PNM Energy Efficiency Programs

Nov 9, 2009
PNM Generation
At-A-Glance

Electricity Mix
8 - Power Plants
(7 in New Mexico)
Own & Maintain
17,400 miles Power Lines

Supply Portfolio

- Coal 57%
- Nuclear 15%
- Natural Gas 10%
- Wind 4%
- Power Purchases 14%
Renewables
Wind

PNM Sky Blue®

Residential Subscribers
17,500 for 100 GWh

Non-Residential Subscribers
1,500 for 80 GWh

NREL rated at 7th best based in country (based on energy sold)
Renewables
Photovoltaics

Residential
• 506 – 1.6 MW
• 229 applications ~ .61 MW

Commercial
• 5 sites - .137 MW
• 27 applications ~ 6 MW
PNM Customer Mix
At-A-Glance

Electricity Sales GWh
- Industrial, 1,657 - 19%
- Residential, 3,214 - 36%
- Commercial, 4,021 - 45%

Customers
- 494,000 Total
  - 440,934 Residential
  - 282 Industrial
  - 52,959 Commercial
PNM
Energy Efficiency Forecast & Budget

Program Year (PY)
Residential = ~40GWh
Average TRC 1.72
PNM
Energy Efficiency

Initial Launch Oct 2007

Residential
Low Income, Demand Response
Lighting, Evap Cooling
Refrigerator Recycling

Business
Lighting, Demand Response

Additional Programs July 2009
Energy Efficiency Programs
Residential

- Refrigerator Recycling
- Residential Lighting
- Low Income Refrigerator and Lighting
- Low Income Energy Wise
- School CFL Exchange
- Load Management
- Market Transformation
Energy Efficiency Programs

Non-Residential

ENERGY STAR Homes
Refrigerator Recycling
Load Management
  - Power Saver (Less than 150 kW)
  - Peak Saver (Greater than 150 kW)
Commercial Comprehensive
  - Retrofit Rebates
  - New Construction Rebates
  - Quick Saver™ (Less than 100 kW demand Direct Install Program)

Market Transformation
Self-Direct
## Energy Efficiency Refrigerator Recycling

- Administered by JACO
- Anticipated ARRA bump, NM statewide goal is 3,000.
- Working with Sears & Best Buy

### Actual to Date
- 5,784 units
- Print, TV, Radio
- Door Hangers
- Bill Inserts, back of envelope, freestanding
- 54 Commercial

### Target
- 10,000
- Target lowered from 12,000 in July Filing
- **PY Budget** - $1.53M
### Energy Efficiency

Residential Lighting

- Administered by APT
- Two local reps.
- Expecting Q4 Bump

<table>
<thead>
<tr>
<th>Actual to Date</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>• 568,000</td>
<td>• 900,000 lamps</td>
</tr>
<tr>
<td>• 160 stores incl. Costco, Wal-Mart, Home Depot, Ace, Walgreens, Sam’s, Grocery, CVS, etc.</td>
<td>• 21,600 MWh Net</td>
</tr>
<tr>
<td>• Over 1MM in ‘08</td>
<td>• <strong>Budget $1.56M</strong></td>
</tr>
</tbody>
</table>
Energy Efficiency
Low Income Refrigerator & Lighting

Administered by MFA – Began in July.

<table>
<thead>
<tr>
<th>Actual to Date</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>• July &amp; August</td>
<td>• 1,000 Refrigerators</td>
</tr>
<tr>
<td>• 41 Refrigerators</td>
<td>• 20,000 CFL’s</td>
</tr>
<tr>
<td>• 579 CFL’s</td>
<td>• 2.13 MWh</td>
</tr>
<tr>
<td></td>
<td>• PY Budget $956,000</td>
</tr>
</tbody>
</table>
Energy Efficiency
Low Income Easy $avings®

“Kit” includes:
• Showerhead
• Fridge Thermometer
• 6 CFL’s 13,18,23 W
• Quick Tips.

<table>
<thead>
<tr>
<th>Actual to Date</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>• &gt;7,500</td>
<td>• 7,500</td>
</tr>
<tr>
<td>• Mailer sent to ~31,000 LIHEAP qualified.</td>
<td>• 2.16 MWh</td>
</tr>
<tr>
<td></td>
<td>• PY Budget $591,000</td>
</tr>
</tbody>
</table>
## Energy Efficiency
### School CFL Exchange

Sierra Club initial point of contact – Interfaith Power & Light is the prime implementer.

<table>
<thead>
<tr>
<th>Actual to Date</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>• 23,875 units</td>
<td>• 50,000 bulbs</td>
</tr>
<tr>
<td>• Community Events</td>
<td>• 960 MWh</td>
</tr>
<tr>
<td></td>
<td>• PY Budget $104,000</td>
</tr>
</tbody>
</table>
### Energy Efficiency
#### Demand Response - Residential

**Power Saver**  
Administered by Comverge  
- Began in 2008  
- 1.64 kW/unit  
- 4 consecutive days in July 2009.

<table>
<thead>
<tr>
<th>Actual to Date</th>
<th>Target (Cumulative)</th>
</tr>
</thead>
<tbody>
<tr>
<td>- 27.3 MW</td>
<td>- 18.75 MW</td>
</tr>
<tr>
<td>- <strong>2009</strong> -10,997 Installs</td>
<td>- 15,244 installs</td>
</tr>
<tr>
<td>- <strong>Total</strong> – 22,091 Installs</td>
<td>- <strong>NET</strong> – 16,637 Installs</td>
</tr>
<tr>
<td>- <strong>NET</strong> – 16,637 Installs</td>
<td>- <strong>PY Budget</strong> $2.0M</td>
</tr>
</tbody>
</table>
Energy Efficiency
Market Transformation

- National Energy Education Development Project (NEED) materials
- Community Events
- Non-Profit partnerships

<table>
<thead>
<tr>
<th>Actual to Date</th>
<th>Target</th>
</tr>
</thead>
</table>
| - School Outreach  
- “Learning and Conserving” kits  
- Multimedia educational ad Campaign Q4 | - 81,000 kWh  
- PY Budget $621,000 |
Launched Oct ‘07

As of July 2009:

- 3-tier program
  - HERS 85 - $500
  - HERS 70 - $750
  - HERS 50 - $1,000

- Administered by ICF
- Partnered with NMGCO
  - At Tier 1 only
- ~25% market share in ABQ metro

<table>
<thead>
<tr>
<th>“Under Contract”</th>
<th>2009 Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>• 2009 -764 (273 paid)</td>
<td>• 400</td>
</tr>
<tr>
<td>• HERS 85 – 447 (69%)</td>
<td>• 1 Local person hired</td>
</tr>
<tr>
<td>• HERS 70 – 292 (38%)</td>
<td>• Rater and Builder “sales” presentations</td>
</tr>
<tr>
<td>• HERS 50 – 25 (3%)</td>
<td>• PY Budget $516,000</td>
</tr>
</tbody>
</table>
Energy Efficiency
Demand Response

**PNM Power Saver**
Demand < 150 kW
- 5412 units

**PNM Peak Saver**
Demand > 150 kW
- 62 Customers

<table>
<thead>
<tr>
<th>Actual to Date</th>
<th>2009 Target (cumulative)</th>
</tr>
</thead>
<tbody>
<tr>
<td>24.9 MW</td>
<td>26.25 MW</td>
</tr>
<tr>
<td>&lt; 150 kW</td>
<td>&lt; 150 kW</td>
</tr>
<tr>
<td>• 8.9 MW</td>
<td>• Not separated</td>
</tr>
<tr>
<td>&gt; 150 kW</td>
<td>&gt; 150 kW</td>
</tr>
<tr>
<td>• 16 MW</td>
<td>• Not separated</td>
</tr>
</tbody>
</table>

• PY Budget $2.79 MM
Energy Efficiency
Demand Response

Total Demand Reduction - 55 MW
No “Bounce!”…
• i.e. EE Savings
Energy Efficiency Comprehensive Program

Retrofit Rebates (Prescriptive)

- Lighting
- HVAC (including VSD’s and Window Film)
- Refrigeration (incl. Ice Machines Strip Curtains, Fan Motors, Vending)
- Motors -NEMA Premium
- Custom

New Construction Rebates

- Lighting (watt/sqft)
- Whole Building (10% & 20% > ASHRAE 2007)

Quick Saver™

- Direct Install Program < 100 kW demand
## Energy Efficiency

### New Construction & Retrofit Rebates (Comprehensive Program)

#### Quick Saver (Direct Install)
Launched - November 2009 as part of the comprehensive program administered by KEMA

<table>
<thead>
<tr>
<th>Actual to Date</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.1 GWh</td>
<td>9.0 GWh CY</td>
</tr>
<tr>
<td>• 2.8 GWh Comprehensive</td>
<td>• 6.27 GWh Comprehensive</td>
</tr>
<tr>
<td>• 4.3 GWh Bus Lighting</td>
<td>• 2.76 GWh Bus Lighting</td>
</tr>
<tr>
<td></td>
<td>• Bus Lighting Jul '09 End</td>
</tr>
<tr>
<td></td>
<td>• PY Budget $3.43 MM</td>
</tr>
</tbody>
</table>
# Energy Efficiency
## New Construction and Retrofit Rebates
### As of Oct 30, 2009

<table>
<thead>
<tr>
<th>Status</th>
<th># of Apps</th>
<th>Calculated Incentive</th>
<th>Annual kWh Saved</th>
<th>Lifetime kWh Saved</th>
<th>Coincident Peak kW Saved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paid</td>
<td>13</td>
<td>$91,221</td>
<td>1,669,303</td>
<td>16,935,333</td>
<td>296</td>
</tr>
<tr>
<td>Final Review</td>
<td>7</td>
<td>$92,505</td>
<td>1,213,868</td>
<td>14,953,293</td>
<td>195</td>
</tr>
<tr>
<td>Pre Review</td>
<td>19</td>
<td>$959,318</td>
<td>15,969,196</td>
<td>279,500,250</td>
<td>1,307</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>39</strong></td>
<td><strong>$1,143,044</strong></td>
<td><strong>18,852,367</strong></td>
<td><strong>311,388,876</strong></td>
<td><strong>1,798</strong></td>
</tr>
</tbody>
</table>
Energy Efficiency Status

Cumulative Energy Savings
Calendar Year (CY)

2007 2008 2009
GWh

- 2009 Target 41.5 GWh
- 2009 YTD Actual
- 2008 Actual
- 2007 Actual
Energy Efficiency
New Developments

Statewide M&V
ARRA
Utility Incentives
Co-ops
New Programs
Energy Efficiency Questions?

For Further Info Contact:

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