committee, which is in the packet. Please see this Memorandum for specifics of this presentation.

Chair Calvert said he appreciates this work, which he believes is more in line with what we've been doing in the past. One, to think prior installation so we don't get into a debate of whether it was effective. He said we have been offering rebates for capital expenditures, sort of one-time rebates based on reliable water saving hardware systems. He said it is hard to know how much it will cost you and if it is fair to other people, other ratepayers. He said this is more in line with what we've been doing and follows along the lines of what other communities have done in this area which has proven to be successful. He appreciates the work in taking feedback and reworking this. He thinks this is much more along the lines of what he and other Councilors have in mind in terms of a program in this area.

10. 2012 CITY OF SANTA FE WATER USAGE – GALLONS PER CAPITA DAY (GPCD) REPORT TO OSE. (ALAN HOOK).

Mr. Hook presented information from his memorandum of March 22, 2013, which is in the Committee packets. Please see this Memorandum for specifics of this presentation.

Mr. Hook reiterated that we are very proud of the low GPCD, would like to continue this and emphasize it to all customers and visitors to the City that one of the lowest cities for water usage and want to continue that, especially during these drought years.

Chair Calvert when we say we are one of the lowest in the West, do we know where we might rank and is everybody using the same methodology to calculating the GPCD, or are there a variety of ways people use to calculate this..

Mr. Hook said there are a variety of ways used to calculate this. He said, for the State of New Mexico, we have one uniform way of calculating this now in the last 3 years. He said it is very similar, noting they are looking at the overall production divided by the customer base, which is one of the ways we can compare to other cities. He said we are in the lowest 5% GPCD.

Chair Calvert asked how we know where we rank, and what is the basis for that. He asked if there is a source of information.

Mr. Hook said the Conservation Office did put out a publication showing various cities throughout the west, and it has their GPCD rating.

Chair Calvert said, "When we say we are one of the best, can you provide us with that information and are there people who claim to do it even better than what you had in the publication, or whatever it was."

Mr. Hook said he can provide that information. It is a comparative graph.

Ms. Trevizo said the comparative graph is based on the years 1996 to the most current years, and it is based on what the utilities she surveyed publicized on their websites. She said it isn't an Apples to Apples comparison, because we don't know how they calculated their GPCD, but it is somewhat similar.

Chair Calvert asked if there is any source that compiles this information from various sources.

Mr. Snyder said he is unaware that they do or they don't, commenting, "if I had to guess, I would say that they probably do some kind of comparison. We can look into that and get that information for you."

Marcos Martinez said Albuquerque's GPCD is at 150.

Chair Calvert said he knows, noting Albuquerque is claiming it is doing great stuff, but they aren't even in the same "ball park." He said they are new to all of this. He said he is curious if there is a central source, such as the American Water Works Association, and would think they might have this kind of figure already.

Mr. Snyder reiterated staff will look into this and provide this information.

Chair Calvert said the significance of the figure to our planning is on the last page of the handout for Item #8(a), which shows the gap in supply into the figure. He said it originally was based on 130 GPCD, and the second based on 110, shows how that gap shrinks. He said the more we can shrink the GPCD, the less the gap we have to meet by other means in the future.

Mr. Hook said, "I concur."

- 11. ALLOCATION OF WATER CREDITS AND REVIEW OF THE 2012 ANNUAL WATER REPORT FOR FINAL APPROVAL AT THE PUC MEETING OF MAY 1, 2013. (ALAN HOOK). Public Utilities Committee 04/03/13; Public Utilities Committee (for approval) 05/01/13; and City Council 05/29/13. This item was removed from the agenda and postponed to the PUC meeting of May 1, 2013.**

This agenda item is postponed to the PUC meeting of May 1, 2013.

- 12. UPDATE ON VOLUNTARY RIVER CONSERVATION FUND. (DALE LYONS AND BRIAN DRYPOLCHER)**

Dale Lyons provided information from his Memorandum of March 22, 2013, which is in the Committee packets. Please see this Memorandum for specifics of this presentation.

Mr. Drypolcher noted the Ordinance on the Voluntary River Conservation was changed in March 2013, which expands the use of the funds to include projects which would improve the flow of the water in the Santa Fe River in ways that enhance the ecosystems of the Santa Fe River and its Riparian Corridor.

Chair Calvert said the Ordinance was conditioned that the additional use allowed after the effective date of the Ordinance amendment.

Mr. Drypolcher said funds collected after March 16, 2013, can be spent on the expanded purpose. He said his activities are focused on two fronts. One, is the acquisition of water rights with funds currently in the fund. He said they have begun running ads in *The Santa Fe New Mexican* to advertise the City's interest in water rights acquisitions. He said they will run a series ads over the next 2 months. He said the second, is to re-promote the River Fund now that we feel it is new and improved, and we have other purposes on which we can expend the funds. He said we did good coverage in *The Santa Fe New*

Mexican, a nice editorial in the paper lauding the City for making this change and the leadership for making these kinds of investments in the river. There was also a nice front page story in *The Journal North*. He said they will be looking at other venues to promote the fund, inserts in water bills, other press that they can get and advertisements and outreach through our partners such as The Santa Fe Watershed Association. st. Come back and identify specifically when ready to spend money.

Mr. Drypolcher said the Council requested, as we look at this new regime and new opportunities to spend money on new activities, as we identified projects, to bring those projects to the "Council to be vetted by the Council for your approval on how we do that." He said they will be starting with a preliminary list, noting the Santa Fe River Commission has asked him to prepare this list and will be bring some ideas as well. He said we don't have enough money in the fund to do something, but we can start working on the list and bring it for approval. He said once that is done, they would be coming back to identify what "we're about to do when we get to the point where we're about to actually spend some money on projects."

Chair Calvert said on the new purpose with new funds, in terms of forming a list, with the input of the River Commission, is valuable. He said if we want to promote the fund again and build up new funds, it might be useful to have an idea of how those funds actually might be spent. He said the people understood the original purpose, whether or not we were going to be able to purchase water rights. He said whether we can make it happen in practice is another story, but at least they had an idea as to how it would be spent. He said on the new purpose, it is sort of this vague description of enhancements, which needs more definition to get more buy-in from the people to support it. With regard to the original fund, if we don't get any prospects for water rights on the Santa Fe River, he thinks this gives us two main options. We can spend it as the Ordinance states on the Rio Grande which was in the original purpose, and we certainly can do that. He believes most people who contributed thought it was going to the Santa Fe River, and the way it was mostly promoted. He said the Ordinance allowed for both, but doesn't know how many people understood that. He said the other option is to amend the Ordinance again, saying what we intended to do is not actually feasible, and we don't want to change the intent, but we think it's in the best interest of the community to consider doing this.

Chair Calvert said if we're going to continue to discuss this, he would like a report on this in 2 months as to where we are now in the efforts to purchase rights for the Santa Fe River, and what are we doing in the Rio Grande or amending the Ordinance even further to allow for the new purposes with the original funds. He said City Legal doesn't like that concept, but he is unsure the people who contributed the funds would object. He said we have to weigh that to a certain extent.

Councilor Trujillo asked if there is a timeline on the acquisition of water rights – one year, 6 months.

Chair Calvert said there is something in the amended Ordinance.

Mr. Snyder agreed, saying there is a time frame, but he can't remember. He thinks it is more interaction with the Committee.

Chair Calvert said he feels the handwriting is "somewhat on the wall here." He said, if we think it's inevitable where we're headed, what are we doing in that regard. And if there "is no water to be had, there's no water to be had." Are we, at the same time, pursuing the other option currently in the Ordinance which is the Rio Grande and variations of that theme. He doesn't want to do this sequentially. He said, "I'd like, if we could examine these alternatives concurrently so that we don't string this out for another two years trying to get to where we're going to get."

Mr. Snyder said the intent of what is before the Committee tonight, is a snapshot/update on where we've been and the current status. He said the intention moving forward is to provide quarterly updates to the Public Utilities Committee. He said, "In the next two months we plan to do what the Chair was saying – continue following up on the advertisement to see if there are additional opportunities. Follow-up with Rick Brenner, follow up with Richard Ellenberg, close the loop on those. Also look at opportunities for the Rio Grande to create a pool as discussed previously, and formalize some of those, so that by the next update we will have started the process and in the next two updates, we will have felt that we have shaken the trees on certain things, nothing has fallen and we've moved forward enough to have a better understanding on others, legally as well as other opportunities. This is the goal and intention of staff."

Chair Calvert thanked Mr. Lyons and Mr. Drypolcher for their work in this regard, commenting it is frustrating for everybody. He doesn't want to move in haste, but he does want to move as quickly as is advisable. He said there is frustration "out there" that the City has collected this money and nothing has happened. He said everything has to be balanced in order to move forward.

Councilor Rivera asked if there is a data base listing of people who have contributed to the fund.

Mr. Drypolcher said he is unaware of one, and if there is, he doesn't know how well the Division and its billing system has been able to track those donations per customer over time.

Mr. Snyder said he is unaware of a data base, but most donations come through the utility billing system, and believes there is some way to query the billing data to get that information, and provide that as an update at the next meeting.

Responding to the Chair, Mr. Snyder said it would be the number of people and if we have the ability to know who.

Councilor Rivera said it would be nice to be able to ask those people who actually contributed what they want done with their money, and give them a list of River improvements. He said we asked them for money initially with a certain idea of what we were going to do with the money, and that didn't pan out, so they should have a say in what happens. He would like Mr. Snyder to look into that and see if we can query that information which would be helpful.

Chair Calvert said there might be some confidentiality issues.

Mr. Martinez said, "I was going to caution the Committee on the fact that the donations were made for two purposes. One was a donation to the Santa Fe River and as Councilor Calvert has articulated, one was for donation to.... the other purpose was for lease or purchase of water rights on the Rio Grande, and those water rights are available. So, people did donate under the old Ordinance scheme and since one purpose is possible to do, before we repurpose it, we need to show that the purchases on the Rio Grande are also impossible. But, we know that those are possible."

Councilor Rivera said, "I agree 100%. I'm just trying to follow up on what Councilor Calvert was saying in anticipation of perhaps shaking the tree enough and nothing falling, and being able to have a backup plan that isn't going to delay us too long, if we get to that point."

Chair Calvert said there has to be a way to extract the names of those people who have that line item on their billing for the donation.

Councilor Rivera doesn't think we need the names of the individuals, just to know if it can be done, and then if we do a mail-out to those people we don't need to know who they are, just if it can be done.

Mr. Snyder said staff will look into this.

13. RECYCLING ART/PUBLIC AWARENESS PROGRAM WITH SANTA FE PUBLIC SCHOOLS AND ENVIRONMENTAL SERVICES DIVISION TO INCREASE AWARENESS AND INVOLVEMENT IN RECYCLING THROUGHOUT THE CITY OF SANTA FE. (RANDALL MARCO)

Cindy Padilla introduced Randall Marco, Community Relations, Environmental Services Division.

Randall Marco presented information from his Memorandum of April 3, 2013, which is in the Committee Packet. Please see this Memorandum for specifics of this presentation.

Councilor Trujillo said he would like to see the signs in the parks in District 4 Parks, especially during baseball season. He said he likes the signs as they are, and would like the art work on only one side.

Mr. Marco said they will be going in City Parks, commenting he thinks this is a good public awareness, public service and public announcement project for the City.

Chair Calvert said if they will be on a vehicle you will only see one side, and if you put them in the window the public will only see one side. He said it is a question of whether you want all of them to be two-sided. He said if you put them perpendicular to the street, he can see the benefit of doing both sides.

Mr. Marco said it may not be possible to do two sides because of the limited number of signs and students actually painting the signs, as well as that it is a one month project. He said Councilor Trujillo and the Chair are right about painting on only one side.

Responding to the Chair, Mr. Marco said it isn't a contest, but staff will pick the best signs and then make an enlargement for the trucks. He said whether it is contest is up to the school, and he will be meeting with the teachers to pick signs are better than others.

Chair Calvert said the Water Conservation Division has a contest among students for posters, and then a Committee selects the best which go in the calendar and the overall winner is on a City bus for a year. He asked Mr. Marco if he is going to something similar and Mr. Marco said yes.

Responding to Councilor Trujillo, Ms. Padilla said part of the strategy was to put signage on the sides of the trucks. She said the best thing about the truck signs is that they are interchangeable so they can put new messages on the trucks.

Chair Calvert said some signs are can be read on the side of the truck and some can't, just because of the size of the print.

Mr. Marco said the posters will be increased to 3 x 6 feet.

Chair Calvert said when they are judging the Water Conservation Posters, one of the things they have to considering is if it is going on the bus will it be readable or visible. He said sometimes they try to put too many words or too much information on the poster.

Councilor Rivera asked if all City public schools participating in this project.

Mr. Marco said no, just a few, noting it was put out through Amy Suma, Director of Arts for Public Schools, and any teacher that wanted to could take it on as an art project. He said there are 5-6 classes that actually are participating.

Councilor Rivera asked how the posters will be enlarged.

Mr. Marco said they take a picture of the one(s) chosen and make a big vinyl of it, and put it on a sliding piece of metal that slides right into the frame on the truck.

Councilor Rivera said then you won't put out every single poster in different areas, but you will be choosing a certain number.

Mr. Marco said, "For the trucks yes, but with the posters, every single one will go out there as much as possible."

Councilor Rivera said during his campaign, his kids painted on one of his posters, and as soon as it rained all the paint ran off the poster. He said he's sure they've thought of this, but just in case.

Mr. Marco said the project will run through the summer months only, and later, they'll consider what to do in the winter time. The project will start mid-late May and run through September.

Mr. Marco said he already has businesses asking him for signs for the windows of their establishment and on their properties. He said they will not be putting signs in the Historical Districts.

Chair Calvert said there are restrictions on signs, so he needs to coordinate with Mr. O'Reilly.

Mr. Marco said this doesn't apply to the City, but a business has square footage restrictions and other restrictions.

Chair Calvert said he might be able to do something in the Historical Districts, reiterating he should check with Mr. O'Reilly.

Councilor Trujillo said the 400th Anniversary signs weren't advertising, but they still had to go before the Historic Districts Review Board.

Chair Calvert wished staff the best of luck in this effort.

14. UPDATE ON THE COLLECTIONS PROCESS FOR DELINQUENT UTILITY BILLING ACCOUNTS. (PETER ORTEGA AND KATHY VALDEZ)

Kathy Valdez, Collection Manager, presented information from her Memorandum of March 27, 2013, which is in the Committee packet. Please see this Memorandum for specifics of this presentation.

Councilor Trujillo what is current cost to disconnect the water, and asked if it is more than \$25.

Ms. Valdez said they charge customers for a disconnect, but not for a reconnect.

Councilor Trujillo said perhaps we should consider a reconnect fee because of our time involved.

Ms. Valdez said our fee is \$25 and the County charges \$90 for disconnect and reconnect.

Councilor Rivera asked if we put people on payment plans, commenting it is hard sometimes to pay the current bill and to try to catch up on the much larger bill.

Ms. Valdez said they do set up payment plans regardless of the amount they might owe.

Councilor Rivera asked if this part of the process that is handled in the delinquent utility billing accounts, and Ms. Valdez said yes, but only if they call in.

[Much of Ms. Valdez's remarks here are inaudible because of feedback from the microphone.]

Ms. Valdez said when the two day notice is delivered, they are encouraged to come in so they won't be disconnected.

Councilor Rivera asked if that is in the letter they received, or only in face to face contact.

Ms. Valdez said in face to face. She said it is a contract and the City has a payment policy, and it provides how this is handled.

Councilor Rivera said it would be a good idea to include that in writing that they can set up a payment plan as they go through each phase of this that. He said his guess is that people owing significant amounts will avoid the water company altogether. So, if they knew there was another option they could turn to, perhaps we would get a better response.

Chair Calvert said Ms. Valdez indicated there is \$390,000 in the 30 day delinquent category, and Ms. Valdez said this correct. Chair Calvert said in the 60 day delinquent category there is approximately \$175,000 – commercial plus residential. He asked if this is separate from the 30 day total, and Ms. Valdez said yes. Chair Calvert said then the delinquency is \$390,000 plus \$175,000 – these two categories are exclusive and there is no redundancy.

Mr. Snyder said this is his understanding.

Chair Calvert said he understands wanting to be compassionate and work with people, but it is also a matter of fairness to those who are paying their bills. He said if we lose a lot of this money and don't collect it, it means we might have to raise rates on everybody else. He wants the staff to work to prevent these things as much as possible. He said we also need to deal with these delinquencies, noting \$390,000 is a large sum of money. He said he would hope that people are prioritizing their budgets. However, his concern is that if the City is too much the good guy and allow these bills to continue, we will go to the back of the line in terms of other utilities and cable and such, because we are being more considerate. He doesn't know where to strike that balance, but believes we could look to what other utilities are doing in this regard.

Mr. Snyder said then the Chair would like staff to look at our policy and compare it to other water utilities in the region, as well as to other entities such as PNM, New Mexico Gas and Comcast, and look at their policies and how the City compares to those, and if they are as stringent or more stringent or as lenient as we are.

Chair Calvert said that would be helpful in designing a policy moving forward.

Chair Calvert noted on page 1 of the Memorandum, it says "The Finance Department is currently pursuing a collection agency to assist in collecting the unpaid closed accounts." He said, "So, this is only on accounts that are no longer active. Is that true."

Ms. Valdez said this is correct.

Chair Calvert asked, "In your department, do you do any of that now – go after the closed accounts."

Ms. Valdez said they do, if a customer is initiating a new service, they look to see if they have an outstanding balance at the other location. She said, "There is a problem there however. We really don't have any identifying factors, as far as.... For example, there could have 7 people by the same name, so we don't if this customer is one of those people. So we really don't have any identifying factors. But if they are transferring from one location to another, we would collect the past due account at the old location that they're moving from."

Chair Calvert said, "If they have a past due and it's an inactive account, then we're not pursuing them."

Ms. Valdez said, "We do if we know what that is."

Chair Calvert other than trying to establish service at another location, we're not pursuing those closed accounts.

Ms. Valdez said no.

Chair Calvert said we have increased rates significantly, and that might factor into a person's ability to pay and not pay. He said we have a program for low income people who get the administrative charged waived, and they only pay the usage charges. He reiterated his concern that people not paying isn't fair to the others that pay, and we need to strike a balance in collections. He said people should put the water bill at the head of the queue, because water is essential to life and the daily routine while other things aren't. He doesn't know how to make sure that people prioritize their water bill appropriately.

Councilor Rivera said he believes compassion does play a part in the District he represents. He said the other part of it is that it's better to collect a little bit every month than to collect nothing at all. He said on page 2 of the Memo, if the level one and amounts are active accounts on which we are seeking payment, and Ms. Valdez said yes.

Councilor Rivera said on page 1 of the Memorandum it says there is approximately \$2.9 million in unpaid active residential and commercial accounts, noting the numbers on page 2 don't come close to those numbers.

Ms. Valdez said those are current, unpaid accounts which are not past due.

Chair Calvert said there are accounts receivable, and a subset of that are the delinquent accounts.

Councilor Rivera said the \$2.9 million is unpaid, and asked what is classified as unpaid – one week past due, or as soon as it is billed.

Ms. Valdez said as soon as it is billed it is unpaid, and that includes everyone in the City.

Chair Calvert said on page 1 in the same sentence it says there is another \$3.5 million in closed unpaid. He said those are not active and is old stuff, and at some point you have to know the likelihood if you are ever going to collect those funds.

Councilor Rivera said, "To my initial point of, if you start shutting people down, that's what's going to happen. You're going to increase that amount."

Chair Calvert agreed, reiterating that we need to prevent people from getting in these situations in the first place, to keep the amounts from building up. He said it is always difficult to collect once these situations manifest themselves. He asked if we have any other identifying information other than the person's name.

Mr. Ortega said they take that information, but they don't enter it into the billing system. He said they do their best to be proactive in researching the customers files. He said we do have some information like a drivers' license number for people signing up for a new account and how they are able to identify people.

Chair Calvert said it is important to get this information, especially in terms of rental accounts, noting his experience delivering mail is that there are "professional renters," who move from place to place. They will use an address long enough to build up a bunch of bills, and when the heat is on, they move to the next place. He said if we can't identify those people we are just contributing to that problem. He said perhaps this is something we need to be considering in purchasing a new billing system – capturing sufficient information to identify people with the same name.

Peter Ortega said, "This is one of the deficiencies in the current billing system. We need to be PCI compliant, and red flag rules compliant, and we are not allowed to enter that information into our current billing system. That is one of the requirements we're putting into the new billing system.

Chair Calvert would like to continue to be updated on the progress of this effort. He said we need to know what the new policy might be, what results we are getting through our collection efforts. He said if the \$3.5 million in closed unpaid accounts are to the point where we're going to end up writing all that off, then our policy on unpaid accounts needs to reflect that, and how we approach that, so we don't get to that point again.

Mr. Snyder it is the intent to build on this base, bringing forward various components of policies, as well as some of the other things we've been discussing tonight, noting they will be providing updates, as

well as examples of the approach moving forward, and comparisons and such.

Chair Calvert said it is incumbent on us to do the best job in fairness to people paying their bills. He said before ask for more money from the people, we need to be doing the best job possible to collect all of the bills.

Councilor Dominguez asked if we have addresses for all of the customers, and Mr. Snyder said yes. Councilor Dominguez asked if it would be possible to dump the information into a GIS data base.

Mr. Snyder asked for what purpose.

Councilor Dominguez said, "Just to look at where delinquencies are geographically, I don't know."

Mr. Snyder said, "To get to your question, we can extract addresses from the billing system and put it into an Excel file which is comparable with the Access data base that you can do things like that for purposes of charting and mapping. Is that what you're thinking."

Councilor Dominguez said, "Yes. If it's easy to do and it's not going to take up a ton of time, because I know staff has too much to do already."

Mr. Snyder said he can look into this and work with GIS to see what it take to do that.

Councilor Dominguez said in terms of mapping it will be "blobs of stuff."

Mr. Snyder said they can do that, and it's not a huge level of effort. It is querying the system, pulling the data and then providing it to a GIS analyst.

Councilor Dominguez asked the number of addresses involved.

Chair Calvert said it depends on the category, in the 30 day there are 2,083 residential accounts and 826 in the 60 day category.

Mr. Snyder said he doesn't visualize this as a manual test, but a query, an extraction and 30 days are green, 60 days are yellow, and 90 days are red. He said this will give you a sense of what the data looks like.

Chair Calvert asked the purpose of doing this.

Councilor Dominguez said just to have a geographical representation of it. He said he doesn't want to talk about his profession, but "if I had that data I could do all kinds of crazy stuff with it. I'm not asking for that. I just want a geographical representation, if possible and it's not tough."

Chair Calvert said the other piece of information he would like is the breakdown of amounts due from rentals, because that could be another set of problems and policies – rental properties vs. owner occupied properties and how to deal with them. He said we used to make the landlord pay the bill, but State law says we have to allow the tenant to pay.

Councilor Trujillo said he has received calls from constituents and he has thrown them “to you guys.” He said when they call him back they tell him the staff is very helpful and professional, and thanked Mr. Ortega and staff.

Mr. Ortega said on a property owner account the City could put a lien on the property, and when they sell the home that can be collected.

Chair Calvert said that could take a long time, but it's a possible way to collect. He reiterated his concern about serial renters that don't pay their bills.

Chair Calvert wants this as a recurring topic on the agenda so we can chart the progress and policy moving forward.

15. AUTOMATIC METER READING (AMR) EVALUATION MATRIX. (PETER ORTEGA AND RICHARD CHAVEZ)

Richard Chavez, Meter Reading Supervisor, presented information from his Memorandum of March 25, 2013, which is in the Committee packet. Please see this Memorandum for specifics of this presentation.

Chair Calvert we are looking at various options moving forward, noting we have been doing a pilot on the Badger/Orion. He said the reliability seems to be better, but we heard at the last meeting that they weren't any better and may be worse than the better ones. He said there are pros and cons, commenting he doesn't know the life expectancy/warranty period. He said another option used by the Gas Company is one where each meter sends out a signal to a central, or do they have to drive by.

Mr. Snyder said he understands they have to drive by and sensor the meter, similar to the City's AMR. However, there are systems which are fixed systems and the meter reader doesn't have to drive by and the information comes to a central location on any frequency – daily, weekly, monthly. He it is similar to the PRV SCADA system.

Responding to the Chair, Mr. Snyder said currently there are 6-7 meter readers who drive around all day in a truck and manually read the meter so we can bill on a weekly basis. He said each month there are about 250 additional manual reads because of the problems with the existing system. He said the pros of the fixed network system also known as an AMI system is that Richard's staff would no longer be driving around daily to get the information and the meter reads would be coming back at whatever frequency was set up. He said the intent is ultimately to bill from the information, as well as the ability of staff to be in the

office looking for irregularities in usage, predicting leaks, identifying leaks proactively, rather than waiting for you to get your bill and then responding. He said they have receive feedback from customers who want to know if it is a hand-held device in their house where they can know, real time, how much water it takes to do the laundry and so forth. He said this system could be compatible with our sunshine portal, where customers could look at their account to see real time data on usage.

Mr. Snyder said the down side as Chair Calvert mention is this information is done via radio waves, similar to what we initiated with our SCADA system for the 50 PRV's we had around the City. There have been some recent lawsuits around Electromagnetic Fields, so this is the downside in the community. He said it is a matter of weighing the upside versus the downside of what we're trying to accomplish and if we can work with the community to meet our needs and goals, while at the same time maintaining a balance with some of the concerns raised around these types of systems.

Mr. Snyder said part of what Mr. Chavez is trying to collect, is information on the latest technology, as well as how the information is radioed back to the City's central facility. It is it all done via cell phone, or are there different technologies which may not be as concerning to people who are EMF and those types of situations. The goal is to get a snapshot of what's out there. He said whatever system we get will have a life expectancy, for example of 10 years. He said the system will cost \$3-5 million and it will take 3-5 years to transition into any new system we might purchase. He said by the time we're up and running with the new system, we're almost halfway through the warranty period. He said it is imperative that we make an educated decision internally, staff-wise, and present you with all the options available. He said, "We want to be educated, educate you and get the best system for the money we will be spending."

Councilor Rivera said he understands what Mr. Snyder is trying to do, and asked if the questionnaire been run through Purchasing specifically looking for any procurement issues. He said, in his opinion, it is an informal bid, and is unsure if this would factor into procurement law, or if this is perfectly fine to do.

Mr. Snyder said he doesn't believe it has been run through procurement, commenting it would be a good idea to do that. He said they also are looking to taking the information and using it to make an educated decision to piloting a different program, in comparison to the Badger/Orion, to make sure are comfortable with any decision before moving forward. He said he will look into the procurement issues.

Councilor Trujillo said there was an issue last year with regard to sending a signal, and we need to look at the system which would be best for all parts of our City. He would like something on which the entire City can compromise.

Chair Calvert said, with regard to the PRV's, we ended up using the telephone which isn't what we wanted.

Mr. Snyder said initially, it was the intent to use a low frequency radio wave, and we did end up with CenturyLink accounts for each site and it is costly, \$45 per month per site.

Responding to the Chair, Mr. Snyder said we are using that system city-wide. The upside to the system is we know a lot more about our water distribution system, and if there is a failure caused by a PRV or if a PRV sticks up, we're there before the failure happens. He said this covers about 50% of the system, and we will need a Phase 2 to get 100% of the system covered, but it is city-wide.

Chair Calvert said we couldn't do that with individual meters, and would need to do something as initially proposed, with a radiofrequency device providing a signal back to the central station.

Mr. Snyder said this is where the evaluation of the questions come in handy for us to learn what is out there, commenting that they are contacted by various vendors weekly. One of the most recent products, is an AMI fixed network system that has teamed with Verizon. There is a system where set fee is paid monthly, but it is incorporated into the whole system, 36,000 accounts. There are various systems and they want to get a handle on the technology that is available.

Councilor Dominguez asked about those who already have some of the system.

Mr. Snyder said the goal is to figure out something that works with the existing system – there is a wide range across the City.

Chair Calvert said the biggest problem on the feedback on the KopyKap was that they “sucked up batteries like nobody's business.”

Councilor Rivera asked if it is necessary to apply to the FCC on those systems using radiofrequency, and if there is a fee.

Mr. Ortega said the vendors with whom he has spoken, have said that the frequency on the transmitters is so low that there is not a requirement to apply with the FCC, and the vendors take care of the licencing and such.

Chair Calvert said, regarding the questionnaire, #15 and #16 are somewhat similar. He said #15 is a more general question and #16 is specific about it. He asked at what point will they stop trying to fix the device and replace it, and how much City staff time will be wasted trying to fix something rather than to replace. He said perhaps we need to be more specific on #16.

DISCUSSION ITEMS AND ACTION ITEMS

There were no Discussion Items/Action Items

MATTERS FROM THE PUBLIC

There were no matters from the public.

MATTERS FROM THE CITY ATTORNEY

There were no matters from the City Attorney.

ITEMS FROM STAFF

There were no items from staff.

MATTERS FROM THE COMMITTEE

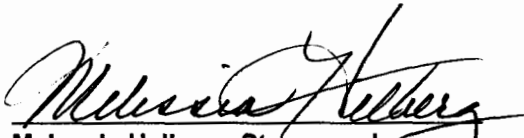
There were no matters from the Committee.

NEXT MEETING: WEDNESDAY, MAY 1, 2013

ADJOURN

There was no further business to come before the Committee, and the meeting was adjourned at approximately 7:45 p.m.



Christopher Calvert, Chair

Melessia Helberg, Stenographer

PNM Update

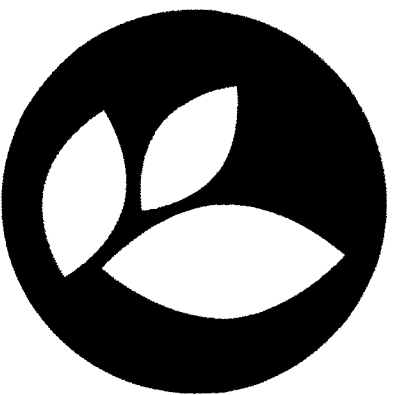
Santa Fe Public Utility
Committee

April 3, 2013

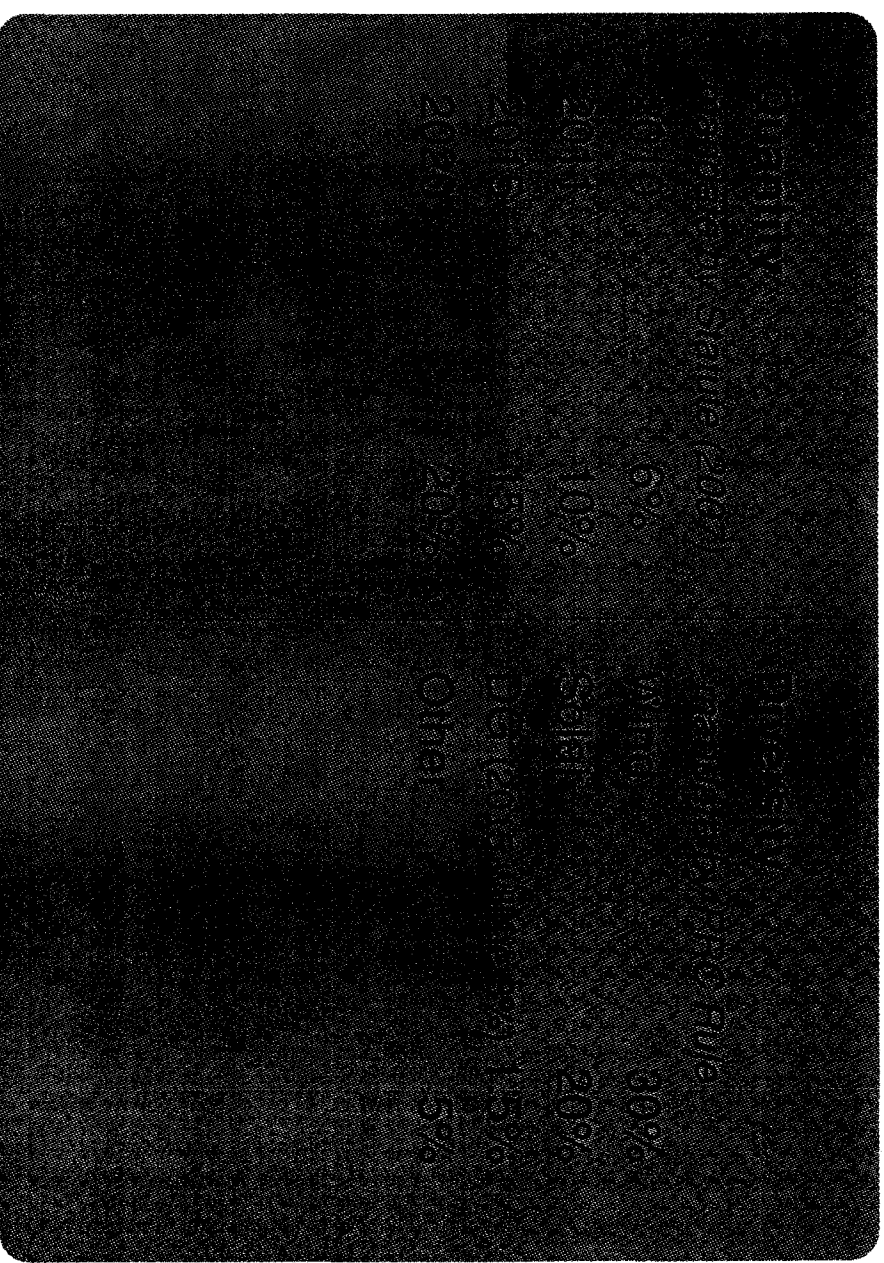
The power to make life better. Together.



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Renewable Portfolio Standard (RPS)



The power to make life better. Together.

PNM Renewable Portfolio

- PNM currently meets the State 10% **Quantity** requirement
- Distributed Generation (DG) is currently at 11.5%, which exceeds the 1.5% mandate
- Expected to fully meet **Diversity** requirement in 2014 after geothermal plant comes on line.

PNM Renewables

- New Mexico Wind Energy Center (200 MW)
- Large scale solar facilities in five locations across New Mexico (22 MW)
- Innovative battery storage pilot project (1/2 MW)
- Customer owned PV solar programs
 - 2,989 residential and business customers at
 - 19.8 MW

2013 Renewable Activities

- Additional 21.5 MW of large-scale solar
- Additional 9 MW of customer owned PV solar programs
- 10 MW of geothermal energy
- All renewable RFP issued in November 2012
 - Addition of 375,000 MWh of additional renewables
 - Plan to be filed at PRC in June 2013
- Re-launch of Sky Blue Program



Community Solar Project

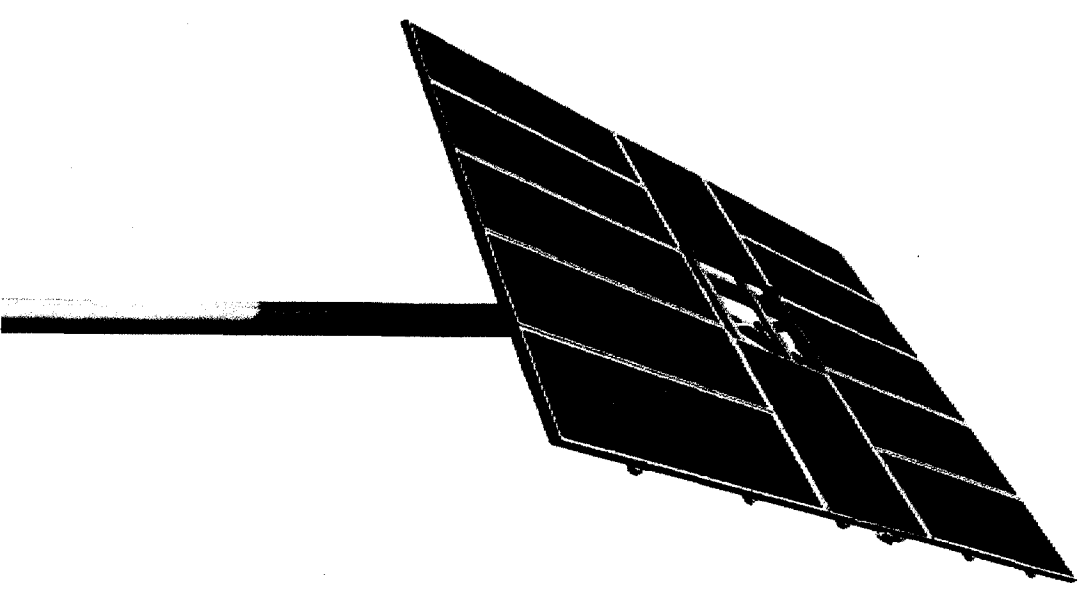
Exploration of pilot project in community

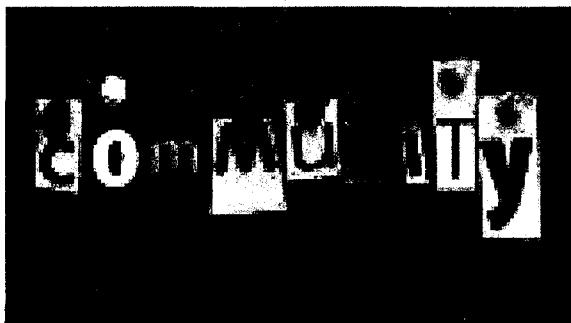
Initial meeting with community group
February 2013
February 2013
February 2013

PNM work - December - Current

- Establish internal team
- Visit sites, meet with external ST consultants
- Examine other existing models
- Contact with industry groups (CEPA) and other utilities
- Conducting financial modeling
- Start work with IT and system service options

The power to make life better. Together.





Santa Fe Community Engagement

172 New Construction/Retrofit and 81 Quick Saver™ projects have resulted in 13,780,815 kWh saved annually

Helped 11 nonprofits reap ongoing energy savings through the issuance of over \$50,000 in Reduce Your Use Grants

PNM Foundation & Corporate Giving

- Education
- Environment
- Economic Development

2013 Community Involvement

- City, Community and Chamber Events and Participation
- Santa Fe Velocity Program
- Breakthrough Santa Fe
- Energy Efficiency Education Events
- "Reduce Your Use" Grant Program
- PNM Foundation 30th Anniversary Environmental Grants

The power to make life better. Together.

Thank you

Matthew A. Jaramillo

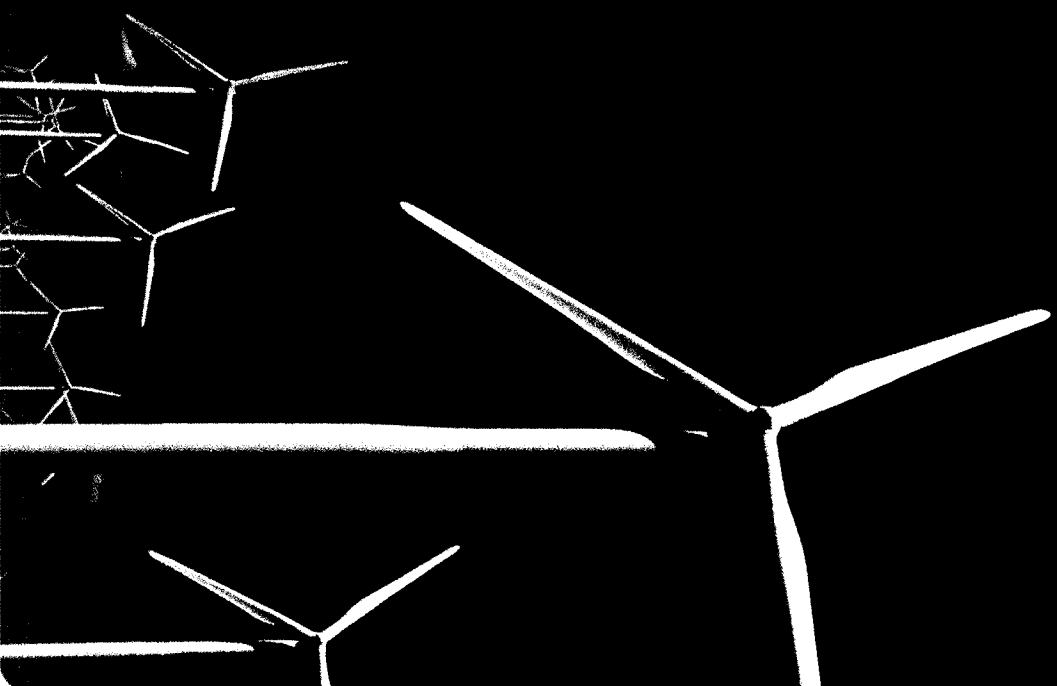
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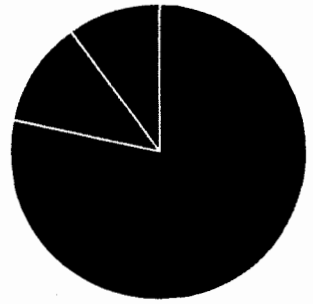


2013 Renewable Resource Mix

To meet New Mexico's Renewable Portfolio Standard

■ Wind	78.5%
■ DG	11.5%
■ Solar	10.0%

PNM Sky Blue® customers
add additional renewable energy.



Update: Energy 2013

Existing Resources and Planned Additions



Los Lunas Solar Energy Center

Los Lunas is typical of our solar centers. Panels are ground-mounted and stand six feet high. They operate in silence, emit no toxins and use no water to produce electricity.

PNM Solar Facilities by the Numbers

- 8 solar centers, 44 megawatts of combined capacity that includes 42.5 megawatts to meet the state's renewable portfolio standard and 1.5 megawatts for PNM Sky Blue
- 25-kilowatt "sunflower" solar array in Algodones
- 5-kilowatt solar installation at our Aztec Rd. offices in Albuquerque

Combined Number of Solar Panels:
Approximately 611,250

Based on latest usage data, all of our centers would produce enough energy to supply:
Approximately 13,900 average homes

Annual carbon reduction:
41,000 tons of CO₂ - the equivalent of removing 7,750 cars from the road

PNM Solar Energy Centers

Manzano - New

- Expected online on or before September 2013
- Will be located on 60 acres opposite Valencia High School on Bonita Vista Blvd. in Valencia County
- 8 megawatts
- 108,000 panels
- Will produce enough electricity to power about 2,600 average-sized homes in a year

Otero County - New

- Expected online on or before November 2013
- Will be located on 70 acres SE of Tularosa on Highway 70 and County Road 545
- 7.5 megawatts
- 101,250 panels
- Will produce enough electricity to power about 2,450 average-sized homes in a year

Los Lunas

- Online June 2011/Expanding on or before October 2013
- On 60 acres located in Los Morros Business Park
- 78,000 panels today / 30,000 added in 2013
- 5 megawatts of capacity today, enough to power about 1,600 average-sized homes
- Will be expanded to 7 megawatts capable of producing enough electricity to power about 2,250 average-sized homes in a year

Deming

- Online August 2011/Expanding on or before November 2013
- On 80 acres located south of Deming on Columbus Highway
- 78,000 panels / 60,000 panels added in 2013
- 5 megawatts of capacity today, enough electricity to power about 1,600 average-sized homes
- Will be expanded to 9 megawatts capable of producing enough electricity to power about 2,800 average-sized homes in a year



PNM Sky Blue® Goes Solar

For a few extra dollars a month, our PNM Sky Blue customers purchase additional renewable energy over and above the energy PNM procures to meet state requirements.

Starting in May 2013, PNM Sky Blue customers will be able to purchase additional solar energy from a PNM solar energy center as well as the wind energy from the N.M. Wind Energy Center in House, N.M.

Learn more at PNM.com/pnmskyblue.

PNM Customer-installed Solar Program

Since 2006, PNM has offered a program for customers who want to install qualified solar systems at their homes or businesses and connect them to the PNM grid.

Participating customers only use electricity from PNM to supplement the electricity their systems produce.

PNM pays the customer for the renewable energy certificates or RECs associated with the energy their systems produce. A REC is a document certifying that energy was created from a renewable resource. Utilities use RECs to demonstrate compliance with the state's renewable portfolio standard. In 2013, PNM expects to pay \$8.67 million to purchase RECs from its customers.

For program details visit PNM.com/solar.

Las Vegas

- Online November 2011
- On 97 acres north of downtown Las Vegas, N.M.
- 78,000 panels
- 5 megawatts of solar capacity, enough electricity to power about 1,500 average-sized homes in a year

Alamogordo

- Online October 2011
- On 70 acres located off Airport Road
- 78,000 panels
- 5 megawatts of solar capacity, enough electricity to power about 1,600 average-sized homes in a year

Albuquerque

- Online April 2011
- On 20 acres co-located with our PNM Reeves Generating Station in Albuquerque
- 30,000 panels
- 2 megawatts of solar capacity, enough to power about 610 average-sized homes in a year

The PNM Prosperity Energy Storage Project

- Online September 2011
- On 4.9 acres near Mesa del Sol south of Albuquerque
- 2,158 panels
- 500 kilowatts of solar capacity, enough to power about 100 average-sized homes in a year

New Mexico has an abundance of sun and wind, but these resources are not always available. Imagine if we could capture this energy and store it for use when it is needed the most. Energy storage is the greatest barrier to fully realizing the potential of solar and wind energy. This project, which links grid-connected solar panels and an energy storage system to a sophisticated computer bank, will help PNM and its partners address this challenge.

Partners with PNM include the U.S. Department of Energy, Sandia National Laboratories, the University of New Mexico, Northern New Mexico College and East Penn Manufacturing Co.

To learn more about the project and view energy output in real time, visit PNM.com/solarstorage.

Purchasing Solar RECs from Tri-State - New

In 2013, PNM will purchase 15,000 megawatt-hours of RECs associated with the energy generated by the Cimarron Solar Facility in Cimarron, N.M. that is owned and operated by Tri-State Generation and Transmission Association. Purchasing RECs is another way to support renewable energy development.



PNM®

Albuquerque Solar Energy Center

At Reeves Generating Station

Albuquerque, N.M.



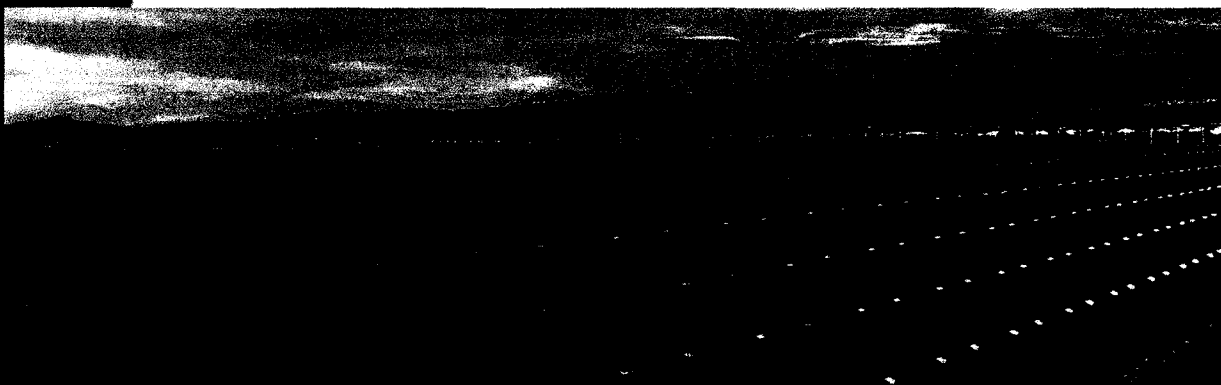
Ground level simulation of the Albuquerque Solar Energy Center

Numbers At A Glance	
Approximate acres	20
Number of solar panels	About 30,000
Based on latest usage data, would produce enough energy to supply	630 homes
Annual carbon reduction (by avoiding natural gas-fired power production)	4 million pounds -or- The equivalent of removing 400 cars from the road

As part of its 2011 build out of 22 megawatts of clean, utility-scale solar photovoltaic energy, PNM is constructing a 2-megawatt solar facility just south of its existing natural gas-fired Reeves Generating Station in northeast Albuquerque.

Project Highlights

- The plant is under construction and will be operational and dedicated in April 2011.
- At the time of its completion, it will be the largest solar PV facility in Albuquerque.
- The facility will consist of an estimated 30,000 solar PV panels on about 20 acres of land south of plant.
- The panels are ground mounted and visually non-obtrusive to nearby industrial and commercial properties.
- The facility will be interconnected to and support PNM's existing electric distribution system.
- Panels are produced and installed by First Solar, of Tempe, Ariz., whose panels have been installed at sites throughout the world.
- PNM will own and operate the facility.
- Construction has created about 50 temporary construction jobs using largely local labor. PNM also used local labor for site grading, fencing, drainage preparation and other project tasks.
- The facility also will benefit local government tax revenues through increased an increased property value.



Alamogordo Solar Energy Center

Alamogordo, N.M.

As part of its effort to meet state renewable requirements, PNM in 2011 will construct five, utility-scale solar photovoltaic energy production facilities in New Mexico. The Alamogordo Solar Energy Center is the fourth of the five facilities to be completed. Solar energy centers in Albuquerque, Los Lunas and Deming were completed earlier in 2011, while one remaining facility, in Las Vegas, will be completed later in 2011.

Project Highlights

- The facility is located in Alamogordo just north of Highway 70 and Airport Road.
- The 5-megawatt facility is the largest solar PV facility in Otero County. It is owned and managed by PNM.
- The facility is interconnected to and supports existing electric distribution system in the Alamogordo area.
- Panels planned for the site are produced by First Solar, of Tempe, Ariz., whose panels have been installed at sites throughout the world.
- The solar panels are ground mounted and rise to a height of about six feet.
- Construction took two months; the facility began producing power in late Sept. 2011.
- In addition to clean energy production and temporary construction jobs, the facility also benefits local government revenues by increasing the land's value for purposes of property tax valuation.

Alamogordo Solar Energy Center	
Acres of Panels	50
Number of solar panels	About 78,000
Based on latest usage data, would produce enough energy to supply	About 1,600 homes
Annual carbon reduction (by avoiding natural gas-fired power production)	10 million pounds -or- The equivalent of removing 1,000 cars from the road



Deming Solar Energy Center

Luna County, N.M.

As part of its effort to meet state renewable requirements, PNM in 2011 will construct five, utility-scale solar photovoltaic energy production facilities in New Mexico. The Deming Solar Energy Center is the third of the five facilities to be completed. Solar energy centers in Albuquerque and Los Lunas were completed earlier in 2011, while facilities in Alamogordo and Las Vegas will be completed later in 2011.

Project Highlights

- The facility is located in Luna County on Highway 11 and Coyote Road. This is a few miles south of the City of Deming.
- The 5-megawatt facility began producing power August 3, 2011, and is the largest solar PV facility in Luna County. It is owned and managed by PNM.
- The facility is interconnected to and supports existing electric distribution system in the Deming area.
- Panels planned for the site are produced by First Solar, of Tempe, Ariz., whose panels have been installed at sites throughout the world.
- The solar panels are ground mounted and rise to a height of four to six feet.
- Construction took two months.
- In addition to clean energy production and temporary construction jobs, the facility also benefits local government revenues by increasing the land's value for purposes of property tax valuation.

Deming Solar Energy Center	
Acres	50
Number of solar panels	About 78,000
Based on latest usage data, would produce enough energy to supply	About 1,600 homes
Annual carbon reduction (by avoiding natural gas-fired power production)	10 million pounds -or- The equivalent of removing 1,000 cars from the road

Las Vegas Solar Energy Center

Las Vegas, N.M.

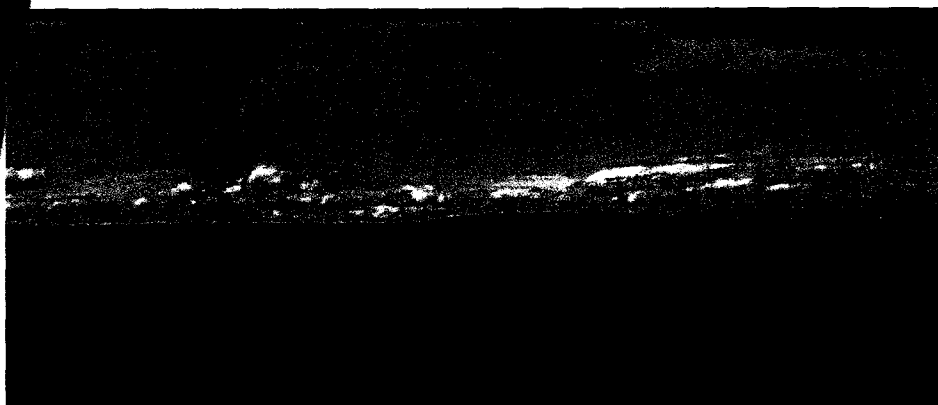
As part of its effort to meet state renewable requirements, PNM in 2011 will construct five, utility-scale solar photovoltaic energy production facilities in New Mexico, including the possibility of one at a proposed site in Las Vegas, N.M. The other facilities will be located in Albuquerque, Los Lunas, Deming and Alamogordo.

Project Highlights

- The proposed site is about 1 mile east of State Highway 518 and one-half mile west of Interstate 25.
- If constructed, the 5-megawatt facility would be the largest solar PV facility in San Miguel County. It would be owned and managed by PNM.
- The facility would be interconnected to and support PNM's existing electric distribution system in Las Vegas.
- Panels planned for the site are produced by First Solar, of Tempe, Ariz., whose panels have been installed at sites throughout the world.
- The solar panels would be ground mounted and rise to a height of four to six feet.
- Construction is estimated to last up to seven months, including about two months for installation of solar panels.
- Construction would create an estimated 80-100 temporary jobs, and First Solar expects to hire temporary local labor for solar panel assembly. PNM will evaluate the use of local firms for grading and site fencing.
- In addition to clean energy production and temporary construction jobs, the facility also would benefit local government revenues by increasing the land's value for purposes of property tax valuation.

Numbers At A Glance

Acres	60
Number of solar panels	About 78,000
Based on latest usage data, would produce enough energy to supply	About 1,600 homes
Annual carbon reduction (by avoiding natural gas-fired power production)	10 million pounds -or- The equivalent of removing 1,000 cars from the road



As part of its effort to meet the N.M. Renewable Portfolio Standard, PNM in 2011 will construct five, utility-scale solar photovoltaic energy production facilities (one each in Albuquerque, Los Lunas, Deming, Alamogordo and Las Vegas, N.M.).

The 5-megawatt Los Lunas Solar Energy Center currently is under construction and will be the second of the five facilities to be completed.

Project Highlights

- The plant is under construction and will be operational in June 2011. It is located just north of the Wal Mart distribution center in northern Los Lunas and will be visible from nearby I-25.
- Once completed, it will be the largest solar PV facility in Valencia County, N.M.
- The facility will be interconnected to and support PNM's existing electric distribution system.
- Panels are produced and installed by First Solar, of Tempe, Ariz., whose panels have been installed at sites throughout the world.
- PNM will own and operate the facility.
- Construction will create an estimated 80-100 temporary construction jobs using largely local labor. PNM also is using local labor for site grading, fencing, drainage preparation and other project tasks.
- The facility also will benefit local government through increased property tax valuation.

Los Lunas Solar Energy Center Key Statistics	
Acres	50
Approximate number of solar panels	78,000
Will produce enough energy to supply	About 1,600 homes
Annual carbon reduction (by avoiding fossil-fueled generation)	10 million pounds *or* the equivalent of removing 1,000 cars from the road

Update: Renewable Energy 2013 Plan

New Mexico requires us to preserve our natural resources, promote energy self-sufficiency and protect the environment by gradually replacing some fossil fuels with renewable energy. We are committed to adding renewable energy while managing costs. In 2013 we will double our company-owned solar capacity, expand our program for customers who install their own solar systems, and add a new geothermal energy facility to our resource portfolio.

PNM Solar Centers

PNM will construct 20 megawatts of additional company-owned solar PV, bringing our total solar capacity to 42.5 megawatts capable of generating enough power to supply approximately 13,400 average homes.

We will build two new solar centers, the Manzano Solar Energy Center in Valencia County and the Tularosa Solar Energy Center in Otero County, and expand our 5-megawatt solar centers in Los Lunas and Deming. Our other solar centers are located in Alamogordo (5 megawatts), Las Vegas (5 megawatts) and Albuquerque (2 megawatts). Our 500-kilowatt PNM Prosperity Energy Storage Project is located south of Albuquerque.

Construction will cost approximately \$45 million, create jobs and generate tax revenue for local communities.

Customer-installed Solar Systems

Since 2006, PNM has offered a program for customers who install their own grid-connected solar systems where the customer uses the energy produced by their system and PNM pays the customer for the renewable energy credit (REC) associated with that solar energy. A REC is a document certifying that energy was created from a renewable resource. Utilities use RECs to demonstrate compliance with the state's renewable portfolio standard.

Geothermal Energy

By 2014, PNM customers will get their first electricity generated from heat deep inside the earth. Heat will be used to create steam to turn a turbine that will produce enough electricity to power 10,900 average homes.

PNM will purchase the energy produced by a new 10-megawatt geothermal facility being developed 20 miles southwest of Lordsburg, N.M., by Lightning Dock Geothermal, a subsidiary of Cynq Energy, Inc.

Construction will provide work for many people. The project will provide new tax revenue for the state and Hidalgo County. Pending future testing, the facility may be expanded to provide an additional 5 megawatts of capacity.

1/24/13

The power to make life better. Together.



Exhibit "3"

PNM expects to make \$8.67 million in REC payments to customers in 2013, making solar systems more affordable for customers and also supporting the local solar industry. We will add 9 megawatts of capacity through 2016 for systems under 100 kilowatts, allocated in six-month capacity allotments, and an additional 2 megawatts for larger systems in both 2013 and 2014.

REC payments for systems up to and including 10 kW_{AC}: The REC price starts at 4 cents per kilowatt-hour and drops every six months by 0.5 cents. The subscription level is limited to 1,000 kilowatts of capacity for each six-month period in 2013 and 2014 and 500 kilowatts for each six-month period in 2015 and 2016.

REC payments for systems above 10 kW_{AC} up to and including 100 kW_{AC}: The REC price starts at 5 cents per kilowatt-hour and drops by 0.5 cents every six months. The subscription level is limited to 500 kilowatts of capacity for each six month period in 2013 and 2014 and 250 kilowatts for each six-month period in 2015 and 2016.

REC payments for systems above 100 kW_{AC} up to and including 1,000 kW_{AC}: 2 cents per kilowatt-hour.

Visit PNM.com/solar to learn more.

Energy from the Wind

The New Mexico Wind Energy Center located in House, N.M., was built in 2003 to serve PNM customers. It is owned and operated by FPL, a subsidiary of NextEra Energy Resources. PNM and PNM Sky Blue customers purchase the entire output from this facility.

Sun, Wind and Hydroelectric RECs

We will purchase additional wind and solar RECs associated with energy generated in New Mexico to help us meet the state renewable energy requirement in 2013 while the new solar and geothermal facilities are being constructed. These purchases include 104,500 megawatt-hours of wind RECs from Southwestern Public Service Co. and 15,000 megawatt-hours of RECs generated by the Tri-State Generation solar facility in Cimarron. Additionally, PNM purchases approximately 400 megawatt-hours of RECs annually from the Santa Fe Canyon Road Water Treatment Plant.

The PNM Prosperity Energy Storage Project

New Mexico has an abundance of sun and wind, but these resources are not always available. Imagine if we could capture this energy and store it for use when it is needed the most!

Energy storage is the greatest barrier to fully realizing the potential of solar and wind energy. The PNM Prosperity Energy Storage Project is a 500-kilowatt facility located south of Albuquerque near Mesa del Sol that is helping PNM, its partners and the utility industry address this challenge.

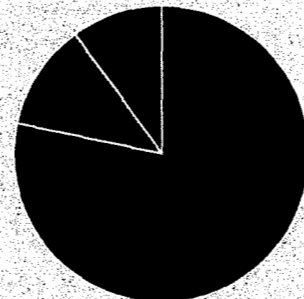
To learn more about the project and view energy output in real time visit PNM.com/solarstorage.

PNM Sky Blue® - Now Solar and Wind

For a few extra dollars a month, customers can drive additional renewable energy onto the PNM grid by participating in PNM Sky Blue, our voluntary renewable energy program. Starting in May 2013, PNM Sky Blue customers will purchase a blend of energy from the New Mexico Wind Energy Center and energy generated from a PNM solar energy center. PNM will also construct additional solar PV for PNM Sky Blue customers. To learn more, visit PNM.com/pnmskyblue.

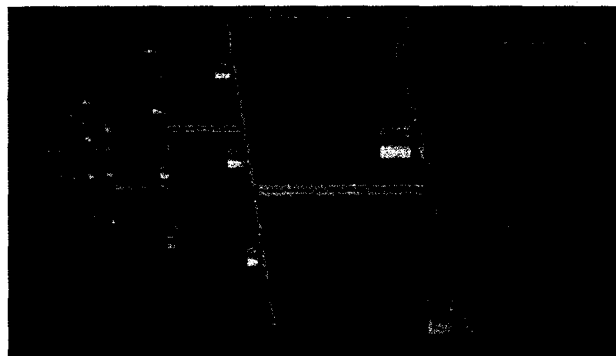
2013 Renewable Resource Mix

■ Wind	78.5%
■ DG	11.5%
■ Solar	10.0%
■ Other	0.0%



PNM

Prosperity Energy Storage Project 2011 - 2013



"Solar is the fastest growing form of renewable energy. We need to understand how to effectively integrate it and many other systems into the grid, like smart buildings, so they work together."

– Andrea Mammoli, University of New Mexico

"The project is a logical next step from ideas on paper to a demonstration on a real utility grid. We can apply the lessons we learn here to other smart grid applications." – **Abraham Ellis, Sandia National Laboratories**

"We must learn to process massive amounts of data and make sophisticated decisions in real time. It's an emerging field referred to as 'big data.' We are learning here and teaching our students at the same time." – **Olga Lavrova, University of New Mexico**

"The data being produced is phenomenal and will help shape the future of energy storage. People are following this."
– **Haresh Kamath, Electric Power Research Institute**

Launched Sept. 21, 2011, the PNM Prosperity Energy Storage Project, the nation's first solar PV storage facility fully integrated into a utility power grid, uses smart grid technology to advance renewable energy.

Grid-connected solar photovoltaic panels and an energy storage system comprised of two kinds of batteries are linked to a sophisticated computer bank that collects up to 220 data points a second.

The data is being used to understand how to safely integrate a variable power source (solar energy) with a grid designed to handle steady, one-way power flows and make solar power available when the

customer most wants it. Learning how to deploy batteries optimally (making them more cost-effective) and using smart grid technology both have application for utilities beyond solar integration.

Partners with PNM include the U.S. Department of Energy, Sandia National Laboratories, the University of New Mexico,

Details

Location: Near Mesa del Sol, south of Albuquerque, NM

Site size: Approximately 4.9 acres

Solar panels: 2,158

Solar power produced: Up to 500 kilowatts

Battery containers: 8

Batteries in each container: 160

Storage capacity: 250 kilowatts per hour delivered over four hours or 1 megawatt-hour

Cost: Overall cost of the storage system and research is \$5.8 million. The DOE grant: \$2.3 million.

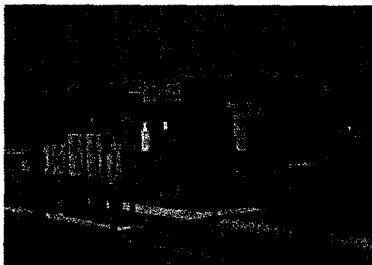
Batteries: Advanced lead acid batteries with an energy rating of 1 megawatt for shifting and UltraBattery™ advanced battery units with a power rating of 500 kilowatts for smoothing.



...and Northern New Mexico College and East Penn Manufacturing, the battery maker. The project is supported in part by a grant through the American Recovery and Reinvestment Act. The panels were manufactured in America. New Mexico companies SCHOTT Solar, Cameron Swinerton and Positive Energy also contributed to the project.

Managing Solar Output

To ensure power quality and prevent damage to customers' appliances and equipment, electricity flowing onto power lines must always equal customer demand for electricity. Grid operators have a short window of time to adjust for changes in demand or reductions in output from power plants. While we can control the power output from conventional power plants, the output from a solar PV facility changes instantly, sometimes dramatically throughout the day as clouds pass by and as the sun makes its passage from east to west. To compensate, an algorithm is being used to tell the batteries when to discharge stored solar energy and when to charge or pull back. Variations of this algorithm are being demonstrated and the data analyzed to find the optimal strategy.



Shifting Solar Output

Power planners work days, months and years ahead to lock in needed power for their customers. Workers at power plants have detailed operating and maintenance schedules to ensure they can deliver the promised amount of power at any time. In the industry, that power is considered firm, meaning you can count on it, and dispatchable, meaning we can generate and use it when we want it.

Solar energy is neither firm nor dispatchable. Moreover, peak output from the solar panels occurs around at 2 p.m. in the summer and is on the wane by late afternoon, yet the most needed (and expensive) power utilities generate in the summer is between 4 p.m. and 8 p.m. Aligning output with peak means customers will get more value for the investment in renewable energy.

Visit PNM.com/solarstorage to view the project at work in real time.

Ahead

The project has been demonstrating the ability to use the battery to store the right amount of energy in the morning and subsequently deliver it the same day during the late afternoon peak. Gaps have been identified such as the need for manufacturers to work more closely together and the need for better weather and cloud cover information. Over the next two years, the use of more complex data-sets, modeling and analysis will allow us to use knowledge learned at this site on other parts of the PNM system and on systems across the nation. Thanks to Northern New Mexico College and UNM, the project is helping students improve math, analytical and engineering skills to prepare for the future.



In New Mexico installed grid-connected PV capacity more than tripled in 2011

2011 Top Ten States			
Ranked by Grid-Connected PV Capacity Installed in 2011			
2011 Rank by State	2011 MWdc	2011 Mkt Share	2010 Rank
1. California	537.8	29%	1
2. New Jersey	306.1	17%	2
3. Arizona	287.8	16%	4
4. New Mexico	122.1	7%	7
5. Pennsylvania	78.2	4%	6
6. Colorado	75.5	4%	5
7. New York	68.3	4%	11
8. Texas	51.1	3%	10
9. North Carolina	45.5	2%	9
10. Hawaii	40.5	2%	14
All Other States	232	13%	
Total	1844.9		

Per Capita Top Ten States		
Ranked by Cumulative Installed PV Capacity per Capital through 2011		
2011 Rank by State	Cumulative through 2011 (Wdc/person)	2011 Installations (Wdc/Person)
1. New Mexico	80.4	59.3
2. New Jersey	64.4	34.8
3. Hawaii	62.6	29.7
4. Arizona	62.2	45.0
5. Nevada	45.9	7.2
6. California	42.0	14.4
7. Colorado	39.1	15.0
8. Delaware	29.4	23.2
9. District of Columbia	19.3	11.9
10. Vermont	18.7	12.4
National Average	13.0	6.0

Source: IREC 2012 Updates & Trends Report

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