

# Resource Planning Advisory Council

**Providing Safe, Reliable Energy** 

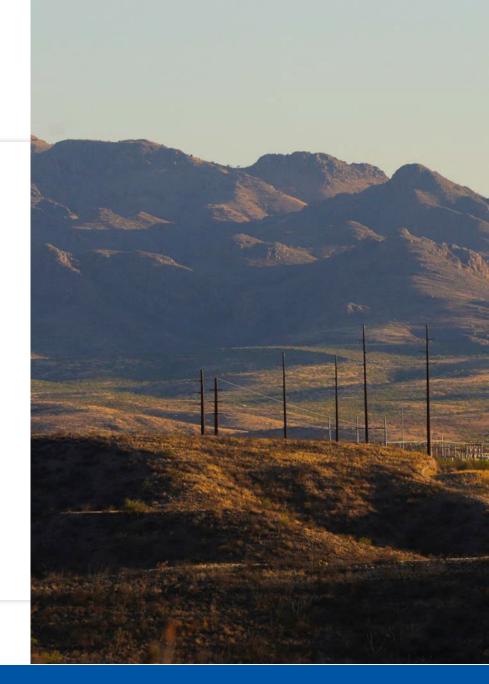


Agenda

- 01 Introductions
- 02 RPAC Purpose & Ground Rules
- 03 UNSE Overview
- 04 Industry Context
- **05** Wrap Up

### Introductions

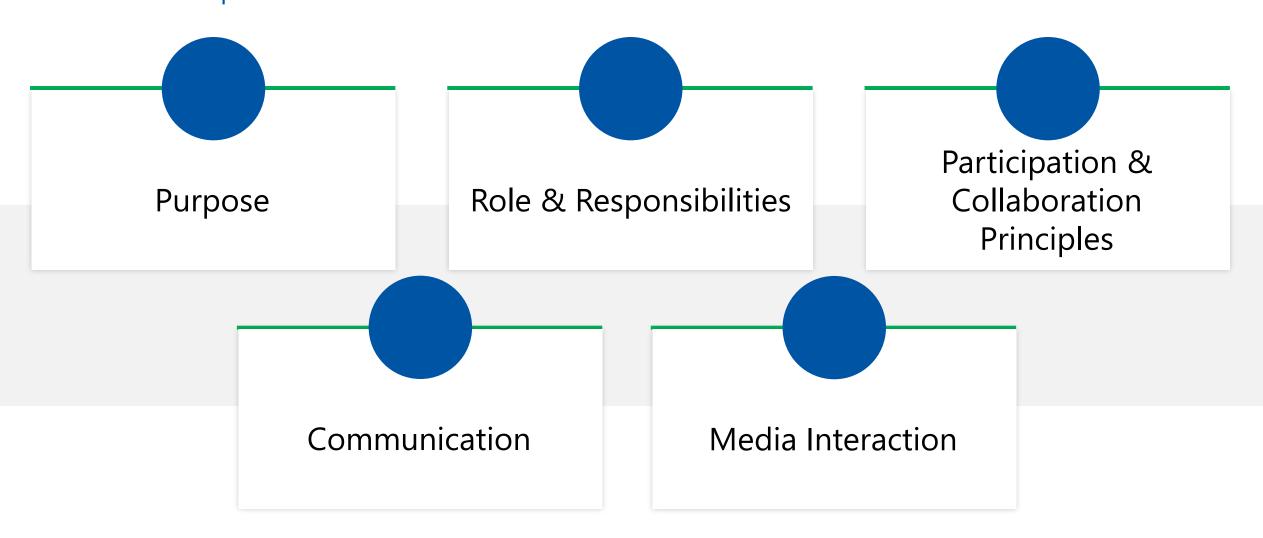
- Your name
- Who you are representing
- Why have you joined the RPAC?





# RPAC Purpose & Ground Rules

# RPAC Purpose & Ground Rules





Break Time



# About Us & Utility Overview

### Our Vision and Values

Our vision is to be an exceptional energy provider that positively impacts the lives of our employees, customers and communities.

Our values define how we work and who we are.

- We work safely
- Our differences make us stronger
- We do the right thing
- We achieve excellence together
- We learn continuously
- We drive sustainability





### Investing in Our Community

#### **Partnering to Support Pressing Needs**

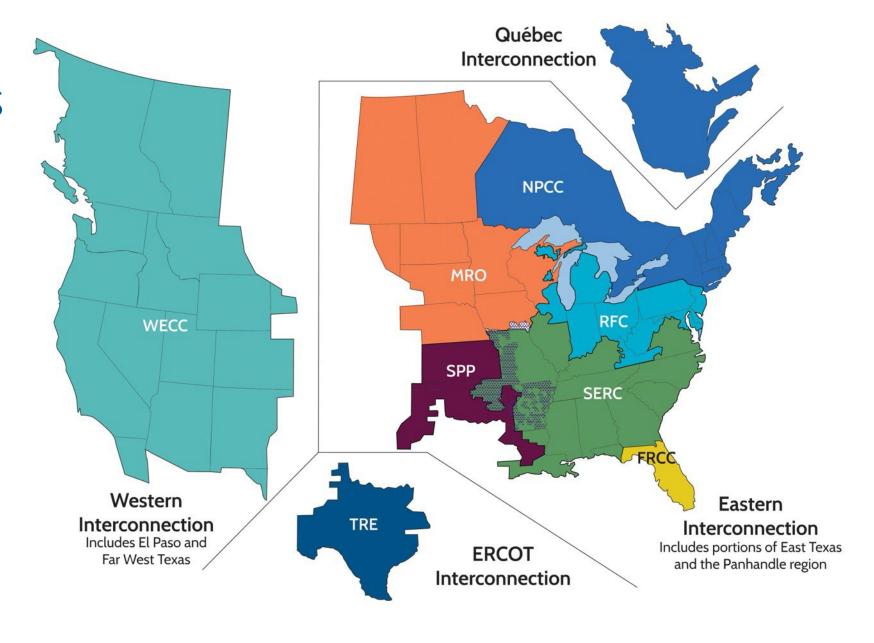
#### In 2024:

- \$362,000 donated
- 100 nonprofit groups supported in their work on community vitality, education, environmental stewardship, and racial and social equity
- 111 active volunteers
- 7,016 hours donated
- Dollars for Doers program allows our volunteers who meet certain thresholds to apply for grants in support of nonprofit organizations of their choice.
- Board service is encouraged, with training provided.

Our financial contributions are funded with corporate resources, not customers' rates.

# Interconnections & Regional Entities

- Separate, self-contained electric grids managed by regional entities
- Overseen by the North American Electric Reliability Corporation (NERC), a notfor-profit international regulatory authority subject to oversight by the Federal Energy Regulatory Commission (FERC) and Canadian authorities

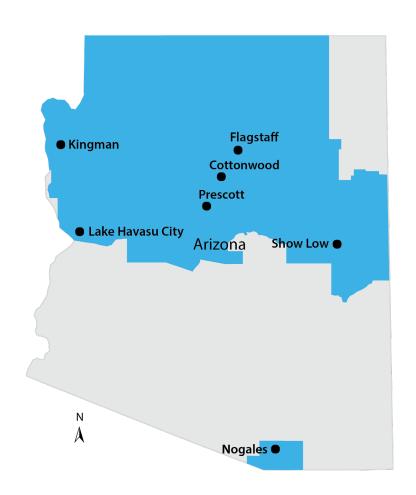


### Safe, Reliable Service Across Arizona

Electric Service

#### Natural Gas Service







# Our Resource Mix

# Conventional Generating Resources

#### **Electric**

Facility	Fuel	Capacity (MW)
Gila River Unit 3	Natural Gas	150
Black Mountain Units 1,2	Natural Gas	90
Valencia Units 1-4	Natural Gas	61
	Total	301 MW





# Renewable Electric Energy Resources

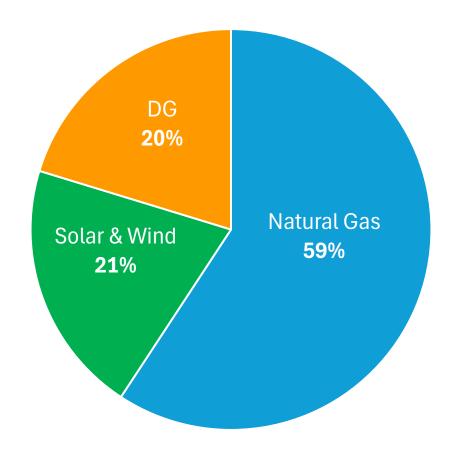
#### **Electric**

Source	Capacity (MW)
Solar (Utility-scale)	94 MW AC
Solar (Distributed generation)	103 MW AC
Wind	10 MW AC
Total	207 MW AC



# 2025 Capacity Mix

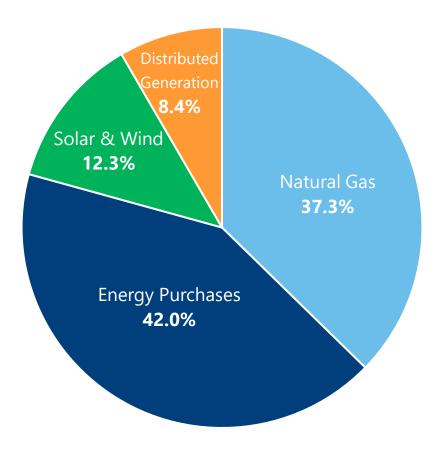




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## 2024 Energy Mix





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## Supporting Solar Power Systems

#### **Electric**

#### Connecting Customer Systems

Nearly 11,000 systems and counting

#### Solar Resources

Information at uesaz.com for those considering solar

#### GoSolar Shares

Easy, accessible, flexible way for anyone to buy solar energy





Reliability



# Top Tier Electric Reliability

#### **Electric**

**SAIDI** - System Average Interruption Duration Index

- Total minutes all customers were out of power/number of customers
- National average (2023): 100+\*
- UniSource: 60 (2024), slightly higher than 44 minutes achieved in 2023

- Translation: Typical customer is out of service about 1 hour/year
  - With 8,760 hours/year, this equates to less than 0.01% out of service
  - Not evenly distributed some customers see higher impacts



<sup>\*</sup> U.S. Energy Information Administration, Form EIA-861, Annual Electric Power Industry Report

# What Causes Electric Outages?







### How do we know there's an outage?

Customer reports
Telephone – 877) 837-4968
Website – uesaz.com

Unisource Mobile App

Reports relayed by first responders or other stakeholders

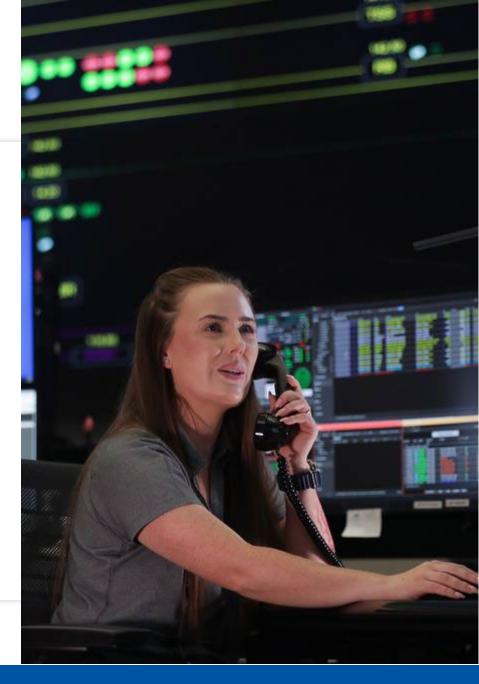
System reports
Automated distribution system management (ADMS) system
Energy Management System (EMS) alerts
Customer meters

Status: Reported/predicted/confirmed



### Restoring Service

- Dispatch Troubleman in response to reported/predicted outage
- Identify cause
- Secure scene
- Isolate damage
- Request supplies from warehouse, if needed
- Dispatch or schedule crew
- Identify, execute steps to route power around damage
- Make repairs
- Work with System Control & Reliability to restore power



### Energy Emergency

#### What would cause an outage to last days instead of hours?

- A temporary shortage of energy to supply local customers
- Can result from a combination of generation outages, transmission failures, extreme weather, wildfire impacts, or higher than expected usage, either locally or regionally
- Can emerge suddenly or gradually
- Response steps include:
  - Adding generation combustion turbines, market resources, delayed maintenance
  - Suspending interruptible load large customers
  - Call for conservation public appeal through media, web, IVR
  - Rotating outages short-term, manual shutoffs affecting different areas of town



# We're Ready: Comprehensive Planning and Coordination

### Electric: Preparing for Summer

- Capacity in place for summer of 2025
- Maintenance completed prior to summer
- Dual fuel backup and procurement procedures are in place
- Black start drills with the Reliability Coordinator
- Communication between physical command center and local/state law enforcement and routine meetings
- Reserve margin target of 16.5% or more

### Natural Gas: Preparing for Winter

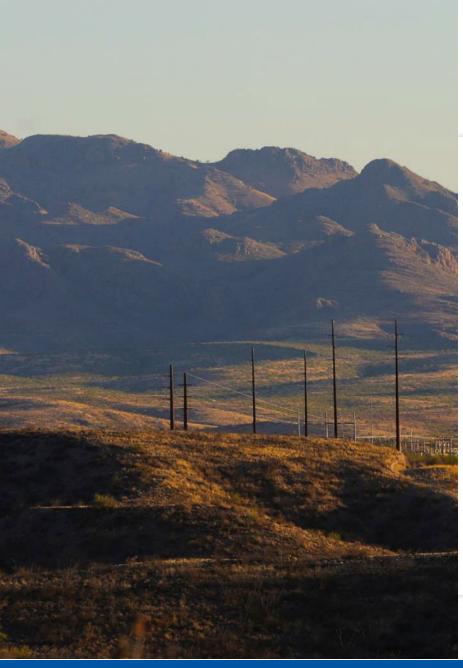
- System Analysis
- Outage Analysis
- Geographic Information System (GIS)
- Equipment inspected to evaluate winter performance
- Emergency procedures and planning
  - Ongoing relationships with first response agencies
- Maintaining good supplier relationships
- Electronic Pressure Monitoring

### All Supported by Real-Time Coordination and Oversight





# Industry Context



# An Era of Dynamic Change

- Growth
- Sustainability
- Regulatory
- Reliability
- Affordability





Next meeting: October 22, 10am – 12pm

