

# Welcome!

## Stakeholder Engagement Meeting (Meeting #8)

2023-2043 Integrated Resource Plan, Public Service Company  
of New Mexico

Thursday, August 31

8:30 AM – 12:30 PM Mountain Daylight Time

Optional 1:00 PM – 2:00 PM Q&A Session

Note: this meeting is being recorded and will be available as public information. The link to the recording will be included in the meeting summary.

Materials available at: [New Mexico Energy Planning – Gridworks](https://gridworks.org/initiatives/new-mexico-energy-planning/)

or

<https://gridworks.org/initiatives/new-mexico-energy-planning/>

## Purpose and Outcomes of Today's Meeting

Draft stakeholder input to action plan.

### KEY OUTCOMES

- Review input to Statement of Need and priority needs
- Stakeholder understanding of modeling results to date
- Suggestions for input to Action Plan

# Agenda

8:30 AM – Welcome, Purpose, Outcomes for the Meeting, & Announcements, Gridworks

8:40 AM – Overview of Input to SoN and Priority Needs Data, All Stakeholders

9:30 AM – Modeling Results, PNM Team

10:30 AM – Break

10:45 AM – Insights, Conclusion, Observations and Candidate Action Plan Ideas, All Stakeholders

12:15 AM – Summary of Actions and Next Steps, Meeting Feedback

12:30 PM – Adjourn

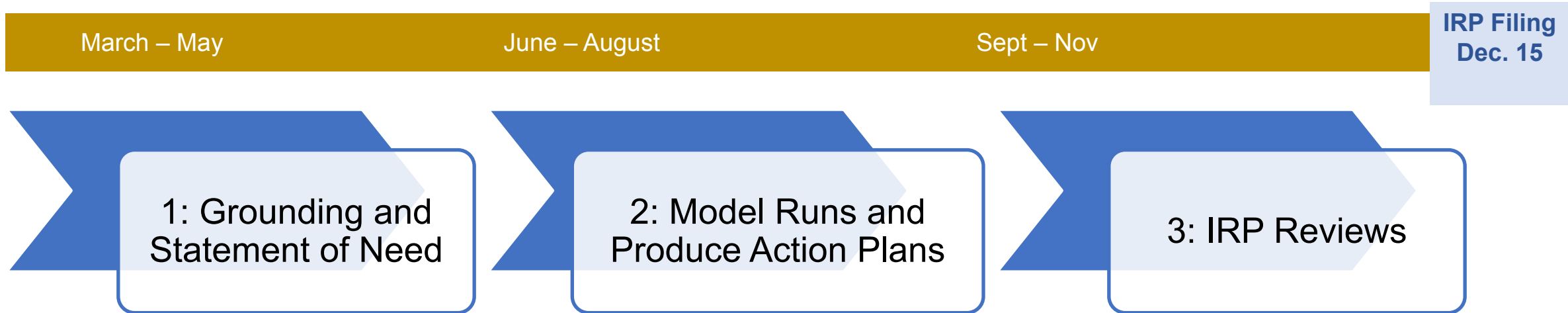
Optional session 1 – 2 PM for real time Q&A session for stakeholders who desire a deeper understanding of modeling results. This session will also be recorded.

## Thoughts about Future Modeling Methodologies

- “IRP Modeling: Forward Thinking” Session held Aug. 22. Materials available at [New Mexico Energy Planning – Gridworks](#)
- Appreciation of stakeholders Fengyu Wang and Glenn Wikle (both New Mexico State University) and Cody Newlun (Sandia National Laboratories)

Information was shared to stimulate thoughts about the future, not to impact or influence current 2023 IRP modeling efforts or results. Results shared have not been validated by the utility or its technical consultants. Given the interest in this topic, Gridworks will recommend that such discussions begin sooner in future IRP processes.

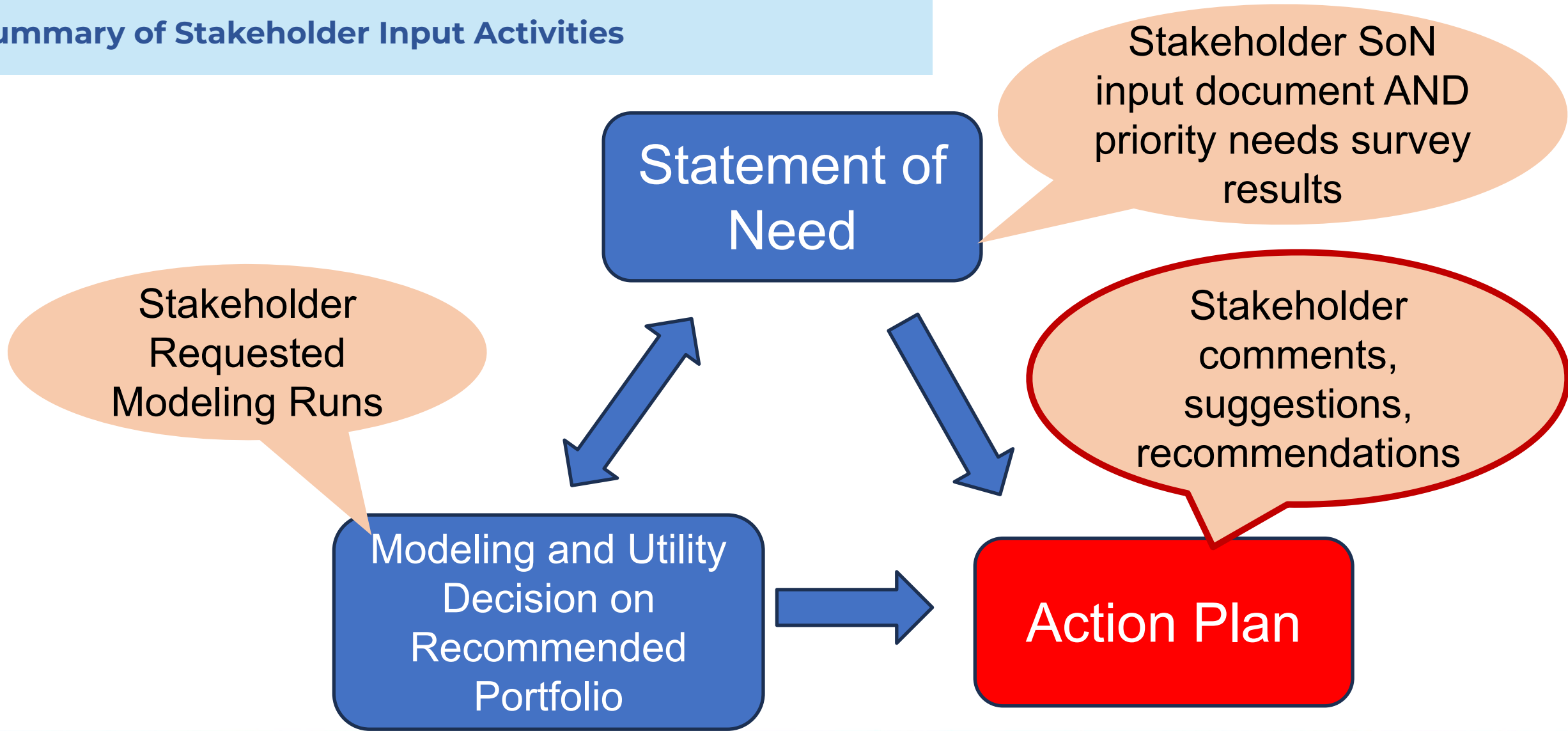
## The Current Focus is Stakeholder Input to the Action Plan



### SCHEDULED MEETINGS

- Sept. 14, 9 AM – 10:30 AM – Finalize stakeholder input to Action Plan
- Oct. 19, 9 AM – 10:30 AM – Review IRP elements of greatest interest to stakeholders
- Dec. 19, 9 AM – 10:30 AM – Facilitated Stakeholder Process feedback collection

## Summary of Stakeholder Input Activities



## Input to the Statement of Need and Priority Needs

- Review for the purpose of informing the action plan
- Input to the SoN – Michael Barrio
- Credit to the working group members:
  - Athena Christodoulou, Barbara Chatterjee, Daren Zigich, Michael Kenney, Cydney Beadles, Jim DesJardins, Chadette Pfaff
- Priority Needs survey summary
- Hear from PNM regarding SoN template
- Discussion

## 1. Introduction

## 2. Vision and Goals

- a. Identify resources
- b. Goals
  - i. Support Rapid Decarbonization & Electrification
  - ii. Reliability and Resilience: Utility's Obligation to Serve
    1. Minimum Reserve Requirements
    2. Reliability Standards
    3. Swift recovery from climate or security threats
  - iii. Public Interest and Equity
    1. Responsibilities to Ratepayers and Stakeholders (affordability, availability to underserved communities, climate justice, impacts on workforce)
    2. Costs associated with the development and deployment of all candidate resources (cost of energy to customers, life cycle impacts)
    3. Improve Communication to the General Public

## 3. Identified Decision Points and Pathways

- a. "Getting to Zero" Greenhouse Gas
  - i. Motivations
    1. Regulations & Policy (ETA, EPA GHG standard, NM methane rule)
    2. Public service in response to March 2023 [IPCC report analysis summary for policymakers](#)
    3. Recognition of Company's corporate commitment to zero carbon by 2040



#### 4. Identified Decision Points and Pathways

- a. Making “no regrets” Decisions (evaluate land use and community impact, broad inclusion of stakeholders, minimize investment risk, maximize infrastructure investment opportunity)
  - 1. First to market w/ long term solutions
  - 2. Public trust and sentiment
  - ii. Value of money vs future human life opportunities
- b. Evaluate & Pursue Regional Planning and Coordination
  - i. Organized market opportunities
  - ii. Future regional transmission operator (RTO) opportunities
- d. Modernizing the Grid
  - i. Policy needs to support reaching carbon targets, DSM (demand side management), DG (distributed generation) and other behind-the-meter resources)
  - ii. Demonstrate transition from old to new grid structure
  - iii. Assessment of impact of all areas of behind-the-meter resources.

## 5. Resources

- a. Resource Description:
  - i. A *brief* description of the resource; its technical characteristics.
- b. Commercial Maturity:
  - i. The Technology Readiness Level (TRL) or similar metric
- c. Staged Cost:
  - i. This is a breakdown of cost by scale (if applicable). Grid Applications and Benefits
  - ii. Why is this resource important to the grid? What are its applications and benefits?
- d. Status of each resource in the modeling process (i.e., included, not included with reason why, not available for inclusion for lack of data, etc.)
- e. Candidate Resources
  - i. Base technologies (wind, solar, 4-hr li-ion storage, energy efficiency, demand response)
  - ii. Other Resources (Pumped hydro storage 70-hr, Pumped hydro storage 8-hr, Iron-air storage, Compressed Air Energy Storage, Liquified Air Energy Storage, Flow battery, Thermal storage, Combustion Turbines, Linear generators, Carbon capture retrofit, NET power plant , Hydrogen

## 6. Potential New Resources

- a. Adoption of new technologies
- b. High Penetration of Distributed/Customer-owned Generation
- c. Energy efficiency and demand-response
- d. Cost-effective repowering or upgrading of existing fossil resources to minimize risk of stranded investment or delayed decarbonization
- e. Describe long duration storage options not considered (reference chart 1 in “Items for Discussion” below)

## 7. [System Needs]

## 8. Preferred Portfolio - Refer to appendix of resource evaluation

- a. [results of PNM modeling]
- b. Potential pilot projects
- c. [PNM conclusions]

# Stakeholders Reinforced Reliability and Affordability as Priority

NUMBER OF PEOPLE LISTING THE NEED AS PRIORITY	NEED
12	Reliability and Resiliency
10	Affordability (life cycle cost of portfolio)
8	Environmental Attributes (e.g. water use, air quality) + non carbon emissions
7	Exceeding State Carbon Reduction Requirements
7	Climate Justice/Energy Justice
6	Fuel Diversity and Fuel Security
5	Exceeding State RE Requirements
5	Maximizing EE, Demand Response and DSM Technology
4	Scalability of Technology
3	Technology Diversity
2	Research & Demonstration of New Technology
1 – OTHER, WRITE IN	Minimizing future reliance on fossil fuels and stranded costs of fossil fuel infrastructure

2 respondents listed affordability as their highest priority need.

Fourteen valid responses to the survey were received.

# Themes and Outline - Statement of Need

PNM TEAM



## Modeling Results Discussion

- PNM Team presentation, 50 minutes
  - Please write questions of clarification in the chat
  - Responses, 10 minutes
- Follow up questions
  - Additional questions of modeling results interpretation will be addressed from 1:00 PM – 2:00 PM today.
  - Questions regarding modeling assumptions, inputs, processes, alternate scenarios, factors/weighting, etc. can be entertained during the IRP public comment period.

# Modeling Results

PNM TEAM



Per the IRP Rule, 17.7.3.11 utility's action plan shall:

- 1) detail the specific actions the utility shall take to implement the IRP spanning a three year period following the filing of the utility's IRP;
  - 2) detail the specific actions the utility shall take to develop any resource solicitations or contracting activities to fulfill the statement of need as accepted by the commission; and
  - 3) include a status report of the specific actions contained in the previous action plan
- The utility creates the action plan, stakeholder input is to be considered
  - Ideas on topics beyond the items list above will be documented but may not be within IRP scope.



## Action Plan Suggestions Offered to Date

Ideas offered by stakeholders during the June 29 Meeting:

- Changing fossil fuel plants to long duration energy storage as environmental justice for impacted communities
- Collect distribution feeder level reliability metrics to understand reliability equity
- Initiate public education effort regarding electricity sector changes and IRP process

Items introduced during stakeholder modeling run request process:

- Explore availability of landfill gas as supplementary/replacement fuel
- Include extreme weather considerations during next IRP cycle
- Explore benefits from participation in organized regional market, and from participation under extreme weather scenarios
- Incorporate consideration of correlated gas outages in next IRP cycle

S  SpecificM  MeasurableA  AchievableR  RealisticT  Timetable

## Process for Input to the Action Plan

- Enter into chat during today's meeting
- Complete form(s) → <https://forms.gle/JVaAstwxakYXcFAU6> by noon on Sept. 13
- If you do not have access to google docs, send an email with “PNM ACTION PLAN SUGGESTION” in the email subject to [info@gridworks.org](mailto:info@gridworks.org) by noon on Sept 13. Please include your suggestions, your name, and your organization.
- All suggestions will be summarized and discussed during Sept. 14 meeting.

## September 14 Meeting Will Focus on Action Plan

- Sept. 14, 9 – 10:30 AM □ ACTION PLAN INPUT FINALIZED
- Oct. 19, 9 – 10:30 AM □ DISCUSS UNRESOLVED ISSUES
- Dec. 15 □ IRP is filed by PNM
- Dec. 19, 9 - 10:30 AM □ Final stakeholder meeting to collect input regarding how you experienced the process

**For those with modeling results questions, please reconvene at 1 PM MDT.**

**Please Access and Complete the Survey Now**

**By either...**



**Scanning the QR Code to the right**

**OR**



**Visiting this link:**

**[bit.ly/PNM-IRP-Feedback](https://bit.ly/PNM-IRP-Feedback)**

Feedback allows us to:

1. Measure effectiveness of this new process for the NM PRC
2. Improve Gridworks' facilitation effectiveness
3. Hear your concerns and suggestions



Thank you for attending.

Questions? Please contact Margie Tatro at:  
[mtatro@gridworks.org](mailto:mtatro@gridworks.org)  
505-205-0838



GRIDWORKS

Materials for this and future meetings available at: [New Mexico Energy Planning – Gridworks](https://gridworks.org/initiatives/new-mexico-energy-planning/)

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