San Juan Generating Station Update

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OVERVIEW

SAN JUAN GENERATING STATION UPDATE

• PNMR Profile
• San Juan Generating Station (SJGS)
  • Past Statistics
  • Environmental Performance
  • 2018 vs 2017 Resource Mix
• What’s Ahead
PNM RESOURCES PROFILE

GENERATION RESOURCES

- Energy holding company
- Based in Albuquerque, New Mexico

- Located in New Mexico
- 523,812 customers
- 15,091 miles transmission and distribution lines
- 2,580 MW generation capacity
- Top quartile reliability
- Affordable rates

- Located in Texas
- 249,632 end-users
- 9,338 miles transmission and distribution lines
- Top quartile reliability
- Affordable rates
Past Plant Statistics

- Four unit, coal-fired steam-electric power generating station – 1683 MW capacity
  - Unit 1, 340 MW (1976)
  - Unit 2, 340 MW (1973)
  - Unit 3, 496 MW (1979)
  - Unit 4, 507 MW (1982)
- Originally 9 owners; PNM’s ownership was approx. 47%
- 13 million MWHr of power produced each year.
- Electric customers served
  - More than 2 million customers throughout the Southwest and West
  - Customers served within New Mexico included:
    - 500,000 PNM
    - 450,000 NM Rural Electric Cooperatives
    - 44,000 City of Farmington
    - 8,500 Los Alamos County
ENVIRONMENTAL PERFORMANCE

SJGS EMISSIONS 2005 - 2017

NOx and SO2 Emissions

Mercury Emissions

PM Emissions

CO2 Emissions
## ENVIRONMENTAL PERFORMANCE

### ENV UPGRADE & REGIONAL HAZE SETTLEMENT

#### SJGS EMISSIONS REDUCTIONS (BASED UPON PERMIT LIMITS)

<table>
<thead>
<tr>
<th>SJGS Emissions</th>
<th>NOx</th>
<th>SO₂</th>
<th>Particulate Matter</th>
<th>Mercury*</th>
<th>CO₂*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emission Reductions- 2009 Environmental Pollution Control Upgrades</td>
<td>44% ↓</td>
<td>71% ↓</td>
<td>&gt; 72% ↓</td>
<td>99% ↓</td>
<td>N/A</td>
</tr>
<tr>
<td>2012** Emissions (tons per year)</td>
<td>21,000</td>
<td>10,500</td>
<td>2,380</td>
<td>0.005</td>
<td>11,906,236</td>
</tr>
<tr>
<td>Emission Reductions from 2012 to 2018- Revised State Implementation Plan (2-unit shutdown/2-unit selective non-catalytic reduction)</td>
<td>62% ↓</td>
<td>67% ↓</td>
<td>50% ↓</td>
<td>50% ↓</td>
<td>47% ↓</td>
</tr>
<tr>
<td>Projected Emissions in 2018 (tons per year)</td>
<td>8,011</td>
<td>3,483</td>
<td>1,184</td>
<td>0.002</td>
<td>6,359,750</td>
</tr>
</tbody>
</table>

- Mercury and CO₂ numbers are based upon actual emissions since there are currently no permit limits for these constituents.
- **2012 chosen as base year to match the base year of EPA’s Clean Power Plan for reduction of CO₂ emissions for fossil generation.**
2018 vs 2017 RESOURCE MIX

CAPACITY MIX

Capacity Mix (% MW), 2017

Forecasted Capacity Mix (% MW), 2018
WHAT’S AHEAD

INTEGRATED RESOURCE PLAN

• PNM’s 2017 – 2036 Integrated Resource Plan (IRP) completed in 2017
  • Examined 20-yr resource plan horizon (must be revisited every three years)
  • Analyzed resource portfolio plans that included SJGS under two scenarios:
    • Continuation
    • Abandonment after current fuel supply agreement expires (2022)
• 2017 IRP indicates that it is cost-beneficial to PNM’s customers for PNM to
  • retire SJGS in 2022, and
  • exit our ownership interest in Four Corners Power Plant in 2031
• Requires NMPRC regulatory approval

https://www.pnm.com/irp
WHAT’S AHEAD

PLANS FOR COAL FREE GENERATION PORTFOLIO BY 2031

• Retirement of SJGS leads to 80% reduction in coal capacity by 2023; exit from Four Corners in 2031 completes transformation to a coal-free generation portfolio
  
  o **2018:** Since the shutdown of Units 2 & 3, PNM anticipates an annual reduction in *system-wide* CO₂ emissions by approximately 40% over 2012 levels
  
  o **2030:** PNM expects to achieve an annual reduction of approximately 60 percent in CO₂ emissions over 2012 levels. PNM plans to exit all coal generation by 2031; and
  
  o **2040:** PNM's goal is to reduce annual CO₂ emissions in 2040 by a total of 87 percent from 2012 levels.

Thank you