# PNM 2014-2033 Integrated Resource Plan

**JULY 2013 KICKOFF** 



## AGENDA

Welcome PNM Community Manager

### **Power Supply Overview**

Ron Darnell, Sr. Vice President of Public Policy

### **Power Supply Planning Process**

Pat O'Connell, PNM Planning and Resource Director

**Questions/Input** 



# Ron Darnell

# PNM Sr. Vice President of Public Policy



#### **PROVIDING POWER 24/7 TAKES PLANNING, RESOURCES, PEOPLE**





June 27, 2013 Demand for power hits all-time record: 2008 MW



\$675 million investment in power plants, power lines 2010-2012



### BALANCE





### BENEFITS AND OBJECTIVES OF SAN JUAN SETTLEMENT

Lessen cost for customers	Broad environmental benefits	Consider economic impact to the Four Corners area and state
Consumers benefit from overall lower cost implementation plan and lower increases related to future potential environmental mandates associated with coal	Achieves strong visibility improvements—visibility improvement is close to FIP	Includes construction of 150 to 200 MW natural gas peaking plant in Four Corners area. Will create approximately 350 person years of construction jobs.
Lower fuel price risk due to a better balanced generation portfolio	Reduces other emissions in addition to NOx—better positions State for future EPA regulations	No SJGS layoffs as a result of closures
		PNM will provide over \$1 million for job retraining and economic development in Four Corners area



### % REDUCTION OF POLLUTANTS: ALTERNATIVE VERSUS ORIGINAL PLAN FOR SJGS

**Percent Reduction (%)** 

	NOx	SO2	Particulate Matter (PM)	СО	VOC	CO2	Mercury (Hg)		
New Alternative	62%	67%	50%	44%	51%	50%	50%		
Original Plan	83%	0	0	0	0	0	0		

In addition, there will be an estimated 50% reduction in fresh water consumption and an estimated 48% reduction in coal ash generation. With the two-unit shutdown, and planned additions of other resources, the PNM system will have a reduction in Greenhouse Gas emissions that will meet or exceed the President's goal of 17 percent below 2005 levels by 2020.



#### PNM RENEWABLE RESOURCES: EXISTING, UNDER DEVELOPMENT AND PROPOSED



Solar Centers (PNM-owned) Algodones - 25 kW, 2006 Alamogordo - 5 MW, 2011 Albuquerque - 2 MW, 2011 Prosperity (ABQ) - 500 kW, 2011 Las Vegas - 5 MW, 2011 Deming - 5MW, 2011/ Exp. to 9 MW, 2013 Los Lunas - 5 MW, 2011/ Exp. to 7 MW, 2013 Otero County - 7.5 MW 2013 Manzano Center - 8 MW 2013 2014 2014 2014 2014 23 MW in Greater ABQ Metro 2014

#### Wind

NM Wind Energy Center – 200 MW, 2003 Red Mesa – 102.4 MW, Jan. 1, 2015

**Geothermal** Lightning Dock – 10 MW, July 2014

Plus 22 MW PV installed by 3,300 customers



### COMPREHENSIVE ANALYSIS

#### MANY FACTORS TO CONSIDER





# Pat O'Connell

# PNM Director, Planning and Resources



SLIDE 10 | JULY 2013

## INTEGRATED RESOURCE PLAN

### AGENDA

- What is an IRP?
- Planning Process
- PNM's 2014-2033 IRP schedule
- Opportunities to Provide Your Input



A plan to create the most cost-effective resource portfolio that meets the energy needs for a 20-year period.

- Four year action plan
- New IRP every three years
- Our planning is improved by public input



### **IRP PROCESS**

### Collect Assumptions

- Data
  - Existing System
  - Known Technologies
- Uncertainties
  - Demand
  - Prices
  - Regulations

### Plan to Understand Risks

- Define Scenarios
- Identify Sensitivities

# Analyze

- Model Potential Solutions
- Identify best solutions using a range of criteria
- Test best solutions under range of uncertainties

### Evaluate

- What works best under most conditions?
- Which risks are easiest to mitigate?
- Most cost effective portfolio
- 4 year action plan

### Report

- Document the process
- File with NMPRC by June 30, 2014



Will present analysis examples early in process:

- Provide foundation for public input
- Examples will be IRP analysis of portfolios that can meet Regional Haze Rule Requirements

Next step is to show IRP analysis for two scenarios:

- Install SCR technology on all 4 units at SJGS
- Retire 2 units and install SNCR technology on other two units at SJGS



### **SCHEDULE JULY - SEPTEMBER**





### SCHEDULE: SEPTEMBER-OCTOBER





# **OPPORTUNITIES TO PROVIDE INPUT**

WE ARE REQUESTING YOUR INPUT

<u>www.pnm.com/irp</u> for documents <u>irp@pnm.com</u> for e-mails

Register your email on sign-in sheets for alerts of upcoming meetings and notices that we have posted new information to the website.



# Thank you

