STAKEHOLDER Input to the Statement of Need – SPS IRP

Based on input from July 6, 2023, Stakeholder Meeting

(It was noted at the July 6 meeting that the elements in this document are not prioritized).

SUMMARY

● When it comes to procurement, the technical characteristics of resources that should be considered:
  o Cost of resources
  o Capacity contribution of resources
    ▪ Dispatchability
    ▪ Location of resource (geographic diversity)
  o Emerging technologies that allow for integration of generation that meets the REA requirements, including distributed energy resources
  o Effect of resources on SAIDI, SAIFI, NERC and WECC requirements
● The objectives we’re trying to solve for:
  o Cost effective resource portfolio
  o Meet the RPS requirements
  o Meet projected load growth and secure replacement energy and capacity for retiring resources (Q for modeling: Load growth requirements v. replacement resources)
  o Reliability and resiliency
  o Robust energy system that furthers diverse economic development in the state
  o Meet evolving resource adequacy requirements
  o Ensuring affordability to all SPS customers, including residential and low-income customers, as the system transitions
  o Providing a just and orderly transition for workforce, customers, and communities, including consideration of replacement generation in communities affected by accelerated retirements.
  o Engaging customers to help the utility reliably serve during grid constrained events
● There are resource needs by 2027 that are currently being addressed by the 2021 IRP Action Plan. SPS/Xcel Energy also has capacity need of ___MWs by 2028-2030, which requires commencement of the resource procurement process as soon as possible, under:
  o Description of level 1-3 modeling process, with details regarding the following:
    ▪ Level 1 - Base case
    ▪ Level 2 - Scenario X, modeled by increased Planning Reserve Margin
    ▪ Level 3 (e.g. higher load)
● Based on generic pricing, Recommended/Preferred Portfolio has potential for:
  o ___ MW new clean energy
  o ___ MW from dispatchable (resource that can be called upon at anytime that is needed)
  o ___ MW storage
  o ___MW Demand Side Resources
NOTE THAT SOME RESOURCES MAY MEET MORE THAN ONE CATEGORY. For example, some assets (such as hydrogen and/or CCS retrofits of existing generation) may be both clean and dispatchable.

Will energy needs also need to be stated (along with capacity needs)?

POSSIBLE ACTION PLAN IDEA - engage customers to help the utility reliably serve all during grid constrained events, including new rate structures. (SEE EXAMPLES BELOW IN “OTHER RATEMAKING PROPOSALS”)

Ultimate portfolio depends on bids submitted/received

Rule/state law compliance

“technical characteristics of proposed new resources”

Timeline considerations

2028-2030 need identified

it takes time to get new large capacity resources on line. Near term resource needs are being met by 2021 action plan

timeline for transmission interconnection to SPP is a consideration (FERC jurisdiction), recognizing that certain resources may be interconnected more quickly than others

interconnection of distributed resources to the SPS system (NM PRC jurisdiction) is also a consideration

note that it takes less time to get smaller resources on line

RELIABILITY

Timeframe to come on line

PRM requirements are expected to increase in the future

More Infrastructure - will need investment in distribution and transmission assets to support new generation and meet resource needs. Note that hosting capacity of existing circuits could be a consideration for distributed resources.

Location considerations

- generation closer to the load makes the resource more valuable.

- Larger facilities could encounter land use conflicts or other local government permitting challenges.

- RFP results will also consider location

Address transmission infrastructure needed to integrate more renewables

- Should be planning for increased resource adequacy requirements

- System analysis for inadequate load supply (blackout/brownout) and designation of critical infrastructure?

MORE GENERATION

- Make individual solar affordable (as a way to decrease load)

- No regrets (new resources & pathway). Do not put new resources on line that emit fossil fuel emissions, especially in the electricity generation sector. Clean electricity sooner is better. Need to deal with upstream emissions as well as stack emissions.

- Most economical and reliable portfolio to meet SPS’s capacity needs
● Lifecycle environmental cost considerations, including decommissioning costs. “Cradle to grave” materials considerations.
● Incorporate evolving technologies
  o batteries
  o carbon free or low emissions, dispatchable technologies
  o technologies that may have previously been considered non dispatchable
● Maximize investment opportunities (how to measure the benefits of these investments is challenging)
  o can the investment facilitate economic development in the state?
  o to meet needs over the long term
  o support a diversity of businesses that support NM’s economy
● Cost effective, including fuel

ENVIRONMENTAL
● Climate Crisis
● Carbon-free ASAP
● In recognition of climate change concerns, make steady progress toward meeting requirements of renewable energy act
  o consider modeling of accelerated RPS goal achievements (prior to 2045)

TRANSITION – HUMAN IMPACT
● Affected workforce support
● Reinvestment in impacted communities
● Involve individuals – both homeowners and renters (community solar?)
● Consider community reinvestment, workforce transitions, training support

LOAD GROWTH - NOTE THAT MODELING RESULTS WILL INFORM THIS SECTION, Demand-side Resources modeling scenario(s) are being developed.
● Electric supply/infrastructure growth rate to include industrial electrification projects in addition to projected business growth. Note a reference offered by K. Stanley…..https://www.ercot.com/files/docs/2023/03/17/Presentation%20to%20ERCOT%20planning.pdf …
  o S&P Global's study identified a current 2.3GW demand gap to supply power to O&G loads in the SPP area, and that gap increasing to 5.3GW by 2032 if the current growth continues. See slide 10.
● Changing load (increased electrification)
  o Environmental regulations driving combustion equipment to electric
● Evaluate probability of new load becoming a reality
  o High side/low side and the potential lag in grid buildout to meet demand
● Demand Response - increased role of DR….specifics discussion in IRP on current and potential demand response programs and impact on load in each IRP scenario. Include information on cost of DR programs as an alternative to additional generation
● Partial Requirement Tariff (standby tariff), Case 22-00285-UT

OTHER RATEMAKING PROPOSALS
Tools to engage customers to help the utility reliably serve customers during grid constrained events, including:

- Real-time day ahead pricing tariff designed to expose customers to market prices such that the customer would respond; change usage behavior in market constrained events, reducing peak load and associated system costs.
- Interruptible load tariff designed to compensate customers for self-curtailment at a cost lower than market purchases in the same time period, reducing peak load and associated system costs.
- Future possible regulatory scenarios
- Behind the meter solar plus storage as tools for the utility to call upon to dispatch as needed.