New Mexico Integrated Resource Planning

Increasing Transparency Through Facilitated Stakeholder Engagement

GRIDWORKS

EXECUTIVE SUMMARY

New Mexico implemented a facilitated stakeholder process for the development of electric utility Integrated Resource Plans (IRPs) in 2023 under rules passed by the New Mexico Public Regulation Commission (PRC) in November of 2022. The new facilitation process contributed to both the Public Service Company of New Mexico and the Southwestern Public Service Company filing IRPs that included substantive input from diverse stakeholders. The new process met the key objectives of increasing transparency and involving stakeholder participation early in developing the utilities' plans.

Utilities and stakeholders reported the facilitation to be a success by helping both utilities develop 20-year plans that address clean energy, aging infrastructure, evolving technology, and public engagement challenges. Stakeholders represented diverse interests, better understood these challenges, and felt heard during the process. Their input to the statement of need, modeling scenarios, and the action plan was incorporated into utilities' plans.

The Gridworks facilitation team recommends that stakeholder facilitation continue in future IRPs. Key recommendations for strengthening stakeholder participation and increasing transparency are:

1. Revisit the timeline for the facilitated process and consider creating an ongoing modeling forum to keep communication open between utilities and stakeholders regarding modeling methodologies, assumptions, and inputs.
2. Initiate an outreach effort to engage stakeholders who may not have participated in prior IRP conversations.
3. Prepare introductory materials for stakeholders to explain the IRP's purpose and elements and describe the relationship between the plan and future resource procurement actions.
4. Structure stakeholder meetings such that data-rich presentations are followed by time for stakeholders to submit comments and questions to be addressed at the next meeting.
5. Engage stakeholders at the start of the meeting series to choose and/or explain data-sharing platforms and associated procedures. Do the same for information requests and question/answer systems.
6. Allow several weeks of preparation by the facilitator and utility before the first stakeholder engagement meeting to develop the schedule, agree on roles and responsibilities, prepare information-sharing systems, and identify and invite stakeholders.

New Mexico is well served by this new public engagement thanks to the dedication of the PNM and SPS IRP teams, the 282 stakeholders who participated, and the visionary leadership of the PRC.

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I. OBJECTIVES & PROCESS

A. Background

In November of 2022 the New Mexico Public Regulation Commission (PRC) established new rules for the state's Investor Owned Electric Utilities Integrated Resource Plans.[1] The new Rule added a mandatory facilitated stakeholder process to the planning steps. The facilitated stakeholder process is required to commence no later than six months before the filing of the IRP. Two utilities, Public Service Company of New Mexico (PNM) and Southwestern Public Service Company (SPS), prepared and filed Integrated Resource Plans (IRPs) in 2023, incorporating input offered through this mandatory facilitated stakeholder process.

Integrated Resource Plans (IRPs) are public utilities' plans for meeting retail customers' existing and future electricity demands. The planning period is 20 years. The PRC requires utilities to develop an IRP every three years, and these plans are submitted (or "filed") for regulatory review.[2] Analyses (including modeling) conducted during the development of the plan create a foundation for the addition, replacement, or retirement of electricity resources. Engagement by stakeholders in the development of each plan is critical as New Mexico transitions its electricity systems from carbon-emitting resources to cleaner options while satisfying the requirements of affordability and reliability.

Stakeholders' views are critically important in considering these electric utility industry trends:

- achieving clean energy policy goals while maintaining an electricity system that is reliable and affordable;
- replacing aging infrastructure that will reach the end of its expected life during the planning period; and
- evolving energy technologies that increase customer choice and complexity of future planning.

Two key elements of the IRP that require stakeholder input are the **statement of need** and the **action plan**. The statement of need is a description and explanation of the amount and type of new resources necessary to reliably meet an identified level of electricity demand in the planning period while adhering to the state's policies, namely, the Energy Transition Act.[3] The action plan contains specific actions the utility carries out to implement the IRP during the three-year period following the plan's filing.

According to the IRP Rule, the facilitated stakeholder process is defined as the statutory public advisory process conducted by a commission appointee to facilitate advisory discussions

[1] 17.7.3 NMAC, 10/27/2022
[2] This review is limited to ensuring compliance with the IRP Rule, in contrast with some other states where approval authority is granted to the regulatory body.
[3] The Energy Transition Act, passed in 2019, is incorporated into NMSA 62, Article 18.

among stakeholders, including members of the public, **to advise the public utility and reach potential agreement in the utility's development of its statement of need and action plan.**

Gridworks, a 501(c)3 organization that convenes and facilitates collaboration between stakeholders in clean energy, was appointed by the PRC to facilitate the newly mandated stakeholder process for the PNM and SPS 2023 Integrated Resource Plans.This document summarizes this new stakeholder process, outcomes, successes, and limitations. Recommendations for subsequent utility IRPs are also included.

B. Objectives

The New Mexico Public Regulation Commission's objectives as stated in the IRP Rule, are shown below:

> ***"This rule serves the commission's objectives of***
> - ***increasing transparency,***
> - ***involving stakeholder participation early in the process, and***
> - ***tying the IRP outcome directly to the procurement process."***
>
> *17.7.3.6.B NMAC, 10/27/2022*

A key part of achieving these objectives includes reaching a potential agreement between stakeholders and the utility on the statement of need and action plan. The facilitated stakeholder process also provided opportunities for stakeholders to offer input to the modeling assumptions and analyses. Figure 1 depicts stakeholder inputs, as prescribed by the IRP Rule.

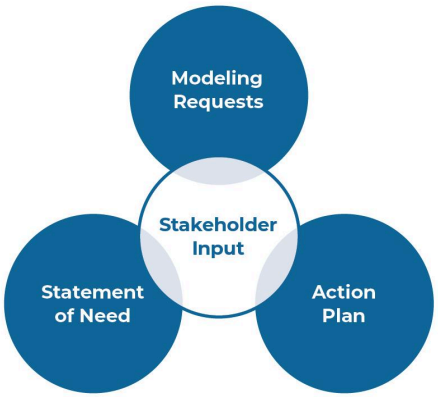


Figure 1. Areas for Stakeholder Input

Increasing the transparency of modeling activities was supported by three specific provisions in the IRP Rule:

1. providing stakeholders with reasonable access to modeling software,
2. performing a reasonable number of modeling runs, and
3. sharing all modeling information.

MODELING FOR UTILITY INTEGRATED RESOURCE PLANNING

Electric utilities use computer simulation models to evaluate options for satisfying future electric system needs. The models simulate the electric system for decades into the future and select among different resources to meet electric demand at the lowest cost while meeting reliability criteria. The models can be programmed to require the utility to meet policy goals like a renewable portfolio standard or emissions limit. The simulations require input information from a broad range of variables such as weather, fuel costs, electric demand, technology costs, and operating characteristics of generation and energy storage technologies. In the IRP, models are typically used to ***estimate*** *the cost, reliability, and emissions characteristics of different combinations of electricity generation and storage resources.*

One of the facilitator's goals was to engage parties involved in past regulatory proceedings and bring new and diverse perspectives to the conversation. A significant effort was made to engage stakeholders who may not have previously engaged in IRP activities. These “unrepresented” stakeholders include representatives from Indian nations, tribes, and pueblos; city and county managers; and income-limited, under-served, and consumer representatives.

C. Process and Logistics

1. Stakeholder Engagement Opportunities

Gridworks organized, facilitated, and documented 12 stakeholder workshops (plus several interim conversations) between March and December of 2023 as part of PNM’s IRP and eight workshops (plus several interim conversations) between May and October in support of SPS’ IRP. Both series began with stakeholder orientation and briefings about the electric system's fundamentals, requirements, and opportunities and challenges to provide necessary electric infrastructure over the next 20 years. The second set of workshops covered modeling discussions, including modeling requests, and stakeholder input to the statement of need. Developing the action plan was the final step in the facilitated stakeholder process. The timeline shown in Figure 2 illustrates the sequence of conversations intended to build a shared understanding among stakeholders while developing input to the statement of need and action plan.

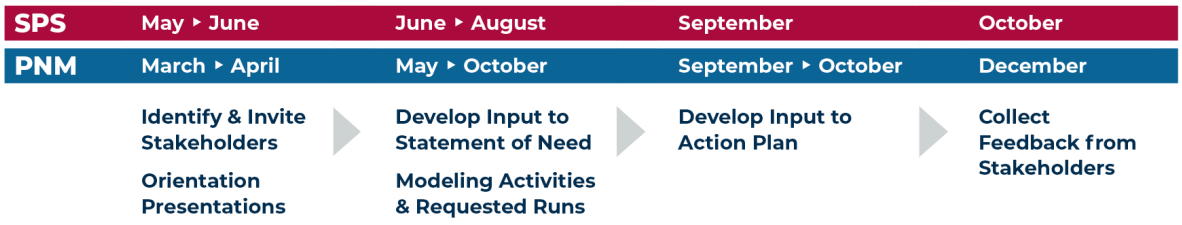


Figure 2. Stakeholder Engagement Timeline

Workshop venues varied to provide opportunities for participation by individuals from diverse locations. Most gatherings were hosted through a virtual meeting platform, two workshops offered in-person attendance, and one was a hybrid - offering both in-person and virtual participation.

2. Stakeholder Participation

Gridworks worked with the utilities to identify and contact stakeholders from various perspectives. Stakeholders who attended the first few workshops were also asked for input on additional participants they felt should be invited to the IRP conversations. All interested individuals were included on the distribution list for the facilitated stakeholder process. Stakeholders included city, state, and county officials; representatives of Indian nations, tribes, and pueblos; members of the public; private industry; nonprofit groups; federal agencies; and research organizations. The facilitation team prioritized recruiting organizations not typically participating in utility planning conversations.

A summary of the number of stakeholders who participated in each IRP is shown in Figure 3 and a combined list of all 129 participating organizations follows. Additional details, including lists of participating organizations in each IRP, are available in Appendix A.

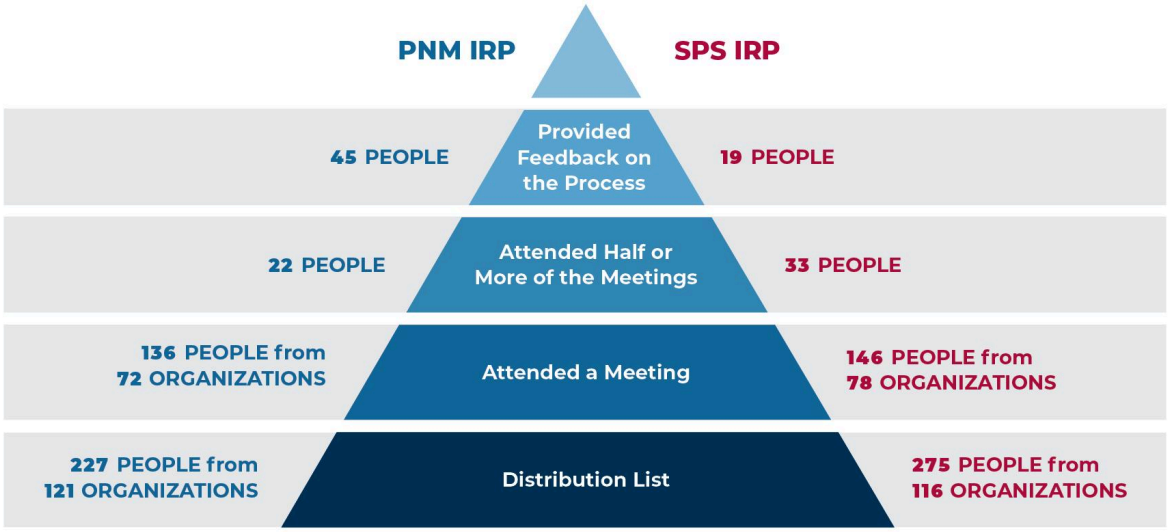


Figure 3. Stakeholder Participation

THANK YOU TO PARTICIPATING STAKEHOLDERS

1898 & Co.
350 New Mexico
Advanced Energy United
AES Clean Energy
Air Force
All Pueblo Council of Governors
Apex Clean Energy
Betty & Wozniak, P.C.
Block Energy
BluWave-ai
Bureau of Land Management, Carlsbad Field Office
Chaves County
Chevron
Citizens Caring for the Future
City of Artesia
City of Clovis
City of Eunice
City of Hobbs
City of Jal
City of Portales
City of Roswell
City of Santa Fe
City of Sudan, TX
Clenera
Coalition for Clean Affordable Energy
Coalition for Community Solar Access
Community member
Crestwood Midstream
CSol Power/NM Solar Energy Association
Curry County
Devon Energy
DNV
Eastern Plains Council of Governments
Economic Development Council of Lea County
Eddy County
EDF Renewables
Electric Power Research Institute
ENGIE
Escalante H2Power
esVolta
ExxonMobil
Form Energy
Galehead Development
Grid United
Hecate Energy
HELP New Mexico/Gonzales Strategies
Hobbs Industries
Holland & Hart
ICF
Independent Petroleum Association of NM
Innergex
Interfaith Power and Light
Interwest Energy Alliance
Invenergy
Itron
JUWI Inc.
Kelly Cable of New Mexico
Key Capture Energy
Kinetic Power
Kingzzzz Ranch
Lea County
Lincoln County
Lincoln County Land and Natural Resource Advisory Committee
Los Alamos National Laboratory
Louisiana Energy Services dba URENCO
LS Electric America
Mad Energy
Malta Inc.
Marathon Oil
Mewbourne Oil
Mitsubishi Power
Modrall Sperling
Naeva
Natural Resources Defense Council
New Law Group
New Mexico Association of Counties
New Mexico Attorney General
New Mexico Gas Co.
New Mexico Independent Power Producers Association
New Mexico Legislature (4): House Energy Committee Member, House Minority Leader, President Pro-Tempore, Senator (Hobbs)
New Mexico Renewable Energy Industries Association
NextEra Energy Resources
NGL Water Solutions
NM Affordable Reliable Energy Alliance
NM Chamber of Commerce
NM Department of Transportation
NM Energy, Minerals and Natural Resources Department, Energy Conservation and Management Division
NM Environment Dept
NM Large Customer Group
NM Public Regulation Commission, Utility Division
NM Renewable Energy Transmission Authority
NM State Land Office
NMSU
Onward Energy
OPL
Phillips 66
Pine Gate Renewables
Prosperity Works
Public (2)
Q-Cells
Quay County
ReneSola Power
REVTX
Roswell Chaves County EDC
Roswell Customer
rPlus Hydro
San Juan Citizens Alliance
Sandia National Laboratories
Savion Energy
Senator Heinrich's Office
Siemens
Sierra Club
Solariant
Southwest Energy Efficiency Project
Sovereign Energy
Stelzner Law Firm
Synapse Energy
Talon/LPE Environmental Consulting
Targa Resources
The Mosaic Company
UCLA
Velarde & Yar, P.C.
Vestas
Walmart
Wartsila North America
Western Energy Storage Taskforce
Western Environmental Law Center
Western Resource Advocates

Stakeholder experiences with IRP topics varied considerably. For example, PNM and SPS stakeholder groups included 5-8 individuals who were knowledgeable and/or experienced with IRPs and resource modeling, yet most stakeholders were not. Several modeling experts preferred a more direct, targeted set of conversations, while non-experts appreciated the opportunity to learn about the role of modeling in resource planning.

Throughout the IRP, participants were asked, via an online survey tool, their opinions on the stakeholder process. The majority of respondents reported that stakeholder diversity was moderately high to high (see Figure 4).

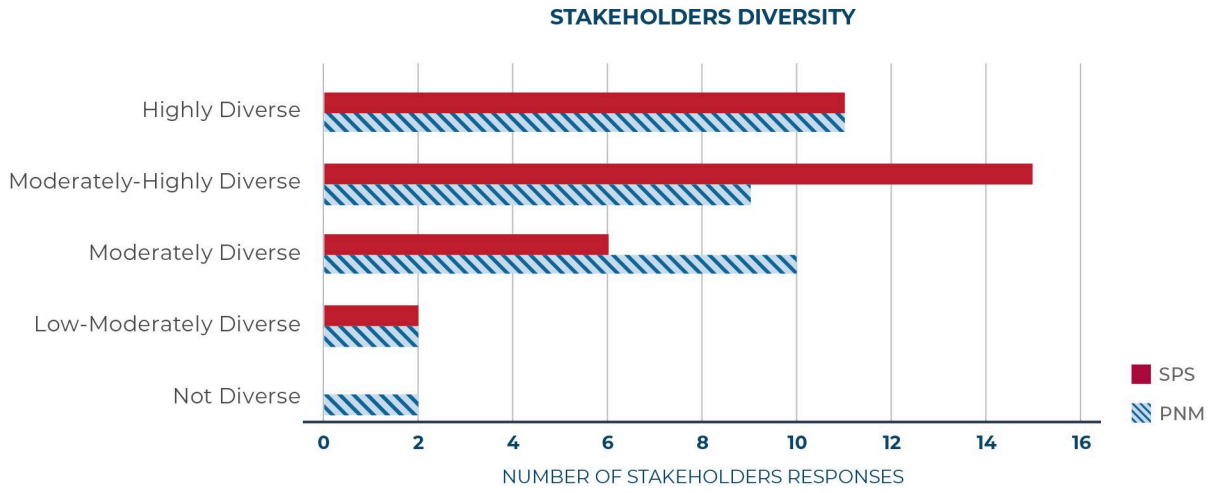


Figure 4. Stakeholder Diversity as Assessed by Stakeholders

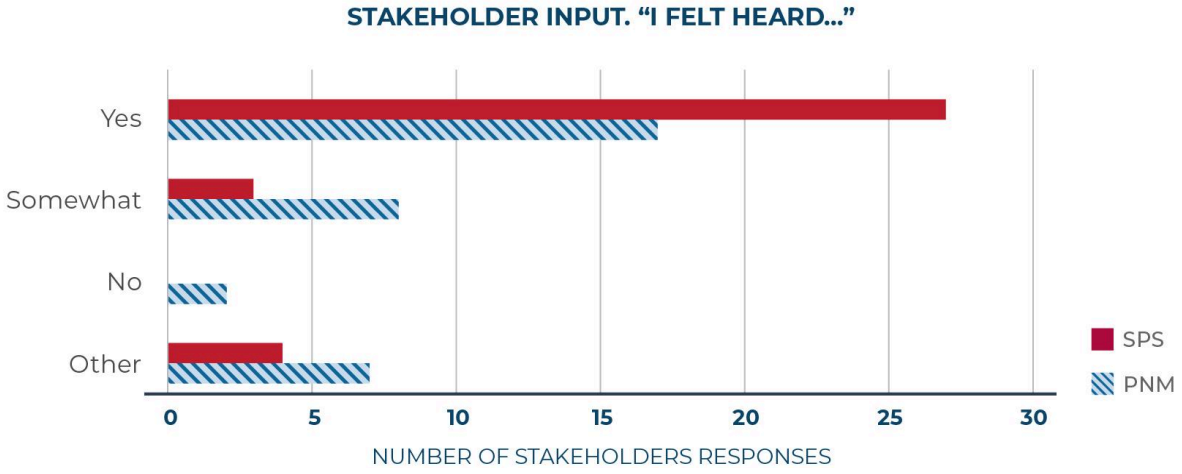


Figure 5. Feedback From Stakeholders Regarding Whether or Not They Felt Heard

A priority for the facilitator was also to ensure that stakeholders were heard by the utility and understood by each other. Based on responses (see Figure 5) stakeholders felt heard and understood, with very few exceptions.

> *"I was worried with the very first one that the stakeholders would not be heard. Today's webinar proved that with the right facilitation, the people can be heard."*
>
> *Quote from stakeholder*

3. Engagement Themes and Sequencing

Stakeholder engagement activities initially focused on building a foundation of common knowledge before gathering input on the statement of need, modeling, and the action plan, as shown in Figure 2 above.

The facilitator worked with each utility to prepare presentations about elements, requirements, and challenges associated with the current and future electricity systems. These "tutorials" were oriented toward non-experts but were also relevant to experts.

The statement of need was not a familiar concept for many stakeholders. As such, a subset of stakeholders formed a working group to explore and document topics they thought should be included in the utilities' statement of need.

Concurrent with work on the statement of need, modeling discussions were held. Modeling inputs, assumptions, scenarios, and sensitivities related to resource modeling were important topics since decisions around preferred resource portfolios are informed by modeling results. Utility briefings, interim stakeholder meetings, phone calls, and emails supported the modeling discussions. Key topics throughout the facilitated stakeholder process included access to modeling information and requests for stakeholder modeling runs. (See Section 5 for more information about how modeling topics were addressed.)

The final phase of IRP facilitation focused on developing suggestions for the action plan. Candidate actions were offered by the utilities and stakeholders. Actions offered by both groups were discussed, possibly modified, and documented via an action plan mapping document.

4. Information Sharing

Information developed during the facilitated meetings was posted on the Gridworks website[4] as the primary repository.[5] Both utilities also posted information on their websites: PNM[6] and SPS.[7] PNM also hosted a "Question and Answer" database for the IRP process, which was available to the public.

Access to modeling information was handled differently by the two utilities. In addition to providing charts and tables in their meeting presentations, PNM made modeling information available through an access-controlled file system, called VENUE. A total of 28 PNM stakeholders requested access to the detailed modeling information. Eight of these stakeholders executed a non-disclosure agreement to receive access to protected information through VENUE. SPS provided modeling information in presentation materials and answered questions during and between stakeholder meetings.

5. Modeling Activities

Stakeholders with diverse interests and backgrounds expressed an interest in modeling activities. Approximately 40 stakeholders attended the first PNM IRP modeling breakout session. Though all stakeholders were allowed to access modeling information and suggest additional modeling runs for consideration, a subset of stakeholders[8] was organized into a modeling core team. This team served as the interface with PNM's modeling team and assisted in focusing modeling discussions. For example, the modeling core team organized and posed questions from all stakeholders during several meetings. A similar team was not needed for the SPS IRP due to the smaller number of stakeholders involved in detailed modeling discussions.

Both utilities were open to input from stakeholders regarding modeling runs to supplement those conducted by the utility. Modeling run suggestions were submitted through "modeling request forms," discussed with interested stakeholders, refined through conversations with the utility, and where feasible, conducted. In addition to utility-defined modeling runs, a total of 10 runs/scenarios were suggested by stakeholders in the PNM IRP, all of which were analyzed. Many suggested runs resulted in action plan tasks. In the SPS IRP, seven modeling runs were

[4] https://gridworks.org/
[5] An issue raised was disclosure of email addresses through group distribution lists and official service list communications. The facilitation team chose to share email addresses with participating stakeholders to encourage communication among them.
[6] https://www.pnmforwardtogether.com/irp
[7] https://www.xcelenergy.com/company/rates_and_regulations/resource_plans/integrated_resource_plan
[8] Modeling core team members included six stakeholder organizations with experience in resource modeling: WRA, Form Energy, Interwest Energy Alliance, NM PRC Utility Division, Sandia National Laboratories, and New Mexico State University. Two people served as co-chairs. Note: one stakeholder felt strongly that potential vendors should not be allowed to serve on the modeling core team.

offered by stakeholders and all were analyzed. (Details on these modeling runs are included in the OUTCOMES section of this report, see II.B.)

The IRP Rule states that the utility *"shall provide stakeholders reasonable access to the same modeling software used by the utility."*[9] Utilities required interested stakeholders to obtain their own licenses. The facilitator is not aware of any stakeholder who pursued this access.

Stakeholder organizations Form Energy, New Mexico State University, and Sandia National Laboratories conducted their own analyses using the PNM modeling information. Results were shared with interested stakeholders. Demonstrating stakeholders' interests in this topic, an interim session entitled "IRP Modeling - Forward Thinking," held on Aug. 22 for the PNM IRP was attended by 56 stakeholders. Conversations focused on modified methodologies for future IRP efforts. Suggestions from these organizations and others included:

- capacity expansion modeling approaches that more accurately capture weather variability and the value of flexibility resources. (PNM identified best practices for using 8760-hour optimization and incorporating multi-weather year analysis.);
- new techniques for modeling energy storage, including seasonal duration storage; and
- examining the value of load loss in addition to the levelized cost of energy.

II. OUTCOMES

The facilitation process contributed to each utility filing an IRP that reflects what stakeholders want from their utility. Contributions from over 127 organizations resulted in a proposed set of actions projected to meet state energy policy goals while maintaining a reliable electric system. The ultimate costs of each plan will depend on the results from future solicitations for energy resources and successfully implementing programs identified in the action plans. Each of these steps requires further regulatory review by the PRC.

The sections below describe important outcomes of the facilitation process for the utilities' statements of need, modeling of their electric systems, and action plans.

A. Statement of Need

Stakeholders did not object to the proposed quantity and type of resources needed as outlined in PNM's draft statement of need.

Many stakeholders were interested in various topics related to electric system needs. Discussions about these topics helped educate participants on electric system challenges and provided opportunities for stakeholders to hear the views of other stakeholders. A working group developed suggestions that covered vision and goals, decision points, attributes of resources to

[9] 17.7.3.9.A.1 NMAC, 10/27/2022.

consider, and other topics for future discussion. PNM documented where all elements of the stakeholders' working group input were addressed in the IRP.

All stakeholders had the opportunity to provide their top five needs as input to the utility's weighting and prioritization of resource portfolios. Results are shown below, in order of priority.

1. Reliability and Resiliency
2. Affordability (life cycle cost)
3. Environmental Attributes (for example, water use and air quality) and non-carbon emitting
4. Exceeding State Carbon Reduction Requirements AND Climate Justice/Energy Justice
5. Fuel Diversity and Fuel Security
6. Exceeding State Renewable Energy Requirements AND Maximizing Energy Efficiency, Demand Response, and Demand-side Management Technologies
7. Scalability of Technology
8. Technology Diversity
9. Research & Demonstration of New Technology

PNM used this information and stakeholder comments to adjust the criteria weighting for the preferred portfolio analysis. For example, the production cost modeling software optimizes for the lowest cost, and as such, the utility team took a closer look at reliability, resiliency, and environmental attributes. Energy justice also emerged as an important consideration for future resource selections.

An agreement between stakeholders and SPS was reached for the statement of need objectives. The quantity of needed resources remained under discussion at the end of the facilitated stakeholder process.

An interim committee of stakeholders in the SPS discussions developed a list of considerations for the statement of need. All were incorporated into the IRP and are shown below:

- Cost-effective resource portfolio
- Meet the RPS requirements
- Meet projected load growth and secure replacement energy and capacity for retiring resources
- Reliability and resiliency
- Robust energy system that furthers diverse economic development in the state
- Meet evolving resource adequacy requirements
- Ensuring affordability to all SPS customers, including residential and low-income customers, as the system transitions
- Providing a just and orderly transition for workforce, customers, and communities, including consideration of replacement generation in communities affected by accelerated retirements
- Engaging customers to help the utility reliably serve during grid constrained events

B. Modeling

Opening the black box of utility resource modeling proved to be educational and productive. As a result:

- Both utilities analyzed all scenarios requested by stakeholders and presented these results in their final IRPs;
- Both utilities analyzed future resource requirements to meet New Mexico's clean energy policies and reduce carbon emissions on **accelerated** timelines;
- Both utilities examined emerging technologies to meet clean energy targets, which will provide a foundation for future plans as more information becomes available on these technologies; and
- Stakeholders gained a deeper understanding of the complexities associated with predicting and satisfying future needs.

Both utilities were concerned initially that they would be overwhelmed with stakeholder modeling requests. Facilitation gathered stakeholders with similar interests and helped define the parameters of modeling scenarios.

Modeling runs suggested by stakeholders and analyzed by PNM are listed here:

- high electricity demand due to electric vehicles and building electrification
- increased demand response scenario
- extensions of Four Corners Power, Valencia, and Reeves power plants
- no new combustion scenarios
- accelerated carbon free scenario
- high-very high gas price scenario
- extreme weather reliability sensitivity
- correlated gas outages reliability sensitivity
- battery degradation reliability sensitivity
- resiliency study focused on winter conditions and the benefits of having access to regional markets

Modeling runs suggested by stakeholders and analyzed by SPS are the following:

- Early compliance with renewable energy and carbon free targets including a load forecast case of high electrification in the commercial and industrial sectors
- Aggregated virtual power plant (distributed energy resources)
- Dynamic load shifting for residential and small commercial customers scenario
- Demand response scenario
- Increased hydrogen blending with carbon capture and sequestration scenario
- Inclusion of reciprocating engines as a resource option, including the sub-hourly credit options

The SPS team also incorporated a stakeholder request focused on EPA 111 compliance into the relevant SPS modeling runs.

C. Action Plan

Stakeholders and utilities agreed on the action plans in both the SPS and PNM IRPs.

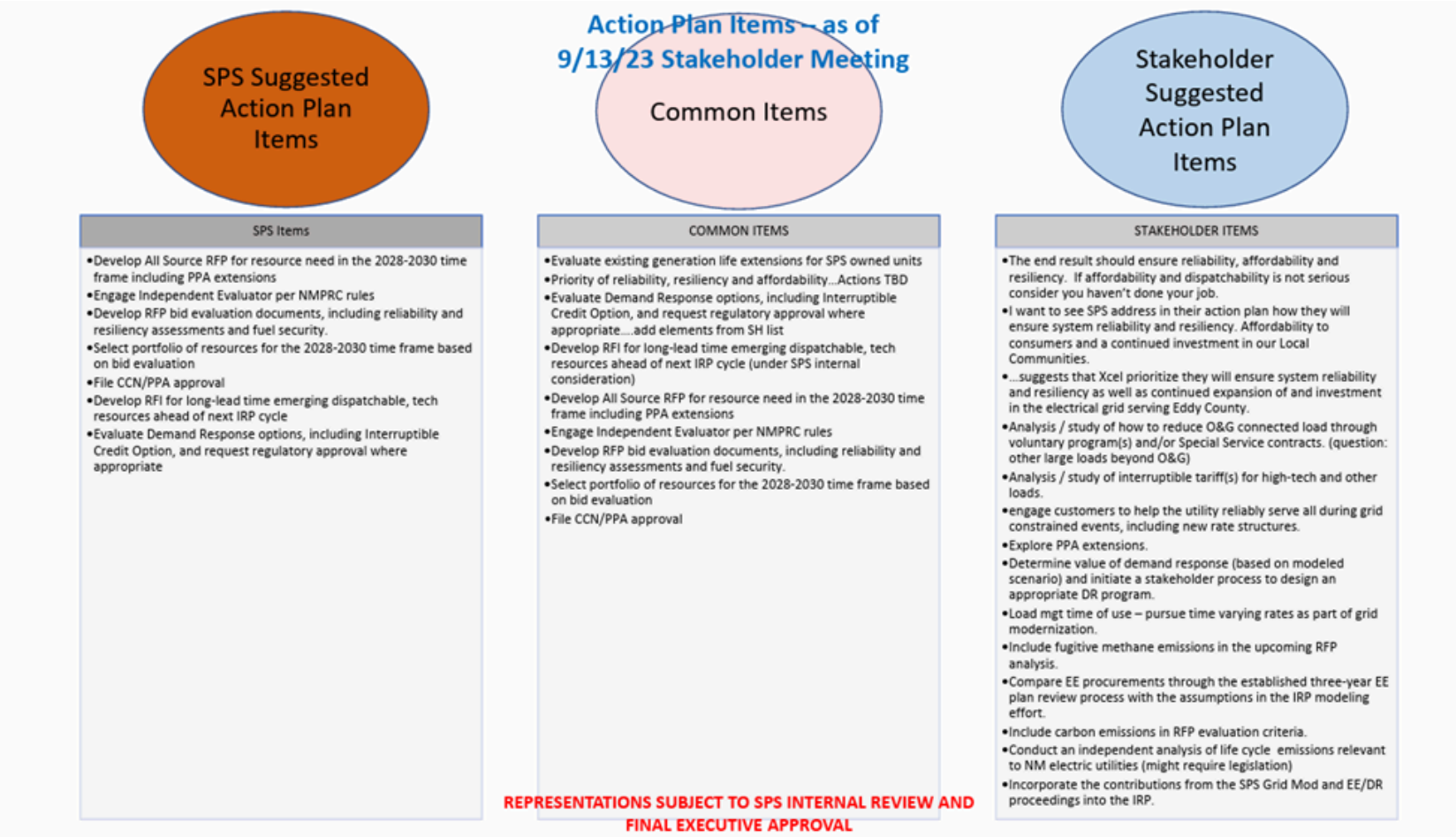
- Both action plans address near-term utility resource needs and present pathways to long-term clean energy goals.
- Both action plans anticipate further stakeholder engagement in the execution of plans and preparation for the next IRP cycle.
- Stakeholders helped develop recommendations in the action plans that will provide clear direction for procurement of resources.

Stakeholders provided 28 specific ideas for the PNM action plan, all incorporated into the IRP. PNM prepared a summary document reflecting the disposition of each suggestion. Topics included:

- public information efforts,
- environmental justice considerations in future procurements,
- extreme weather considerations,
- benefits from participation in organized regional markets,
- time of day use rates and new or improved demand response programs,
- input on long-lead-time resources and new technologies,
- opportunities to abandon the Four Corners Power Plant,
- the use of additional reliability metrics and resiliency standards, and
- many others.

The establishment of stakeholder modeling workshops was also suggested by stakeholders. This could be implemented as part of PNM action plan item #8: “Initiate stakeholder workshops and meetings for the 2026 IRP in advance of the required six-month stakeholder process as required under the IRP Rule.”

The “mapping document” on the next page illustrates a working document used in the SPS IRP action plan discussions. Suggestions from stakeholders and SPS are shown in the right and left columns, respectively. Consensus or “Common Items” (shown in the center column) were incorporated into the IRP. Many items that were not adopted were noted by SPS as being addressed through other regulatory proceedings. A stakeholder recommendation regarding using lifecycle analysis for emissions estimates in resource planning conversations was also raised in PNM IRP conversations. This may warrant consideration by the Commission.


Action Plan Items – as of 9/13/23 Stakeholder Meeting
SPS Suggested Action Plan Items
Common Items
Stakeholder Suggested Action Plan Items
SPS Items
•Develop All Source RFP for resource need in the 2028-2030 time frame including PPA extensions
•Engage Independent Evaluator per NMPRC rules
•Develop RFP bid evaluation documents, including reliability and resiliency assessments and fuel security.
•Select portfolio of resources for the 2028-2030 time frame based on bid evaluation
•File CCN/PPA approval
•Develop RFI for long-lead time emerging dispatchable, tech resources ahead of next IRP cycle
•Evaluate Demand Response options, including Interruptible Credit Option, and request regulatory approval where appropriate
COMMON ITEMS
•Evaluate existing generation life extensions for SPS owned units
•Priority of reliability, resiliency and affordability…Actions TBD
•Evaluate Demand Response options, including Interruptible Credit Option, and request regulatory approval where appropriate….add elements from SH list
•Develop RFI for long-lead time emerging dispatchable, tech resources ahead of next IRP cycle (under SPS internal consideration)
•Develop All Source RFP for resource need in the 2028-2030 time frame including PPA extensions
•Engage Independent Evaluator per NMPRC rules
•Develop RFP bid evaluation documents, including reliability and resiliency assessments and fuel security.
•Select portfolio of resources for the 2028-2030 time frame based on bid evaluation
•File CCN/PPA approval
STAKEHOLDER ITEMS
•The end result should ensure reliability, affordability and resiliency. If affordability and dispatchability is not serious consider you haven't done your job.
•I want to see SPS address in their action plan how they will ensure system reliability and resiliency. Affordability to consumers and a continued investment in our Local Communities.
•…suggests that Xcel prioritize they will ensure system reliability and resiliency as well as continued expansion of and investment in the electrical grid serving Eddy County.
•Analysis / study of how to reduce O&G connected load through voluntary program(s) and/or Special Service contracts. (question: other large loads beyond O&G)
•Analysis / study of interruptible tariff(s) for high-tech and other loads.
•engage customers to help the utility reliably serve all during grid constrained events, including new rate structures.
•Explore PPA extensions.
•Determine value of demand response (based on modeled scenario) and initiate a stakeholder process to design an appropriate DR program.
•Load mgt time of use – pursue time varying rates as part of grid modernization.
•Include fugitive methane emissions in the upcoming RFP analysis.
•Compare EE procurements through the established three-year EE plan review process with the assumptions in the IRP modeling effort.
•Include carbon emissions in RFP evaluation criteria.
•Conduct an independent analysis of life cycle emissions relevant to NM electric utilities (might require legislation)
•Incorporate the contributions from the SPS Grid Mod and EE/DR proceedings into the IRP.
REPRESENTATIONS SUBJECT TO SPS INTERNAL REVIEW AND FINAL EXECUTIVE APPROVAL

III. RECOMMENDATIONS

Stakeholders, utilities, and the facilitation team offered recommendations for the development of future IRPs. These include best practices that should be preserved and future improvements.

A. Best Practices to Preserve

Cross-cutting

- Encourage broad participation by stakeholders with diverse interests.
- Continue using an independent facilitator that can:
    - engage individuals and organizations that have not participated in past utility discussions,
    - allow diverse stakeholders to participate and be heard, and
    - leverage local knowledge and relationships to create a trusting, collaborative environment for stakeholder conversations.
- Employ both in-person and virtual formats to provide a variety of effective engagement opportunities.
- Use a centralized, publically accessible question-and-answer website to support learning by all participants and provide a repository of information that documents issues raised and responses. A benefit of this system is that the utility avoids spending time answering the same question more than once.

Statement of Need

- Provide multiple opportunities to discuss the magnitude of new resources needed. The large quantity of new resources proposed by SPS (5324 - 10,211 megawatts in the 2028-2030 timeframe) created a lively discussion among stakeholders. Load growth projections of the large industrial customers and affordability for all customers were key issues. Facilitated conversations among utilities, large industrial customers, environmental groups, and PRC Utility Division staff resulted in a better understanding of options for meeting those needs.
- Encourage utilities to inform stakeholders where their input to the statement of need is addressed in the IRP. This increases transparency and ensures all recommendations are addressed.

Modeling Activities

- Create a small group of knowledgeable stakeholders to serve as a liaison to the broader stakeholder group on modeling. A “modeling core team” was created for the PNM IRP to address the desires of some stakeholders to have a deeper understanding of utility modeling. This allowed a small number of experts to conduct a detailed evaluation of utility modeling, which was shared with participating stakeholders. The team of six, who

were chosen from 40 interested individuals, led the deep-dive modeling discussions. The PNM modeling team was an active, constructive, and critical member of the modeling core team.
- Use facilitation to develop agreements on the scope and number of stakeholder-requested modeling runs.
- Support and appreciate the responsiveness, patience, and courtesy shown by utilities in responding to modeling-related questions.

Action Plan

- Encourage utilities to inform stakeholders where their input to the action plan is addressed in the IRP.
- Use tools to visualize action plan ideas supported by the utility, stakeholders, and areas of consensus. An action plan mapping document helped to develop consensus and increase the transparency of the source and resolution of action plan suggestions.

B. Suggested Future Improvements

Cross Cutting

- Revisit the 6-month timeline for the facilitated stakeholder engagement. This is warranted based on the following feedback from participants: 1) several stakeholders expressed a desire for more focus on specific technical/modeling topics; 2) stakeholders and utilities alike found the pace (particularly in preparing and digesting modeling information) to be too fast; and 3) stakeholders who represented consumers and the public desired participation by more people with general interests. In Gridworks' experience, three options could be considered as shown below.

Process Changes	Advantages	Disadvantages
Add 1-3 months to the facilitated stakeholder process.	Provides more time for preparation of and interpretation of information.	Adds cost and time commitment from stakeholders and utilities. Could discourage consumers and unrepresented stakeholders.
Create an ongoing modeling forum.	Supports IRP, rate cases, and other regulatory efforts. Avoids having to address all modeling issues during the limited IRP stakeholder process.	May need to be utility-specific. Requires resources to organize, conduct, and document.
Separate engagement into 2 tracks: one for public/consumers and one for technical interests	Efficient use of stakeholders' time. Might be more attractive to unrepresented stakeholders.	Reduced opportunities for knowledge and perspective sharing among stakeholders.

- Initiate an outreach effort to increase the participation of previously unrepresented stakeholders. More participation by indigenous people and income-limited representatives would have broadened the perspectives of the stakeholder group. Barriers to engagement cited by interviewed representatives at the conclusion of the stakeholder workshops include difficulties digesting the many complex and technical issues, time required to engage fully, and priority of IRP conversations compared to other concerns.

  Details regarding this effort for the 2023 IRPs are summarized below:
  - ➢ The Gridworks team reached out by telephone and email to 36 different organizations identified by the utilities' and facilitators' networks.
  - ➢ Representatives from 21 organizations attended one or two workshops at the start of the engagements. Most were city and county governments.
  - ➢ A written invitation described what was at stake, why stakeholders' voices mattered, and a description of the process for potential PNM stakeholders. Invitations were sent to representatives of Indian nations, tribes, and pueblos and representatives of income-limited organizations, followed up with phone calls from the Gridworks team.
  - ➢ SPS invitees, identified by the utility, included city and county officials and income-limited representatives. These representatives were contacted first by the utility, and then by Gridworks.

  The PRC's Tribal Advisory Council could strengthen future connections to indigenous people in the IRP process.

- Record introductory videos and/or develop Frequently Asked Questions to help stakeholders understand the purpose and elements of the IRP, and to describe the relationship between the plan and future resource procurement actions. Use this material to prepare stakeholders. Post materials on the PRC website to increase the transparency of the IRP.
- Structure stakeholder meetings such that data-rich presentations are followed by time for stakeholders to submit comments and questions to be addressed at the next meeting. The complexity and volume of information included in modeling analyses require time for stakeholders to review.
- Engage stakeholders at the start of the meeting series to choose and/or explain document and data-sharing platforms that support the greatest transparency and ease of access for utilities and stakeholders. Do the same for information requests and question/answer systems.
- Allow several weeks of preparation by the facilitator and utility before the first stakeholder engagement meeting. This time is needed to develop the schedule, agree on roles and responsibilities, prepare information-sharing systems, and identify and invite stakeholders.

<u>Statement of Need</u>

Many divergent views regarding the electric system's needs were expressed by stakeholders during the group meetings. Conversations allowed stakeholders to explore many topics, yet input for the statement of need was not directly aligned with the utilities' view of the statement of need. To develop the statement of need more efficiently and focus stakeholder input, two actions are recommended:

- PRC may consider issuing additional guidance on the content of the statement of need.
- Encourage utilities to provide briefings on the last approved statement of need and projected updates at the beginning of the stakeholder meetings.

Modeling Activities

- Establish a year-round modeling forum to allow stakeholders to stay up to date on new modeling approaches, updates on inputs, etc. This forum could support engagement in IRP, rate cases, and many other regulatory efforts.
- Encourage utilities to establish clear procedures for access to sensitive modeling data through non-disclosure agreements and make this information available to stakeholders at the beginning of the stakeholder meetings.

Action Plan

- Start the next action plan development phase with a stakeholder update on the prior action plan. This could be scheduled as the utility updates its annual action plan to the PRC.
- A stakeholder recommendation regarding using lifecycle analysis for emissions estimates in resource planning was also raised in both the PNM and SPS IRP conversations. This may warrant consideration by the Commission.

IV. CONCLUSION

This report summarizes the first facilitated stakeholder process for PNM and SPS under the new IRP Rule. The independent facilitation contributed to each utility filing an IRP that directly addresses several converging trends in the electric utility industry and a period of significant transition in New Mexico. All participants helped achieve the goal of increased transparency through meaningful input to the IRPs. The effort also created a foundation for linking IRP outcomes with future procurement activities.

> *"First and foremost, the filed comments demonstrate that the stakeholder process facilitated by Gridworks was a success."*
>
> *Quote from SOUTHWESTERN PUBLIC SERVICE COMPANY'S RESPONSE TO PUBLIC COMMENTS ON ITS 2023 INTEGRATED RESOURCE PLAN, filed on 12/12/2023.*

V. APPENDIX

A. Summary of Stakeholder Participation

Numbers and organizational affiliations of stakeholders are presented here as evidence of stakeholder engagement. Data are presented separately for the PNM and SPS efforts.

1. PNM Stakeholders

Gridworks and PNM worked together to identify and contact stakeholders from various perspectives. All interested individuals were included on the distribution list for the facilitated stakeholder process. Ultimately, the list included 227 individuals from 121 organizations (not including 45 individuals from PNM and their consultants nor the four Gridworks personnel.) Stakeholders included city, state, and county officials; indigenous peoples; members of the public; private industry; nonprofit groups; federal agencies; and research organizations. A particular challenge was to reach and engage nontraditional stakeholders including representatives of Indian nations, tribes, and pueblos; city and county managers; and income-limited, under-served, and consumer representatives.

A total of 136 individuals from 72 organizations attended one or more stakeholder workshops. 22 individuals attended at least half of the sessions. A summary of the number of individuals and organizations attending the 11 core stakeholder workshops is shown below. Approximately eight individuals representing six Pueblos and/or income-limited entities participated in som8+90e initial workshops.

The following organizations (not including the facilitators nor PNM representatives) were represented at one or more stakeholder workshops:

1898 & Co.

350 New Mexico

Advanced Energy United

AES Clean Energy

All Pueblo Council of Governors

BluWave-ai

City of Santa Fe

Clenera

Coalition for Clean Affordable Energy

Community member

CSol Power/NM Solar Energy Association

DNV

ENGIE

Escalante H2Power

esVolta

Form Energy

Galehead Development

Grid United

Hecate Energy

Hobbs Industries

ICF

Innergex

Interwest Energy Alliance

Invenergy

Itron

JUWI Inc.

Key Capture Energy

Kinetic Power

Kingzzzz Ranch

Lincoln County Land and Natural Resource Advisory Committee

LS Electric America

Mad Energy

Malta Inc.

Mitsubishi Power

Modrall Sperling

Naeva

New Mexico Attorney General

New Mexico Gas Co.

New Mexico Independent Power Producers Association

NextEra Energy Resources

NM Affordable Reliable Energy Alliance

NM Energy, Minerals and Natural Resources Department, Energy Conservation and Management Division

NM Public Regulation Commission, Utility Division

NM Renewable Energy Industries Association

NM Renewable Energy Transmission Authority

NMSU

Onward Energy

Pine Gate Renewables

Prosperity Works

Public (2)

Q-Cells

ReneSola Power

REVTX

rPlus Hydro

San Juan Citizens Alliance

Sandia National Laboratories

Savion Energy

Senator Heinrich's Office

Siemens

Solariant

Southwest Energy Efficiency Project

Sovereign Energy

Stelzner Law Firm

Synapse Energy

UCLA

Velarde & Yar, P.C.

Vestas

Western Energy Storage Taskforce

Western Resource Advocates

2. SPS Stakeholders

Gridworks and SPS worked together to identify and contact stakeholders with a wide range of perspectives. All interested individuals were included on the distribution list for the facilitated stakeholder conversations. The list included 275 individuals (not including 49 individuals from Xcel Energy/SPS and their consultants nor the four Gridworks personnel.) Over 116 organizations comprised the distribution list. Invitees included city, state, and county officials from New Mexico and Texas; New Mexico state legislators; private industry; nonprofit groups; federal agencies; and research organizations. A particular challenge was to reach and engage nontraditional stakeholders including representatives of Indian nations, tribes, and pueblos; city and county managers; and income-limited, under-served, and consumer representatives.

A total of 146 individuals from 78 different organizations (in addition to utility and facilitator representatives) attended one or more stakeholder workshops. 33 individuals attended at least half of the sessions. A summary of the number of individuals and organizations attending the eight core stakeholder workshops is shown below. Approximately 17 individuals representing 15 cities, counties, and/or income-limited entities participated in a few workshops.

The following organizations (not including the facilitators nor SPS representatives) were represented at one or more stakeholder workshops:

AES Clean Energy

Air Force

Apex Clean Energy

Betty & Wozniak, P.C.

Bureau of Land Management, Carlsbad Field Office
Block Energy
Chaves County
Chevron
Citizens Caring for the Future
City of Artesia
City of Clovis
City of Eunice
City of Hobbs
City of Jal
City of Portales
City of Roswell
City of Sudan, TX
Coalition for Clean Affordable Energy
Coalition for Community Solar Access
Crestwood Midstream
CSol Power/NM Solar Energy Association
Curry County
Devon Energy
Economic Development Council of Lea County
Eddy County
EDF Renewables
Eastern Plains Council of Governments
Electric Power Research Institute
ExxonMobil
HELP New Mexico/Gonzales Strategies
Holland & Hart
Independent Petroleum Association of NM
Innergex
Interfaith Power and Light
Interwest Energy Alliance
Kelly Cable of New Mexico
Lea County
Louisiana Energy Services dba URENCO
Lincoln County
Lincoln County Land and Natural Resource Advisory Committee
Los Alamos National Laboratory

Mad Energy

Marathon Oil

Mewbourne Oil

New Law Group

New Mexico Association of Counties

New Mexico Legislature (4): House Energy Committee Member, House Minority Leader, President Pro-Tempore, Senator (Hobbs)

New Mexico Renewable Energy Industries Association

Nextera Energy Resources

NGL Water Solutions

NM Attorney General

NM Chamber of Commerce

NM Department of Transportation

NNM Energy, Minerals and Natural Resources Department, Energy Conservation and Management Division

NM Environment Dept

NM Large Customer Group

NM Legislature, President Pro-Tempore

NM State Land Office

NM Attorney General

NM Public Regulation Commission, Utility Division

NM Renewable Energy Transmission Authority

Natural Resources Defense Council

OPL

Phillips 66

Quay County

Roswell Chaves County EDC

Roswell Customer

Sierra Club

Southwest Energy Efficiency Project

Talon/LPE Environmental Consulting

Targa Resources

The Mosaic Company

Walmart

Wartsila North America

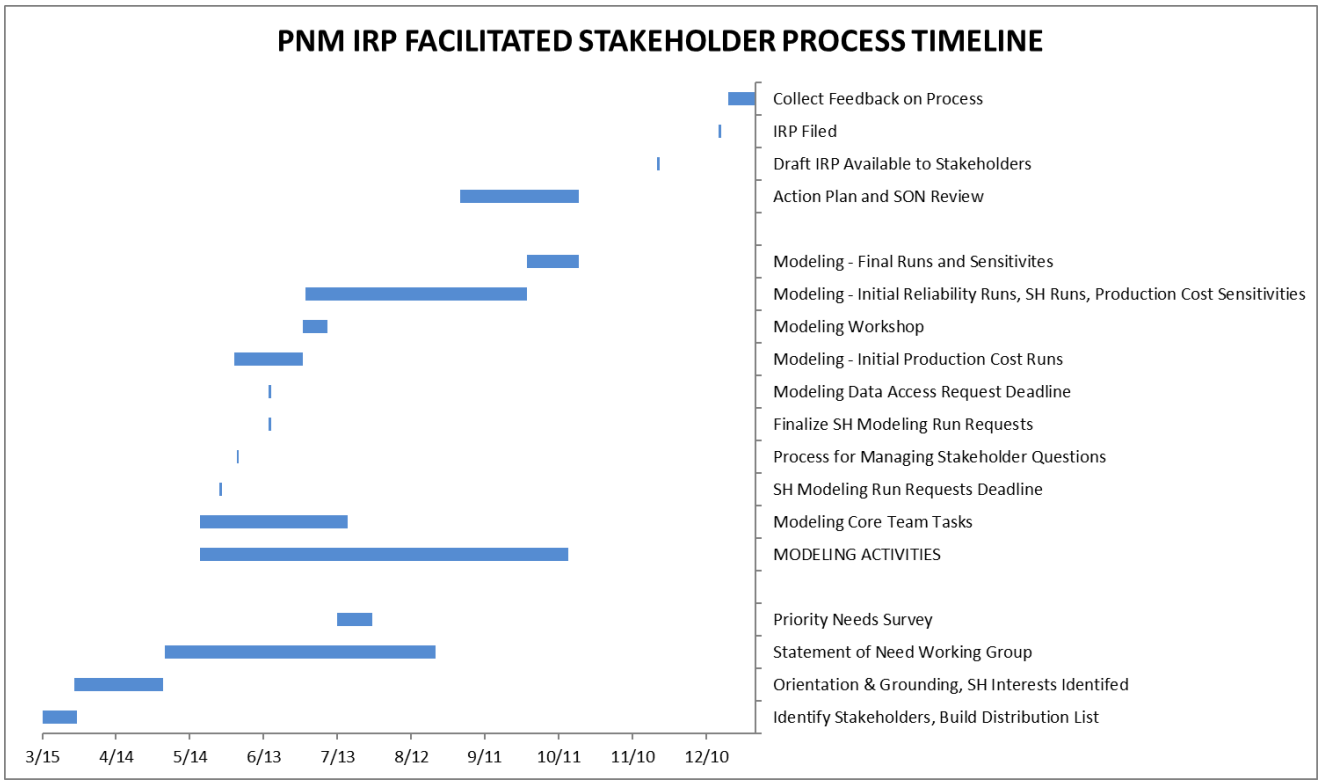
Western Environmental Law Center

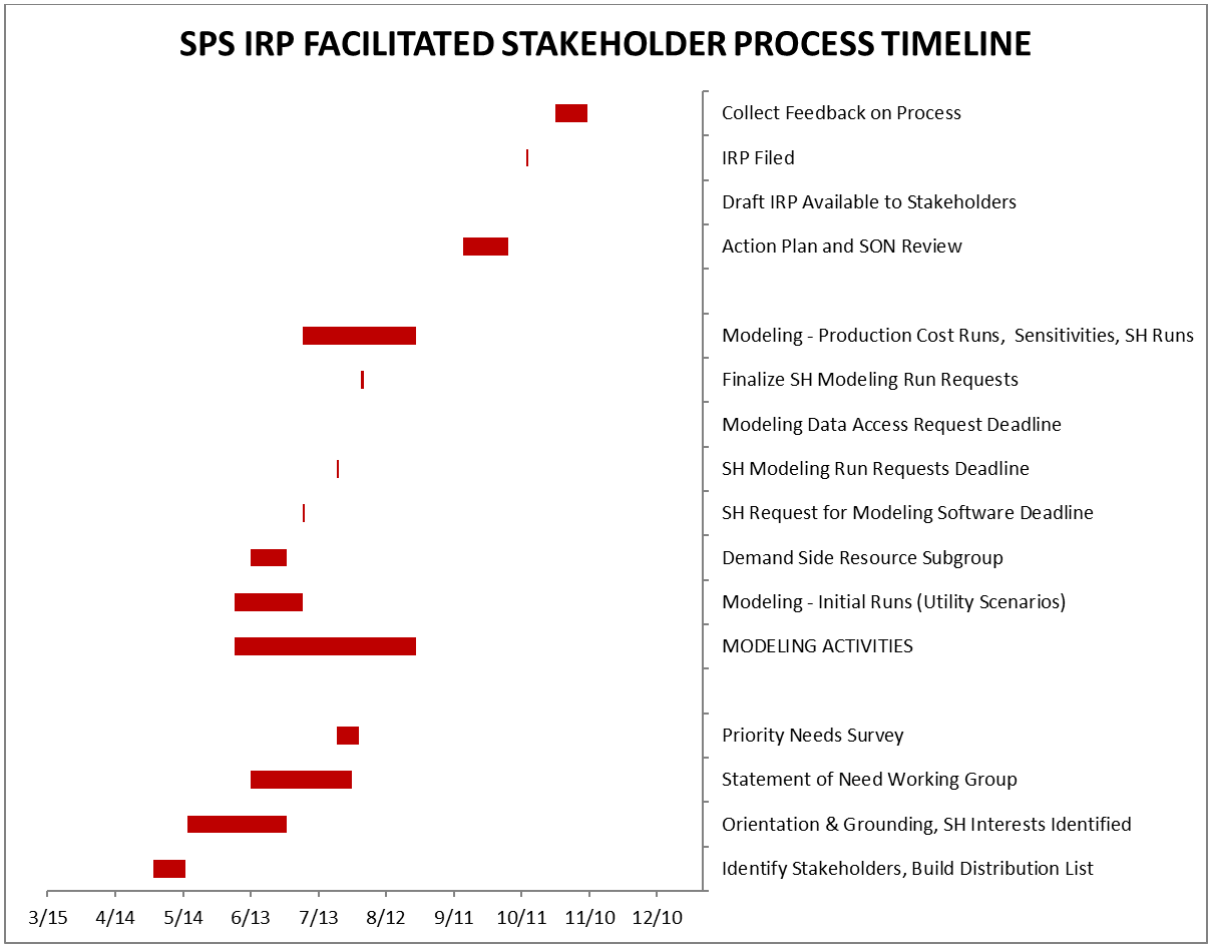
Western Resource Advocates

B. Process Timelines

The IRP Rule requires utilities to file their IRPs no later than six months after commencing the facilitated stakeholder process. PNM included a three-month transition period between the formal Public Advisory Process, which took place between April 2022 and March 2023, and the independent stakeholder facilitation.

Timelines for each process, shown below, illustrate two points: 1) modeling activities spanned at least half of the timeline, and 2) overall feedback on the effectiveness of the independent facilitation was collected after the filings of the IRPs. (Feedback on facilitation effectiveness was also collected after each stakeholder workshop.)




SPS IRP FACILITATED STAKEHOLDER PROCESS TIMELINE
Collect Feedback on Process
IRP Filed
Draft IRP Available to Stakeholders
Action Plan and SON Review
Modeling - Production Cost Runs, Sensitivities, SH Runs
Finalize SH Modeling Run Requests
Modeling Data Access Request Deadline
SH Modeling Run Requests Deadline
SH Request for Modeling Software Deadline
Demand Side Resource Subgroup
Modeling - Initial Runs (Utility Scenarios)
MODELING ACTIVITIES
Priority Needs Survey
Statement of Need Working Group
Orientation & Grounding, SH Interests Identified
Identify Stakeholders, Build Distribution List
3/15
4/14
5/14
6/13
7/13
8/12
9/11
10/11
11/10
12/10