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## June 29, 2023, Stakeholder Meeting (#6) for PNM Integrated Resource Plan

### Meeting Summary

Approximately 32 stakeholders attended the June 29, 2023, meeting held in person in Albuquerque.

Recordings of the meeting sessions are available at:

- I. Welcome, Gridworks <https://youtu.be/EteZD-vXPY>
- II. Statement of Need <https://youtu.be/zR-swyFOoRU>
- III. Modeling Insights and Observations, Form Energy <https://youtu.be/sPC61a7HOXc>
- IV. Modeling Results and Factors, PNM <https://youtu.be/7mJLbRaERB0>
- V. Next Steps, Gridworks <https://youtu.be/u0kLokIOyK4>

Additional materials are posted at [New Mexico Energy Planning – Gridworks](#) or <https://gridworks.org/initiatives/new-mexico-energy-planning/>. Below is a list of available documents:

- [Workshop Agenda](#)
- [Slide Deck – Gridworks 6/29/23 Stakeholder Workshop](#)
- [Slide Deck – PNM 2023-2042 IRP: Modeling Results Update](#)
- [Slide Deck – Form Energy: Modeling best practices in a decarbonized future](#)
- [SoN Outline V2 – 6/26/23](#)
- [SoN Parking Lot – 6/29/23](#)
- [SoN Input from 6/29/23 Stakeholder Meeting](#)

### Meeting Purpose, Outcomes, and Announcements

The purpose of the meeting was to prepare stakeholders to provide input to the Action Plan by August. Key outcomes of the meeting were:

- Input on Statement of Need
- Review of modeling results to date
- Awareness of “APPENDIX A factors” to consider in evaluating resource portfolios
- Candidate action plan ideas that are independent of modeling results

Two schedule changes were announced:

1. July 13 meeting has been moved to July 27 from 9 AM-12 NOON via WEBEX.
2. Aug 17 meeting has been extended. It is now scheduled for 9 AM -12 NOON via WEBEX.

### Statement of Need Update



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Michael Barrio presented the status of the Statement of Need input document ([SoN Outline V2 – 6/26/23](#)) and stakeholder comments were offered as feedback. Input offered during the meeting is summarized in [SoN Input from 6/30/23 Stakeholder Meeting](#).

The working group, led by Michael and supported by Amanda Ormond, will be incorporating material offered to date and will prepare an updated document (to be posted on the Gridworks.org website) for stakeholders to review before the July 27 meeting. A working group call will be scheduled in advance of the meeting on July 27. Stakeholder consensus will be assessed during the July 27 meeting.

## **Stakeholder Modeling Observations**

Kailash Raman, Form Energy, shared insights derived from a review of the PNM IRP public data set. Suggestions for future modeling techniques, including using an 8670-hour optimization method and incorporating multi-weather year analysis, were recommended for characterizing the decarbonized grid of the future. See [Slide Deck – Form Energy: Modeling best practices in a decarbonized future](#). The treatment of energy storage resources in modeling was discussed by the group as being very important.

Note: July 13 is the last date for stakeholders to notify Gridworks ([mtatro@gridworks.org](mailto:mtatro@gridworks.org)) of their desire to share insights and observations from their own modeling efforts.

## **Modeling Update**

The PNM team provided an update on preliminary modeling results to date, including initial results from several stakeholder-requested runs. Outputs from these runs have been posted on VENUE and stakeholders who have requested access to the public or confidential data are welcome to review the information. The team also shared a preliminary set of criteria (factors and weights) used to rank order the portfolios analyzed to date. Following the modeling results overview, members of the modeling core team led the modeling deep-dive discussion using questions submitted by all meeting attendees. The PNM team shared model result details on many topics including energy efficiency, demand response, hydrogen assumptions and risks, and carbon emissions. Attendees also discussed carbon capture, weather years, wind and transmission implications, regional market influences, and load changes possible through customer engagement. Members of the modeling core team in attendance, Aaron Gould, Kailash Raman, Cynthia Mitchell, Ed Rilkoff and Marissa Ballantine, were thanked for their leadership and insights.

## **Recommended Portfolio Factor and Weights**

A brief discussion was held introducing factors to consider when selecting resource portfolios and the language in the IRP rule (via Appendix A) that utilities must consider resulted in the following comments from stakeholders:



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- PNM noted - Additional reliability factors will be added by PNM in its third phase of modeling such as Expected Unserved Energy (EUE), Loss of Load Event (LOLE), Peak Load Shed, and Loss of Load Hours
- Costs vary among different futures
- Technical readiness is a subjective criteria
- Diversity has two components- technology diversification (e.g.,types of storage) and fuel diversity
- Need consideration of secondary carbon effects – upstream (cradle to grave)
- End of life costs – ensuring it is included in utility costs, not passed on to society
- Drought impact on hydro, Palo Verde cooling water, etc.
  - Water use and availability
- Net Present Value portfolio (not with weighted factor)
- Value of scalability relates to load forecasting and should not be a weighting factor
- Too many points given to reliability because models already solve/screen for reliability
- What is reliability expectation for a carbon-free resource future (& climate change)
- Climate justice (replacing fossil peakers with storage)
- NIMBY
- Action plan needs to add an item to address location of replacement resources (e.g. justice)
- There is value in downward flexibility (ramping down generation, when needed), in addition to upward flexibility

## Action Plan Suggestions

Three candidate action plan ideas that are not related to modeling, were collected during the meeting in the “coffee break” area. These are shown below:

- Changing fossil fuel plants to LDES 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

## Closing and Request for Feedback

Gridworks thanked all stakeholders for their engagement, insights, and suggestions as we move forward together in this new process. Gridworks appreciates the 10 people who completed the survey during the meeting.

Others are encouraged to complete the survey by visiting this link:

[bit.ly/PNM-IRP-Feedback](https://bit.ly/PNM-IRP-Feedback), or scanning the QR code shown here



**NEXT MEETING: Thursday, July 27**

**TIME: 9 AM – 12 NOON**

**WHERE: WEBEX**



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**REGISTER:** [Schedule & Registration \(pnmforwardtogether.com\)](https://pnmforwardtogether.com), click on the July 27 “REGISTER” box in the meeting schedule table