UNSE RPAC Meeting Minutes – January 22, 2026

Facilitators:

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Meeting Purpose:

Continue the RPAC process leading to the 2026 Integrated Resource Plan, with a focus on updating stakeholders on forecasting methodologies, long-term planning inputs, market conditions, and modeling resources.

Meeting Focus:

- Aurora Licensing & Modeling Access
- Load Forecasting Methodology
- Long-Term Capacity Expansion (LTCE) Inputs

Key Themes and Topics Discussed:

1. Introductions

2. Stakeholder Representation:
   - TEP/UNSE
     - Resource Planning
     - Business Development
     - Communications
     - Corporate Environmental Services
     - Pricing/Customer Analytics/Rates
   - Consultants
     - Siemens
   - Business advocacy
     - Arizona Solar Energy Industry Association
   - Mining
     - South 32
   - Consumer advocacy groups
     - AARP
     - AZ PIRG
     - RUCO
   - Regulatory
     - Arizona Corporation Commission

3. Aurora License
   - Aurora licenses for the 2026 cycle will cost **$7,000**.
   - Email communication will follow to ensure all stakeholders receive the information.
   - **March 6** deadline for notifying UNSE of licensing requests.

- NDA is required for access to the modeling dashboard.
- Dashboard access does not require an Aurora license; it contains: Portfolio inputs, Model outputs, Resource additions, Cost summaries, etc.
- Entities in both the UNSE and TEP RPACs only need to pay for a single license
- UNSE will follow up on whether separate NDAs will be required

4. Load Forecasting:

Presentation focused on updated demand and energy projections for UNSE's service territories.
- Methodology included ARIMAX time series forecasting models using population, demographics, weather, and economic data.
- Separate forecasts for demand-side management (DSM), distributed generation (DG), energy efficiency (EE), and electric vehicle adoption layered on top of base forecasts.
- Large customer forecasts and data center have expressed interest but none are incorporated into base forecasts.
- Population forecasts for Santa Cruz and Mohave counties show sharp increases around 2020 due to recounts and economic shifts.
- Load growth over the next 25 years shows steady upward trends across sectors.
- Stakeholders asked that UNSE provide early awareness if any potential data center projects begin to solidify, as such developments could materially influence planning assumptions.

5. Long-Term Capacity Expansion Inputs:
- Review of key inputs for capacity expansion modeling.
- Inputs include natural gas market dynamics, gas price forecasts, load growth assumptions, and technology cost trajectories.
- Consideration of resource mix options to meet reliability goals.
- Discussion on constraints such as transmission limits and regulatory requirements.

6. Levelized Cost of Energy (LCOE):
- Analysis of cost metrics for different technologies (renewable, storage, conventional generation).
- Comparison of LCOE assumptions with industry benchmarks.
- Highlighted importance of accurate LCOE in portfolio optimization.
- LCOE projections impacted by expiration of tax credits (e.g., solar/wind PTC ends after 2027).

7. Power Price Outlook:
- Presentation on projected wholesale power prices and market trends.
- Discussion on supply volatility and its implications for procurement strategies.
- Consideration of how price outlooks inform IRP modeling and risk management.
- Hourly pricing trends with solar hours seeing price drops and non-solar peak hours

remaining high until the late 2030s.

8. Dashboard Preview
   - New dashboard allows side-by-side comparison of portfolios, which will include: Revenue requirements, Resource additions & retirements, Reserve margins, Market purchases/sales, ELCC values, Energy outputs, etc.
   - NDA required for access; stakeholder version will include finalized inputs after modeling.

9. Stakeholder Feedback Themes:
   - Engagement: Stakeholders want more detail on load forecasting assumptions and express interest in how LTCE inputs flow into IRP portfolio selection.
   - Inputs: Requests for transparency on LCOE assumptions and desire to see modeling sensitivities and alternative portfolios.
   - Portfolio Development: Modeling approaches and trade-offs.
   - Key challenges: Balancing cost, reliability, and sustainability. Uncertainty in load from emerging industries (AI, data centers). Long lead times for thermal resources.

10. Stakeholder Questions:

Aurora License
   - If we want full modeling access or an Aurora license for different datasets, does that request follow the same March 6 deadline? And is there anything we must complete before March 6 to get access to the dashboard or required data?
     o To receive the dashboard, an NDA is required, but it does not follow the same process as requesting a full Aurora modeling license. The license request deadline remains March 6, per ACC requirements. UNSE will work to ensure dashboards are delivered in a timely manner, even if some NDA processing is still underway, and there is flexibility similar to ACC treatment. If you're interested in viewing the dashboard or the portfolios included in it, you should notify UNSE as soon as possible so access can be arranged.

Load Forecast
   - What is the current outlook for data center development in UNSE's service territory, and are any such loads included in the forecast?
     o UNSE has received multiple inquiries from data center developers across different areas, but none have advanced to a contractual stage that would justify including them in the official load forecast. While these inquiries indicate strong interest, significant constraints—such as system limitations and required infrastructure—prevent UNSE from treating them as committed projects at this time.
   - Q: Could you provide the average population growth rate for these areas and compare it to the past 10 years?

o Yes. Additional details will be shared as part of the forecasting materials.

Natural Gas Forecast
- The gas price forecast you showed is based on Henry Hub. Do you also account for other regional gas hubs, and how would those differences affect the forecast?
  - o Yes. UNSE/Siemens incorporates basis differentials for all regional gas hubs in their modeling. While each hub has slightly different pricing, they generally follow the same overall trend as Henry Hub. Currently, many regional hubs show very low or highly negative basis values due to oversupply and limited export capacity. This is expected to continue for the next five years as LNG export capability expands. These differentials are included in the modeling, but they do not materially change the general price trend compared to Henry Hub.

Levelized Cost of New Resources
- Are these years all in service years? Are these real dollars?
  - o Yes, these are costs in real dollars for in-service years.
- When you refer to turbines, are you talking about combined-cycle plants or simple-cycle units?
  - o Both. The modeling includes simple-cycle combustion turbines (CTs) as well as combined-cycle (CC) units, since they often use the same underlying turbine platform. A combined-cycle plant is essentially one or two CTs with a steam turbine added to capture waste heat.
- Can you explain how energy efficiency (EE) and transportation electrification (TE) are reflected in your modeling assumptions? Are these impacts already incorporated into the load forecast or handled separately?
  - o Yes. Energy efficiency, transportation electrification, and distributed generation are already incorporated into the overall load forecast. The forecast reflects UNSE/TEP's best available outlook and is used as an input to the broader regional modeling process. Energy efficiency impacts are added on top of the baseline load forecast, which helps show how customer behavior and program adoption affect long-term demand. Transportation electrification assumptions are based on publicly available information from utilities in the region, such as published IRPs and EV adoption forecasts, and are integrated into UNSE's modeling as well. These assumptions are then carried through into the power price modeling and resource planning process.
  - o The UNSE Dashboard will include UNSE specific data.

RPAC Feedback
- When developing portfolios, can input from different stakeholder groups be combined? For example, if there are ideas requested in other processes—like the TEP process—can those be carried over into this RPAC portfolio development?
  - o Yes. UNSE confirmed that they are working to gather input from both stakeholder groups and will consider ideas that arise in either process. The goal

is to identify where the groups' priorities differ, but also where there is common ground that can strengthen the overall portfolio development process. UNSE encouraged stakeholders to share any ideas—whether new or previously discussed—so they can integrate the most effective and meaningful approaches into the IRP portfolios.

Action Items:

- Provide load forecast average load growth comparison.
- Send feedback survey on desired IRP portfolios via SurveyMonkey.
- Next RPAC Meeting scheduled for **February 25 at 10 AM**.

These notes aim to encapsulate the discussions and outline the next steps for effective collaboration moving forward in the RPAC process.