Apache Generating Station
Cochise, Arizona

Coal Modernization Project Overview

Stabilize and Optimize Coal Power: Program Overview

October 6-7, 2026

Arizona G&T Cooperatives

Touchstone Energy® Cooperatives

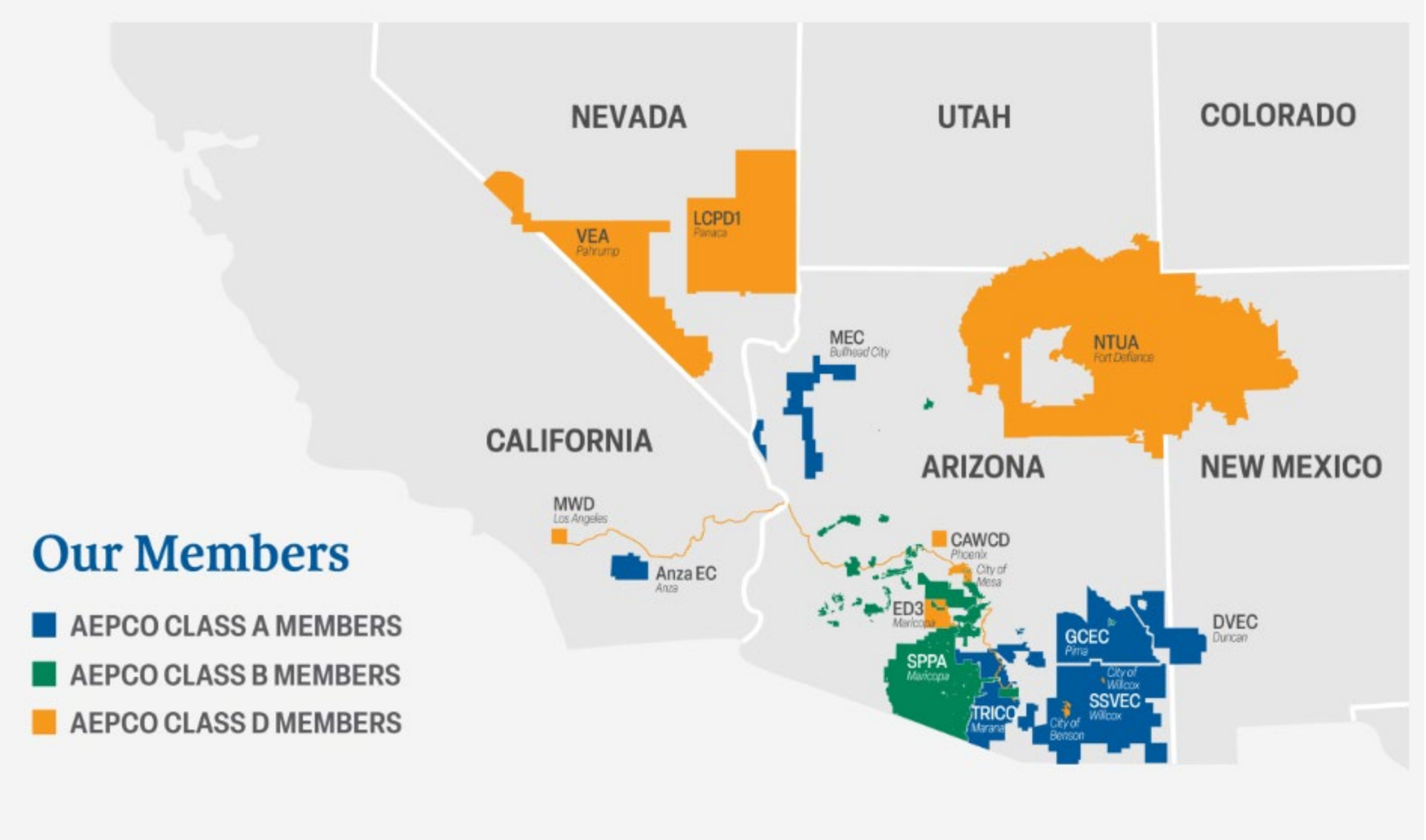
Acknowledgement & Disclaimer

- Acknowledgment: This presentation is based upon work supported by the Department of Energy under Award Number DE-FE0032771

- Disclaimer: This portion of the presentation was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof. The views and opinion of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof.

Arizona G&T Cooperatives
Touchstone Energy® Cooperatives

AEPCO Distribution System



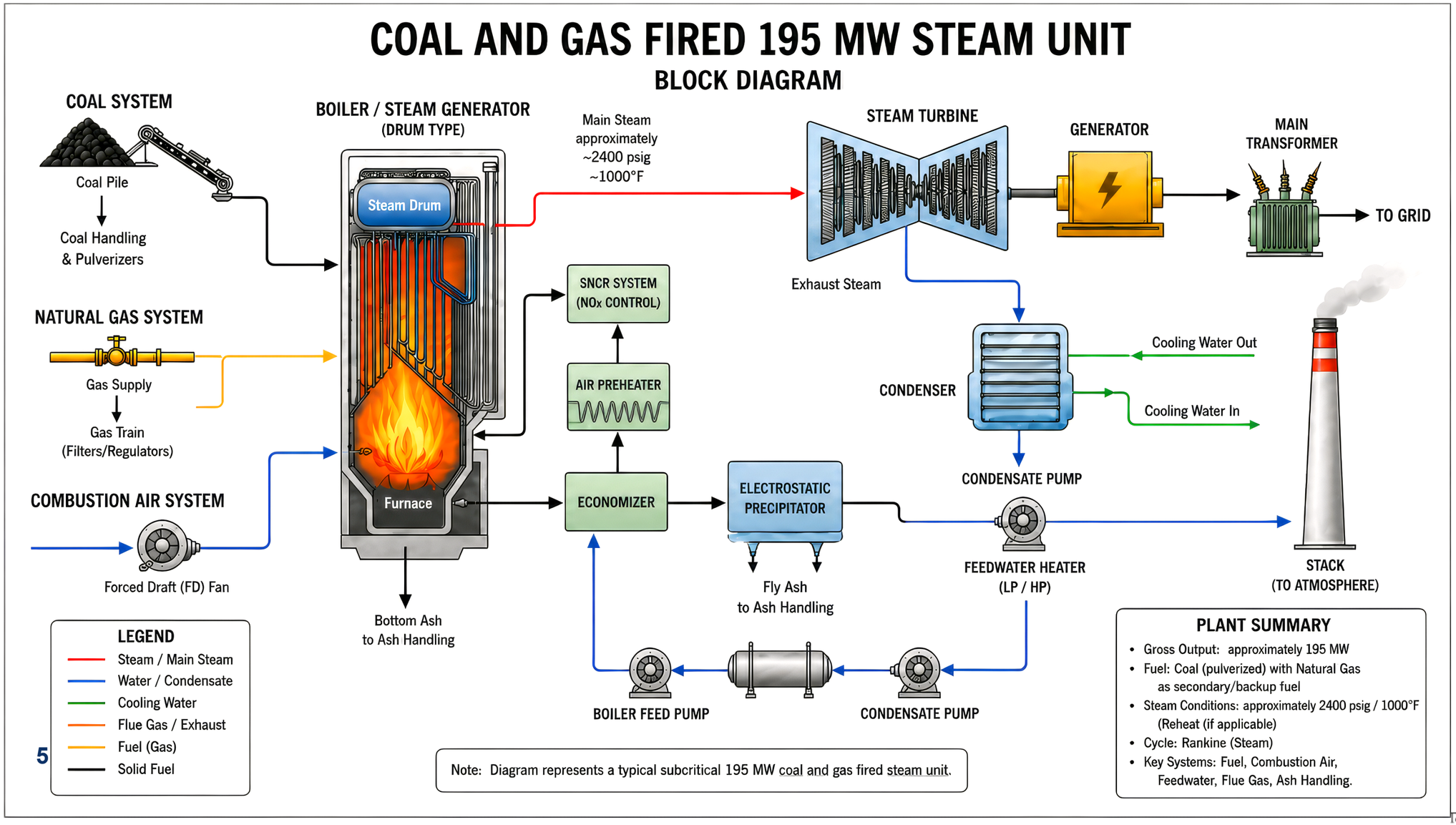
Arizona G&T Cooperatives
Touchstone Energy® Cooperatives

Apache ST3

- Commissioned in 1978 (49 years old)
- Gross capacity: 195 MW
- Subbituminous coal with a coal blending facility on-site
  - Multi-coal fuels blended for optimum combustion/economics
- Pollution Controls
  - Selective Non-Catalytic Reduction
  - Low NOx Burners
  - Scrubbers
  - Electrostatic Precipitator
  - Activated Carbon Injection

Arizona G&T Cooperatives
Touchstone Energy® Cooperatives

Apache ST3 Flow Diagram



Arizona G&T Cooperatives

Touchstone Energy® Cooperatives

Project Objectives

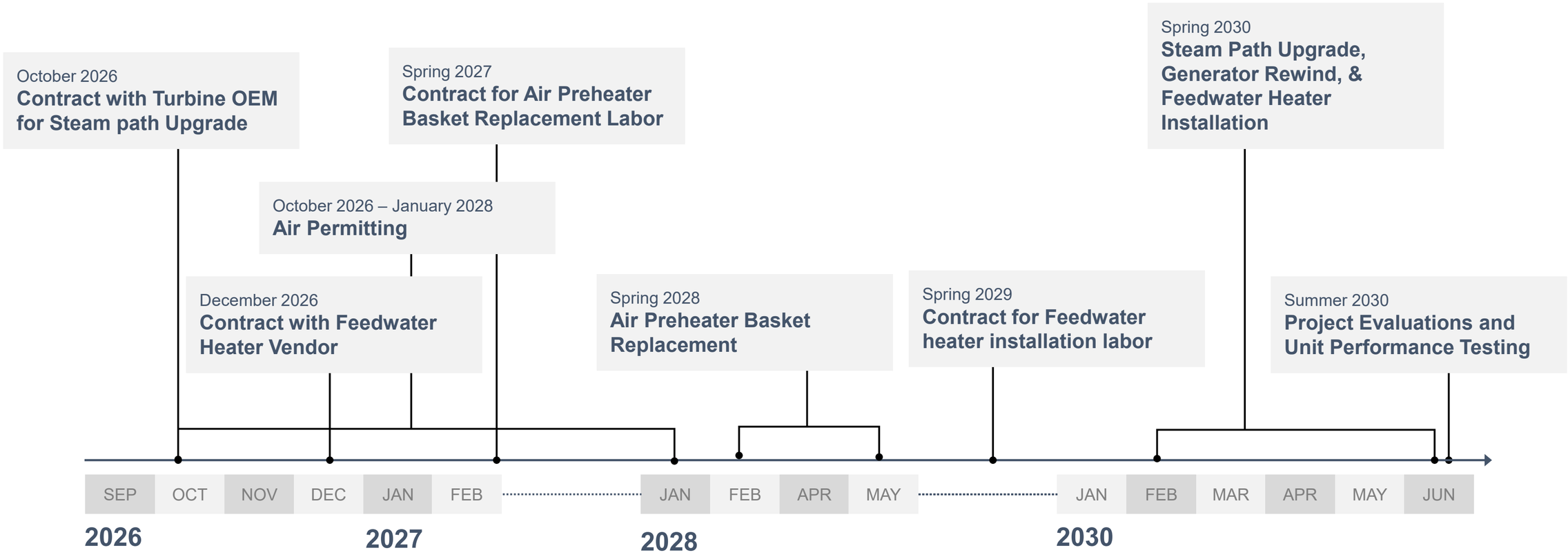
- Modernize Coal Fired Unit
- Improve unit heat rate
  - Improve cost competitiveness
  - Increase unit efficiency (>4.0%)
- Increase MW output to grid
  - Lower cost of energy to Members
  - More available power output to offset other market purchases
- Extend life of unit
  - Maintain local jobs
  - Maintain energy production – defer costs of new generation

Arizona G&T Cooperatives
Touchstone Energy® Cooperatives

Project Implementation & Outcomes

- 4 Major projects over 4 years
  - $61M total costs with $20.8M DOE cost share
- 2 Overhauls required:
  - Minor in Spring 2028
  - Major in Spring 2030
- Gross capacity increased
- Extension of major maintenance intervals
- Unit end-of-life equipment replaced
- Degraded heat rate impacting equipment replaced
- Key Participants: GE Vernova, Howden, AGT Services, Babcock/TEI
- AEPCO will seek permits for all modifications

TIMELINE


October 2026
Contract with Turbine OEM for Steam path Upgrade
Spring 2027
Contract for Air Preheater Basket Replacement Labor
Spring 2030
Steam Path Upgrade, Generator Rewind, & Feedwater Heater Installation
October 2026 – January 2028
Air Permitting
December 2026
Contract with Feedwater Heater Vendor
Spring 2028
Air Preheater Basket Replacement
Spring 2029
Contract for Feedwater heater installation labor
Summer 2030
Project Evaluations and Unit Performance Testing
SEP
OCT
NOV
DEC
JAN
FEB
JAN
FEB
APR
MAY
JAN
FEB
MAR
APR
MAY
JUN
2026
2027
2028
2030