

# PNM 2023-2042 Integrated Resource Plan

---

APRIL 28, 2022

---



Talk to us.



---

## 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](http://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).



## **Nick Phillips** **Director, Integrated Resource Planning**

Mr. Phillips manages the PNM Resource Planning department and is responsible for developing PNM resource plans and the regulatory filings to support those resource plans.

Prior to joining PNM, Mr. Phillips was involved with numerous regulated and competitive electric service issues including resource planning, transmission planning, production cost analysis, electric price forecasting, load forecasting, class cost of service analysis, and rate design.

Mr. Phillips received the Degree of Master of Engineering in Electrical Engineering with a concentration in Electric Power and Energy Systems from Iowa State University of Science and Technology, and the Degree of Master of Science in Computational Finance and Risk Management from the University of Washington Seattle.

# AGENDA

---

## 2023-2042 IRP KICKOFF MEETING

---

- Welcome, Introductions and Safety
- Current Events / Updates
- 2023 IRP Overview
- Open Listening Session / Stakeholder Input
- 2023 IRP Public Advisory Meeting Schedule
- Wrap Up / Next Steps



# Energy + Environmental Economics (E3) is assisting PNM for the IRP filing

- + **Founded in 1989, E3 is a 90+ person leading energy consultancy with a unique 360-degree view of the industry built on the depth and breadth of their experts, projects, and clients**
- + **E3's resource planning experts have led numerous analyses of how renewable energy and greenhouse gas policy goals could impact system operations, transmission, and energy markets**
  - Experience includes studies of deeply decarbonized and highly renewable power systems in California, Hawaii, the Pacific Northwest, the Desert Southwest, New York, New England, South Africa, and other regions



**Nick Schlag**  
Partner



**Manfei Wu**  
Managing Consultant



**Arne Olson**  
Senior Partner

# Astrapé Consulting

- **Energy consulting firm with a focus on Resource Adequacy and Resource Planning**
  - Performs resource adequacy studies for utilities throughout the U.S. and internationally including California, MISO, SPP, ERCOT, TVA, Southern Company, Duke energy and others
    - Target Reserve Margin Studies
    - ELCC Studies for solar, wind, battery and demand response
    - Renewable Integration Studies
    - Licenses and provides consulting services using proprietary SERVM model



**Nick Wintermantel**  
**Principal**



**Chase Winkler**  
**Consultant**

# GROUND RULES

## MEETING GROUND RULES

01



- Questions and comments are welcome – One Person Speaks at a Time

02



- Reminder; today's presentation is not PNM's plan or a financial forecast, it is an illustration of the IRP process

03



- When asking a question, please speak clearly and slowly as all questions will be logged and labeled with the person and organization responsible for asking the question

04



- These meetings are about the 2023 IRP, questions and comments should relate to this IRP. Any questions or comments related to other regulator proceedings should be directed towards the specific filing.

# CURRENT EVENTS

---

## SINCE THE 2020 IRP WAS FILED

---

- PNM – Avangrid Merger (Case No 20-00222-UT)\*
- Four Corners Power Plant Abandonment (Case No 21-00031-UT)
- Supply Chain Impacts on Recent Procurement Efforts
  - SJGS Updates (Case Nos 19-00195-UT/20-00182-UT)
  - PVNGS Updates (Case No 21-00215-UT)
- IRP Rule and Procurement Rule (Case No 21-00128-UT)
- Community Solar (Case No 21-00112-UT/22-00020-UT)
- Grid Modernization (Case No 22-00058-UT)
- Transportation Electrification (Case No 22-00085-UT)

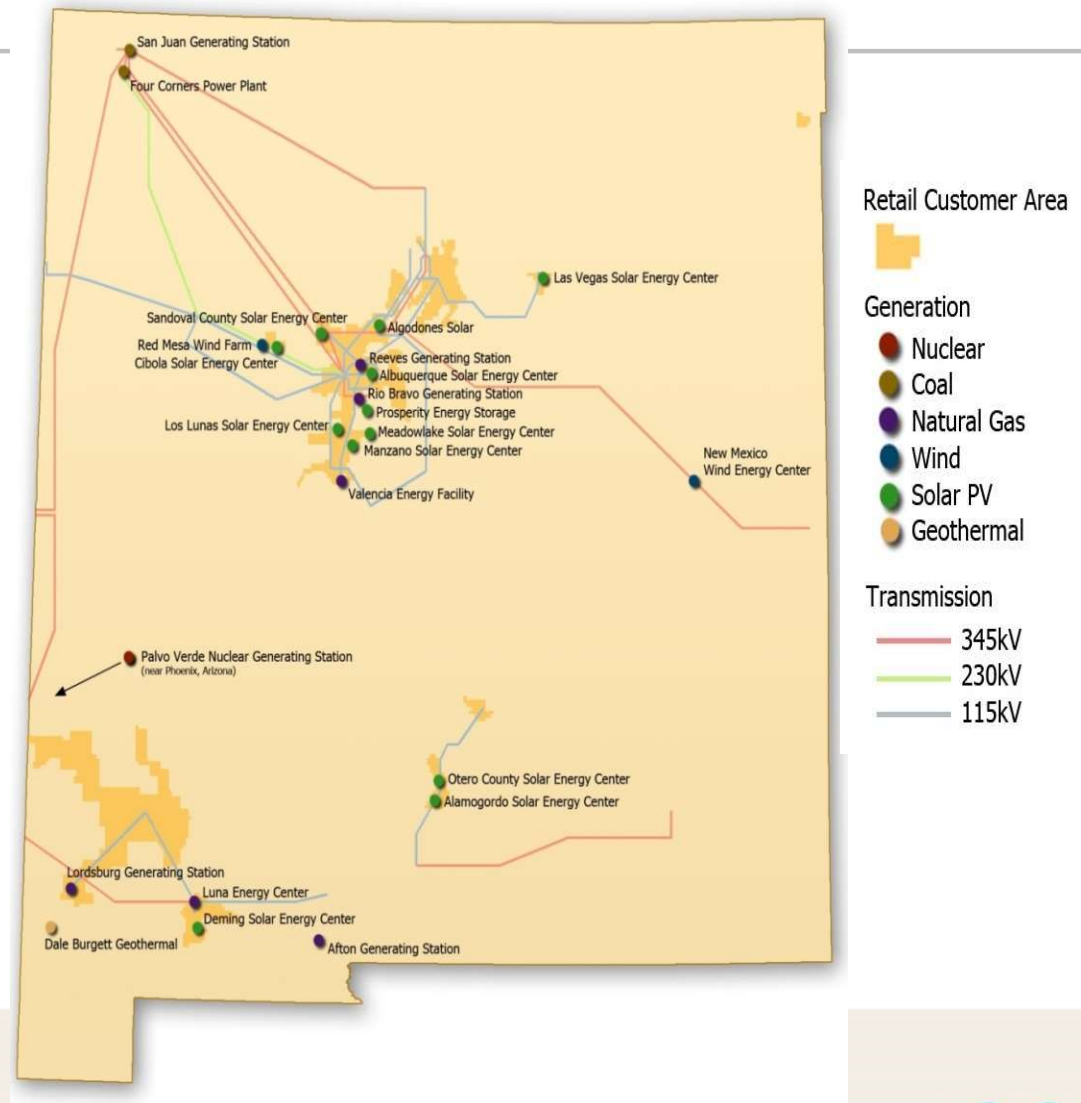
\*Will not affect the IRP



# PUBLIC SERVICE COMPANY OF NEW MEXICO

## OVERVIEW

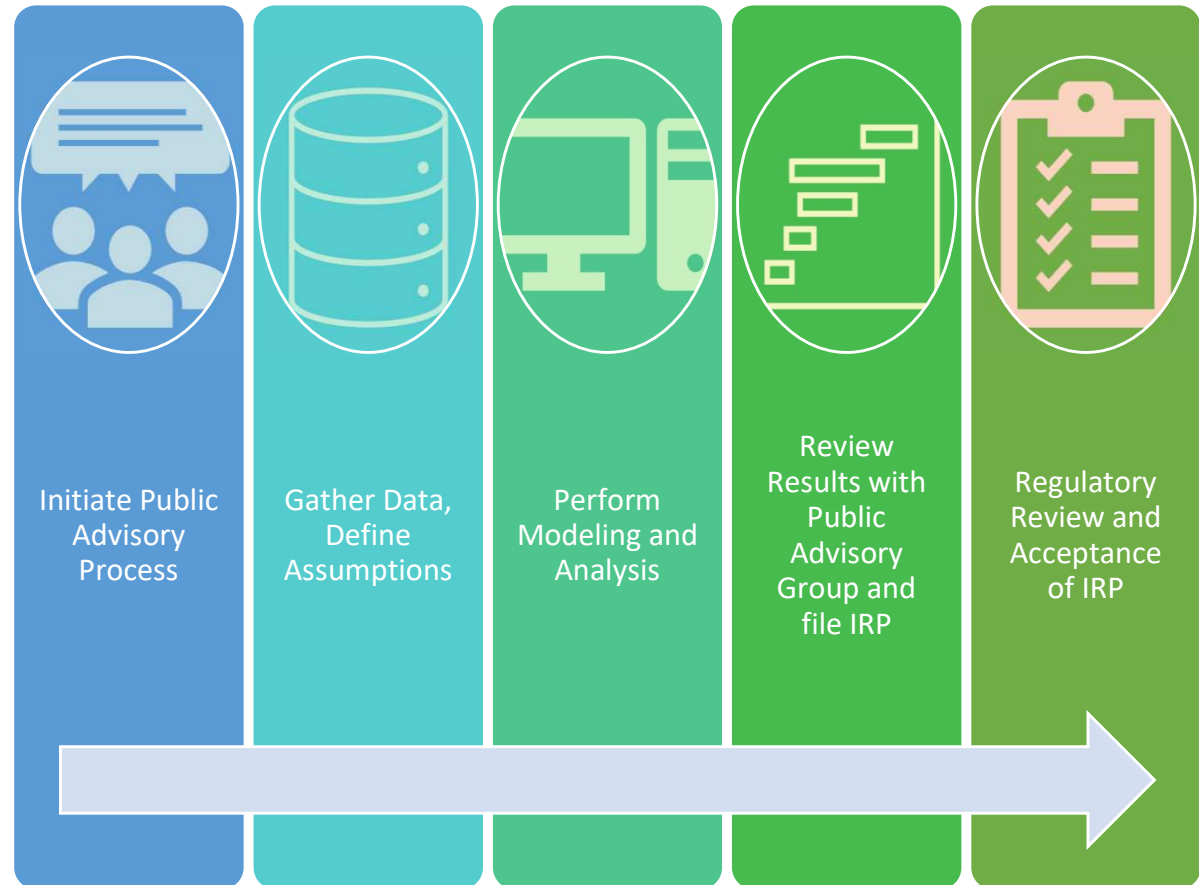
- Only NYSE traded company headquartered in NM
- 1,500 employees
- Serving 525,000 customers (40 communities)
- 15,000 miles of transmission and distribution line
- 2,700 MW generation capacity
- Top quartile for affordability in the west and reliability in the nation.
- Top companies in the nation for diversity



# IRP OVERVIEW

## TRIENNIAL DEVELOPMENT CYCLE

- PNM's IRP Examines a 20-year resource planning horizon
- Triennial planning cycle
- Create a Four-Year Action Plan
- Develop IRP with extensive stakeholder input and outreach through Public Advisory Process
- Most Cost-Effective Portfolio(s) developed with rigorous and robust modeling in accordance with industry best practices.
- File with NM Public Regulation Commission for review & acceptance



# IRP OVERVIEW

## GENERAL TIMELINE

- Notify public and stakeholders of 2023 IRP process
- Kickoff meeting

Mar-Apr  
2022



- Setup analytic process
- Gather data
- Identify requirements

Mar-Sep  
2022



- Discuss inputs and modeling assumptions

May-Oct  
2022



- Expansion plan modeling
- Reliability modeling
- Portfolio development

Oct 22'-  
Feb 2023



- Review results
- Determine MCEP

Jan-Mar  
2023



- Complete IRP
- Determine Four-year action plan
- File with NMPRC on July 3, 2023

Apr-Jul  
2023



*PNM seeks, receives and incorporates public feedback throughout the IRP development cycle*

# IRP OVERVIEW

---

## RULES, REGULATIONS AND LEGISLATIVE REQUIREMENTS

---

### Legislation:

- New Mexico Public Utility Act – 62-3-1 et.seq. NMSA
- Efficient Use of Energy Act – 62-17 NMSA
- Energy Transition Act – 62-18 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

# 2023 IRP PUBLIC ADVISORY PROCESS

---

## WHAT IS NEW FOR THE 2023 IRP?

---

The purposes of the public participation process are for the utility to provide information to, and receive and consider input from, the public regarding the development of its IRP. As PNM gathers data and receives inputs from internal business units and external consultants (ongoing through Sept/Oct), PNM is going to modify the Public Advisory process to solicit more feedback up front.

- Technical Sessions at the outset of the Public Advisory Process
  - Focused groups to collaborate on technical modeling framework and details, may lead to additional data gathering, etc.
- Updates / summaries of the technical sessions will be presented after every two or three technical meetings to ensure all members of the Public Advisory Group help steer the process.
  - This will hopefully help reduce dispute later in the process and focus the attention of the process on critical issues to further improve the IRP

# 2023 IRP PUBLIC ADVISORY PROCESS

---

## WHAT IS NEW FOR THE 2023 IRP?

---

- We will still be hosting the more traditional Public Advisory meetings – this process upfront is to better align those meetings with the focus of our stakeholders. There will still be opportunities to submit modeling scenario requests, review inputs and outputs, discuss key results and findings, etc.
- If you have topics pertaining to the development of the IRP that you would like for PNM to address throughout the Public Advisory process, please raise them during the meetings or submit your ideas to [IRP@pnm.com](mailto:IRP@pnm.com).

# 2023 IRP PUBLIC ADVISORY PROCESS

---

## SUGGESTED TOPICS FOR TECHNICAL DEEP DIVES

---

- Reliability, Resource Adequacy and Resiliency
  - SW Resource Adequacy Study (E3)
  - PNM Resiliency Study (PNM, Astrape, E3)
  - ELCC Study & Synergies of Resources
  - Regional Reserves, Market Liquidity & Reliance on Market Assistance
  - Extreme Weather
  - Correlated Outages
  - Move to 0.1 LOLE
  - Use of Multiple Metrics (LOLE, EUE, etc.)

# 2023 IRP PUBLIC ADVISORY PROCESS

---

## SUGGESTED TOPICS FOR TECHNICAL DEEP DIVES

---

- Load Forecast
- Renewable Resource Cost Development
- Long Duration Storage and Hydrogen Resource Modeling
- Transmission Analysis in the IRP
- Distributed Resource Modeling
- Scenario Tree Development
- Modeling of Existing Resources
- Candidate Resources / Technologies
- Others?

PNM Issued two RFIs seeking information on emerging technologies and new power resources. Initial responses are due June 15, 2022 and supplemental information can be provided through September 15, 2022.



# 2023 IRP PUBLIC ADVISORY PROCESS

---

## WE WOULD LIKE TO HEAR FROM YOU - KEY QUESTIONS

---

1. What did we do well in the last (2020) IRP and where can we improve?
2. Any additional ideas for technical discussions?
3. What is the proper way to balance reliability, customer cost and accelerating the transition to clean energy?
4. How can we be more collaborative throughout the process with our public stakeholders?

# Open Listening Session / Stakeholder Input

# NEAR TERM SCHEDULE

---

## FUTURE MEETING TIME & LOCATION

---

**When: May 25, 2022\***

**Topic: Public Advisory Steering Meeting #2: Southwest Resource Adequacy Study and PNM Resiliency Study.**

**Start Time: 9:00 AM**

**CNM – Workforce Training Center\***

5600 Eagle Rock Ave NE

Albuquerque, NM 87113

(505) 224-5200

\*Dates, locations and topics are being finalized and will be posted on the website along with individual registration links.

# NEAR TERM SCHEDULE

---

## FUTURE MEETING TIME & LOCATION

---

**When: June 8, 2022\***

**Topic: Technical Session #1: Reliability Modeling**

**Start Time: 9:00 AM**

**CNM – Workforce Training Center\***

5600 Eagle Rock Ave NE

Albuquerque, NM 87113

(505) 224-5200

\*Dates, locations and topics are being finalized and will be posted on the website along with individual registration links.

# PUBLIC ADVISORY TOPICS AND SCHEDULE

---

## UPCOMING PUBLIC INPUT MEETING DATES\*

---

June 22, 2022 – Technical Meeting #2

July 6, 2022 – Technical Meeting #3

July 20, 2022 – Steering Meeting #3

August 3, 2022 – Technical Meeting #4

August 17, 2022 – Technical Meeting #5

August 31, 2022 – Technical Meeting #6

September 14, 2022 – Steering Meeting #4

September 28, 2022 – Technical Meeting #7

October 12, 2022 – Steering Meeting #5

\*meeting dates are subject to change. Dates are being finalized and will be posted on the website along with individual registration links.

# PUBLIC ADVISORY TOPICS AND SCHEDULE

---

## UPCOMING PUBLIC INPUT MEETING DATES\*

---

- October 26, 2022 – Steering Meeting #6
- November 16, 2022 – Steering Meeting #7
- December 14, 2022 – Steering Meeting #8
- January 18, 2023 – Steering Meeting #9
- February 15, 2023 – Steering Meeting #10
- March 15, 2023 – Steering Meeting #11
- April 19, 2023 – Steering Meeting #12
- May 17, 2023 – Steering Meeting #13
- June 14, 2023 – Steering Meeting #14
- July 3, 2023 – File 2023 IRP

\*meeting dates are subject to change. Dates are being finalized and will be posted on the website along with individual registration links.



Talk to us.



---

## NEXT MEETING

---

We encourage you to send in your thoughts ahead of time to [IRP@pnm.com](mailto:IRP@pnm.com) so that we can summarize them and distribute them for the next meeting. Please have your submissions in by May 18, 2022 for us to include them in the May 25, 2022 meeting discussion.

---

MAKE SURE WE HAVE UP TO DATE CONTACT INFORMATION FOR YOU

---

[www.pnm.com/irp](http://www.pnm.com/irp) for documents

[IRP@pnm.com](mailto:IRP@pnm.com) for e-mails

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

# Thank you



Talk to us.

