# PNM 2017-2036 Integrated Resource Plan

JUNE 30, 2016



**JUNE 2016** 

#### 2017-2036 IRP KICKOFF MEETING

- Welcome, Introductions and Safety
- IRP Goals
- IRP Process
  - -Schedule
  - -Scenarios & Sensitivities
- How to stay informed



## SAFETY AND LOGISTICS

- Fire escape routes via stairways at east and west ends of hallway; please let us know if you require special handicap egress or special assistance
- We must obey any fire or emergency alarm; even drills/test alarms
- Restrooms Women's room at west end; Men's room at east end
- Must sign-in with security desk each time you enter the building
- Recycling is easy and encouraged



- Questions and comments are welcome
- Comments should be respectful of all participants
- Use name tents to indicate you have a comment or question
- Reminder; today's presentation is not PNM's plan or a financial forecast, it is an illustration of the IRP modeling process



#### **DISCLOSURE REGARDING FORWARD LOOKING STATEMENTS**

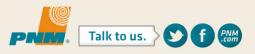
The information provided in this presentation contains scenario planning assumptions to assist in the Integrated Resource Plan public process and should not be considered statements of the company's actual plans. Any assumptions and projections contained in the presentation are subject to a variety of risks, uncertainties and other factors, most of which are beyond the company's control, and many of which could have a significant impact on the company's ultimate conclusions and plans. For further discussion of these and other important factors, please refer to reports filed with the Securities and Exchange Commission. The reports are available online at www.pnmresources.com.

The information in this presentation is based on the best available information at the time of preparation. The company undertakes no obligation to update any forward-looking statement or statements to reflect events or circumstances that occur after the date on which such statement is made or to reflect the occurrence of unanticipated events, except to the extent the events or circumstances constitute material changes in the Integrated Resource Plan that are required to be reported to the New Mexico Public Regulation Commission (NMPRC) pursuant to Rule 17.7.4 New Mexico Administrative Code (NMAC).



# Ron Darnell

# Senior Vice President, Public Policy



SLIDE 6 | JUNE 2016

#### MANY FACTORS INFLUENCE PROVIDING POWER 24/7

- Clean Power Plan
- Customer owned generation
- Plug-in electric vehicles
- Energy efficiency
- Increased peaks and lower use
- Technology
- Consumer demands



- Increased solar energy at PNM
  - 1,000,000 PNM owned solar panels
  - 6,000 customers with rooftop solar panels
- More wind resources
- Geothermal added to PNM's portfolio
- Coal usage will drop by nearly 50 percent at San Juan Generating Station
- Technology advancements
- Environmental policy changes
- Energy price forecasts



# Pat O'Connell

# Director, Resource Planning



SLIDE 9 | JUNE 2016

### IRP OVERVIEW

#### PNM'S 2017-2036 INTEGRATED RESOURCE PLAN

- Examine a 20-year resource planning horizon
- Revisit plan every three years
- Create a four-year action plan
- Improve plan through public advisory process
- File with NM Public Regulation Commission for review & acceptance

#### Legislation:

- New Mexico Public Utility Act 62-3-1 et.seq. NMSA
- Efficient Use of Energy Act 62-17 NMSA

#### **NMPRC Rules:**

- Integrated Resource Plans for Electric Utilities 17.7.3 NMAC
- Renewable Energy for Electric Utilities 17.9.572 NMAC
- Energy Efficiency 17.7.2 NMAC



# OBJECTIVE

#### **IRP PROVIDES A FOUNDATION FOR THE SELECTION OF FUTURE RESOURCES**

The integrated resource planning process results in a resource roadmap and documents the actions required to achieve the plan's objectives over the next four years.

Since the IRP can be accepted but not approved, PNM also must obtain NMPRC approval of each resource that PNM proposes for addition to the company's resource portfolio.

Public participation improves the Plan and provides context for future filings and communications.



THREE PUBLIC ADVISORY PHASES, ONE DEADLINE

- July October: Build assumptions and discuss scenarios and sensitivities
- November February: Discuss analysis plan and discussion of findings
- March June: Discuss draft report
- July 1, 2017 File report documenting the Plan and process with New Mexico Public Regulation Commission



## NEAR TERM SCHEDULE

#### **MEETING SCHEDULE THROUGH NOVEMBER**

- Today: Kickoff, overview and timeline
- July 27: Reliability standards & grid modernization concepts
- August 11: Baseload resources
- September 1: Transmission, renewable energy & energy efficiency
- September 22: Natural gas price forecasts & environmental regulations
- October 13: Load forecast, rates and tariffs
- November 10: Modeling roadmap resulting from discussion at previous meetings



# ANALYSIS ELEMENTS

- Supply, Demand and Pricing
  - More renewables and new technologies
  - Energy efficiency
  - Multiple load forecasts
  - Variable costs including fuel
  - Impacts of carbon emission and fracking regulations
  - Capital costs and costs to maintain resources
- Baseload Plants
  - San Juan under two scenarios: continuation or abandonment after current fuel supply agreement
  - Four Corners after current fuel contract ends in 2031
  - Palo Verde leased capacity
- Risk Analysis
  - 20 year planning period look at a wide range of assumptions
  - Scenarios, sensitivities and Monte Carlo



#### MAKE SURE WE HAVE UP TO DATE CONTACT INFORMATION FOR YOU

<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.

> Meetings Schedule: Thursday, July 27, 2016, 10 a.m. to 3 p.m. Thursday, August 11, 2016, 10 a.m. to 3 p.m. Thursday, Sept. 1, 2016, 10 a.m. to 3 p.m.



# Thank you

