ARIZONA ENERGY MODERNIZATION PLAN

Objective
- Update Arizona’s energy policies
- Provide affordable energy to consumers
- Lead the nation in adapting to new technologies
- Prevent double-recovery, curtailment, and stranded assets

Scope
- Renewable Energy Standard and Tariff (REST)
  - Clean Resource Energy Standard and Tariff (CREST)
  - Clean Peak Target
  - Biomass Production Requirement
- Integrated Resource Plans (IRPs)
  - Energy Storage Target
  - Compliance and Planning Reformation
- Demand-Side Management (DSM) and Energy Efficiency (EE)
  - Transportation electrification
  - Water-energy nexus
GUIDING PRINCIPLES

1. Resiliency (Security)
2. Affordability and Reliability
3. Innovation
4. Economic Development
5. Resource Diversity
BUILDING ON THE RENEWABLE ENERGY STANDARD AND TARIFF (REST)

- Keeps all existing REST targets in-tact
  - (15% goal by 2025 is unchanged)
- Seeks to shift a portion of REST-qualified assets to on-peak hours
- Asks that a sustainable portion (60MW) of REST compliance come from Arizona-harvested biomass resources
WHAT WILL THE CLEAN RESOURCE ENERGY STANDARD AND TARIFF (CREST) LOOK LIKE?

80% clean energy portfolio by 2050

Clean definition
- Solar, wind, nuclear, hydro, and any other zero-carbon emission resource

20% recognized for flexibility, baseload, or market purchases
- Based on current portfolios and portfolio projections for the future

2050 target
- Respects existing investment lifespans and prevents curtailments
- Gives room for acceleration
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80% Clean Energy portfolio by the year 2050

• “zero net emissions beyond that of steam”
• Includes nuclear
• Accounts for baseload needs and existing plant lifespans
• Prevents new build-out of non-clean plants
3GW of energy storage capacity by the year 2030

Technology agnostic
- Battery storage
- Pumped hydro
- Compressed air

Based on utility projections
Helps to provide solar power during hours when the sun doesn’t shine
50k acres

60MW of Arizona-Biomass Generated Energy per year

- Calculated for sustainability (no clear cuts)
- 50,000 acres thinned per year
  1 million acres in 20 years
- Must be Arizona-sourced
  (at least 80%)
  (high-risk forest)
  (small diameter trees)
- Reduce wildfire risk via existing REST framework
Clean Peak Target that increases 1.5% each year

- Top 10% of energy use accounts for top 40% of energy cost
- Percentage of “on peak” hours must come from clean resources
- Hours from 3pm to 8pm
- Incentivizes energy storage
- Helps equalize “peak” demand (duck curve)
Modernize Energy Efficiency & Prepare Transportation Electrification infrastructure

- Revisit and reform the existing energy efficiency rules
- Prepare Arizona for the electric vehicle economy
- Requires plans for EV infrastructure build-out (commercial & residential) (government & highway)

EVready
HOW WILL THESE TARGETS HELP ARIZONA RATEPAYERS?

Potential to reduce funds needed for future wildfire suppression

Prevents utilities from over-investing in resources likely to be curtailed, which protects ratepayers from double-paying on stranded assets

Prevents curtailment of existing resources by respecting their remaining lifespans

Saves ratepayers on the most expensive hours of the day, by shifting load and reducing peak demand
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NEXT STEPS

1. Commission vote to approve the plan
   *Biomass moved forward on 3/13/2018*
2. Begin the rulemaking process
3. Collect stakeholder comment
4. Refine plan details & rule language
5. Finalize rulemaking by end of 2018
THANK YOU

FOR QUESTIONS:
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