



U.S. DEPARTMENT  
of **ENERGY**

Hydrocarbons and  
Geothermal Energy Office

# Stabilize and Optimize Coal Industry: Program Portfolio Kick-off

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Office of Coal**

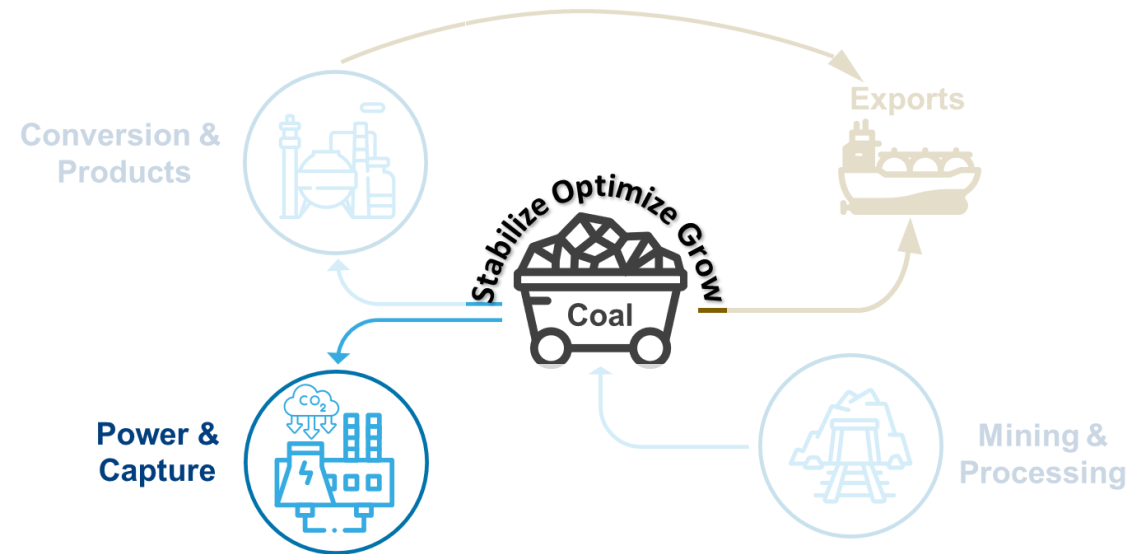
October 6, 2026



# Power & Capture: Mission

**Mission:** Develop technologies that stabilize, optimize, and grow the American coal electric generation industry, restoring it as a cornerstone of the U.S. energy mix.

- **Stabilize:** Modernize existing coal power assets, along with the deregulation efforts by the U.S. Environmental Protection Agency.
- **Optimize:** Capture/convert plant waste streams (SO<sub>2</sub>, wastewater, coal combustion residuals) to co-products to diversify revenue stream
- **Grow:** High efficiency, modular designs, advanced combustion, and flexible operation



# Power & Capture: Portfolio



**STABILIZE:** EXISTING COAL PLANTS &  
MINES LONGEVITY EXTENSION

**NOFO 3605 / TA 2**

\$0.6B (Federal) / 1.73B (Total)  
18 Projects



**OPTIMIZE:** ENHANCING  
OPERATIONAL AND ECONOMIC  
OPPORTUNITIES FOR COAL

**NOFO 3606**

Up to \$100M (Federal)  
9 Projects



**GROW:** NEW COAL TECHNOLOGIES



Funding Notice DE-FOA-0003605

# Restoring Reliability: Coal Recommissioning and Modernization

Topic Areas

1. Coal Commissioning, Recommissioning, Retrofitting, and Modernization Projects

➡ 2. Rural Capacity and Energy Affordability Coal Projects

*Projects will demonstrate the potential to stabilize rates, and ensure long-term availability of reliable, affordable, and secure generation resources in underserved or constrained regions.*

[Funding Notice: Restoring Reliability: Coal Recommissioning and Modernization | Department of Energy](#)

|                                |                                                              |
|--------------------------------|--------------------------------------------------------------|
| Funding Opportunity Issue Date | 09/29/2025                                                   |
| Closing Date for TA 2          | 12/08/2025                                                   |
| Closing Date for TA 1          | 02/11/2026                                                   |
| Awards date for TA 2           | 09/30/2026                                                   |
| Estimated Federal Funding      | TA 1: up to \$350M<br>TA 2: \$175M (IIJA*)<br>\$425M (DPA**) |
| Number of Projects Selected    | TA 1: 4 Selections<br>TA 2: 6 (IIJA) + 12 (DPA)              |

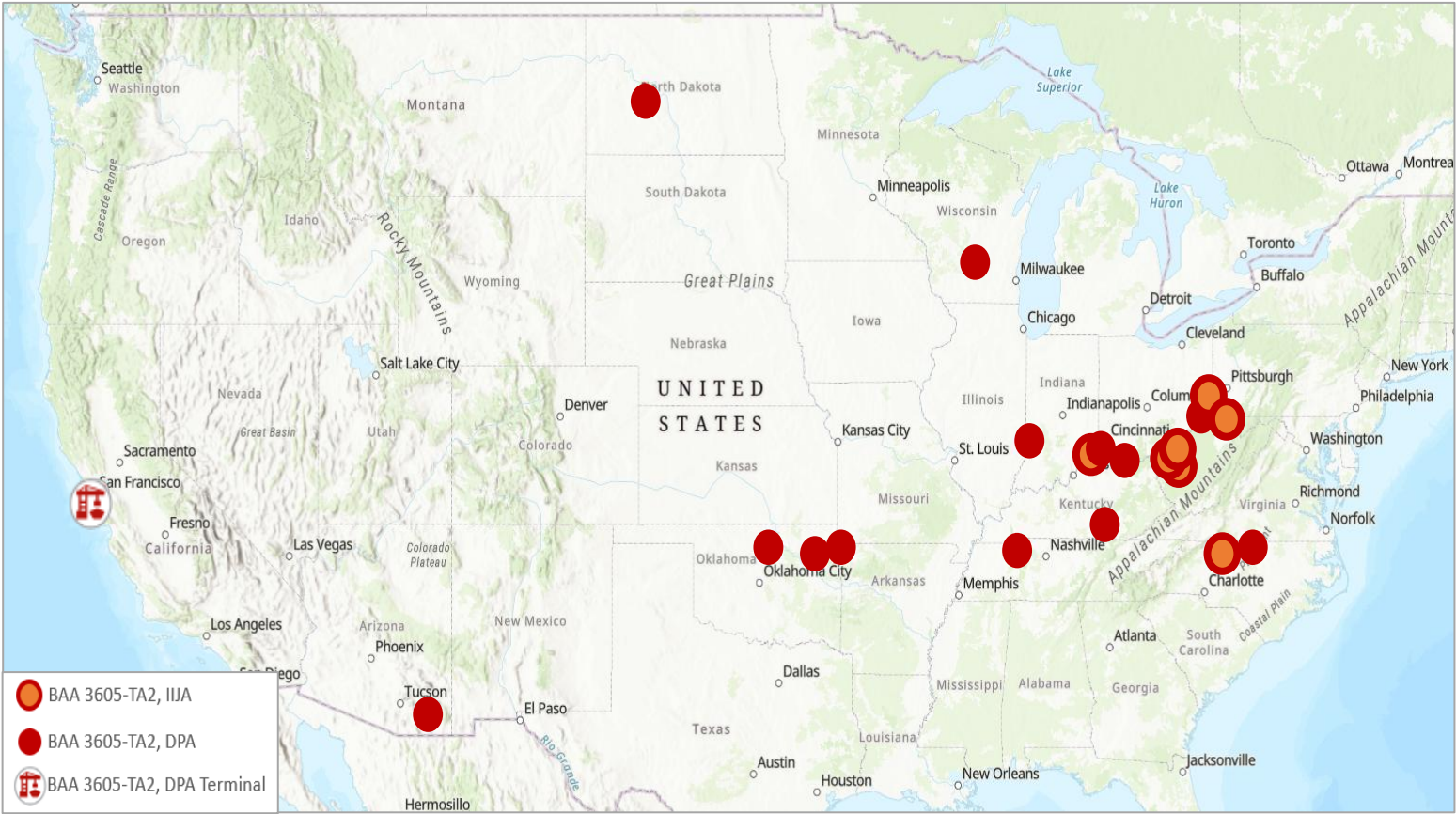
\* IIJA - Infrastructure Investment and Jobs Act  
\*\*DPA – Defense Production Act



# Funding Notice DE-FOA-0003605, TA 2

## Coal Modernization and Infrastructure Projects

**PORTFOLIO FOOTPRINT**  
24 GW gross capacity  
20 plant sites | 39 generating units



**APPALACHIAN POWER**  
An AEP Company  
Mountaineer, Amos Mitchell, WV

**Alliant Energy**  
Columbia, WI

**Arizona G & T Cooperatives**  
Touchstone Energy® Cooperatives  
Apache, AZ

**BASIN ELECTRIC POWER COOPERATIVE**  
A Touchstone Energy® Cooperative  
Antelope Valley, ND

**OHIO'S ELECTRIC COOPERATIVES**  
The Touchstone Energy® Companies  
Cardinal, OH

**DUKE ENERGY**  
Belews Creek, Roxboro, NC  
East Bend, KY

**EAST KENTUCKY POWER COOPERATIVE**  
A Touchstone Energy® Cooperative  
Spurlock, Cooper, KY

**GRDA**  
Grand River Dam Authority  
Grand River, OK

**Hallador Power**  
Merom, IN

**KU**  
Kentucky Utilities Company  
Ghent, KY

**Mon Power**  
A FirstEnergy Company  
Fort Martin, WV

**OVEC-IKEC**  
Ohio Valley Electric Corp. • Indiana Kentucky Electric Corp.  
Kyger Creek, OH

**OG&E**  
Sooner, OK

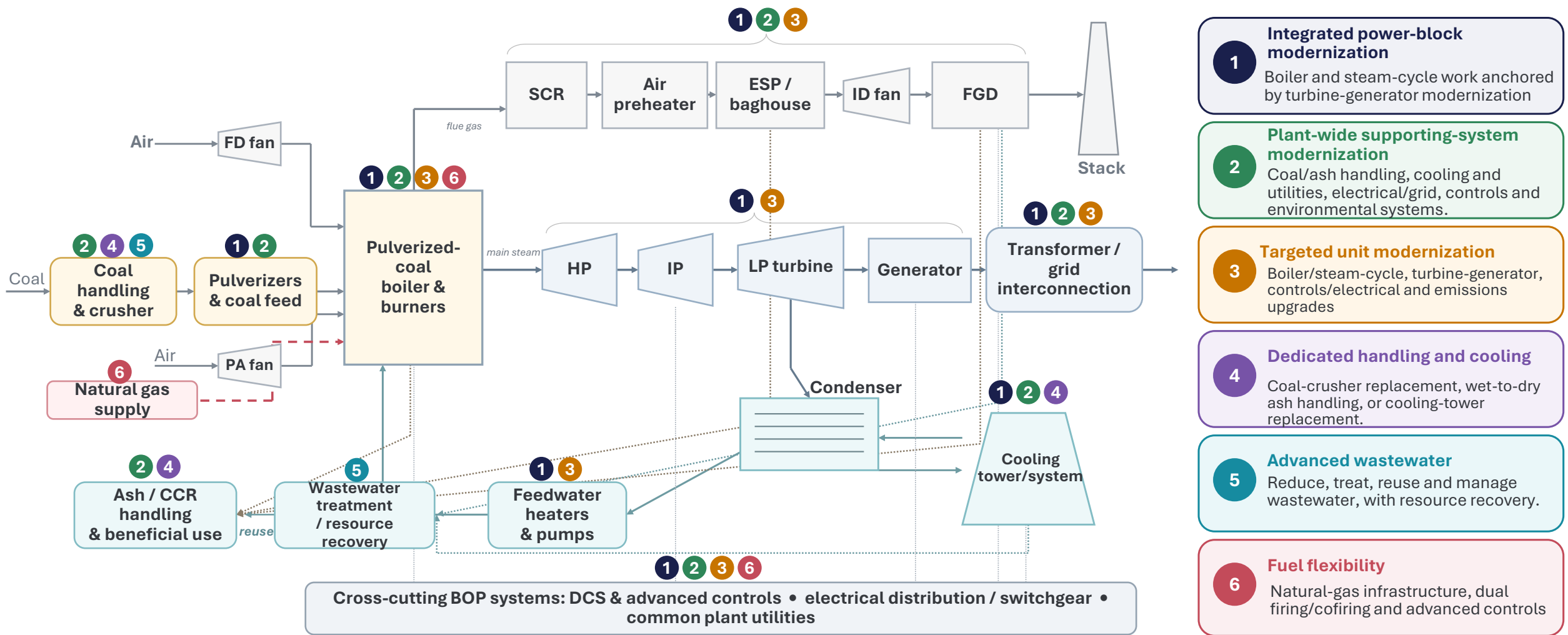
**SOUTHWESTERN ELECTRIC POWER COMPANY**  
An AEP Company  
Flint Creek, AR

**TVA**  
TENNESSEE VALLEY AUTHORITY  
Cumberland, TN



Funding Notice DE-FOA-0003605, TA 2

# Six Project Groups\* Organized by Primary Technical Emphasis



Notes: \* Grouping reflects primary technical emphasis and overall project architecture, not mutually exclusive technical categories. Individual project scopes vary. Exact Balance of plant (BOP) scope varies by project.

Funding Notice DE-FOA-0003606

# Improving Efficiency, Reliability, and Flexibility of Coal-Based Power Plants

**Topic Areas**

- 1. Development and Implementation of Advanced Wastewater Systems
- 2. Engineering and Implementation of Dual Firing Retrofits
- 3. Development and Testing of Natural Gas Cofiring Systems

*Development (Phase 1), engineering (Phase 2), and implementation (Phase 3) of transformational technologies & CCUS retrofit evaluation*

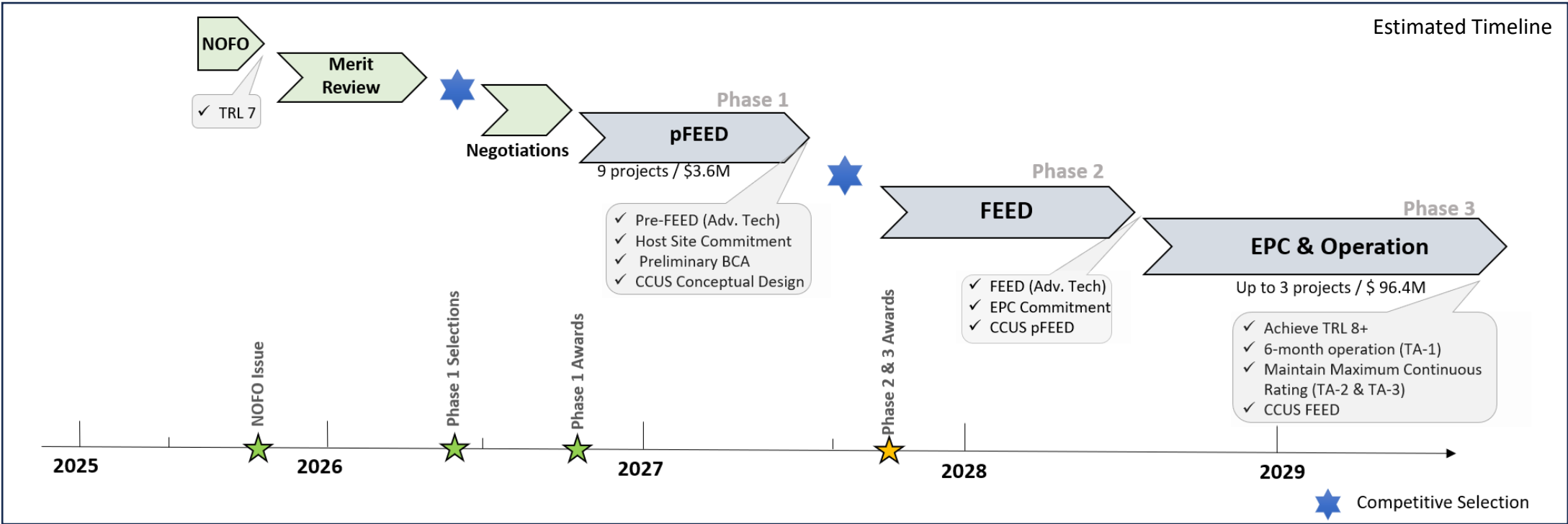
[Funding Notice: Improving Efficiency, Reliability, and Flexibility of Coal-Based Power Plants | Department of Energy](#)

|                                |              |
|--------------------------------|--------------|
| NOI Issue Date                 | 10/06/2025   |
| Funding Opportunity Issue Date | 10/31/2025   |
| Closing Date                   | 01/23/2026   |
| Selections Notifications       | June 2026    |
| Awards date                    | 09/30/2026   |
| Estimated Federal Funding      | up to \$100M |



# Funding Notice DE-FOA-0003606

## Timeline & Specifications



|                            | TA 1 — Advanced Wastewater Management Systems                                                                                                                                                                 | TA 2 — Dual Firing Retrofits                                                                                                                                                                          | TA 3 — NG Cofiring                                                                                                                                                |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Core technology (Examples) | <ul style="list-style-type: none"><li>• Chemical precipitation,</li><li>• Membrane filtration,</li><li>• Biological treatment,</li><li>• Spray drying,</li><li>• Thermal evaporation, encapsulation</li></ul> | <ul style="list-style-type: none"><li>• Dual-fuel burner/OFA systems,</li><li>• Heat-transfer-surface &amp; emissions-control modifications,</li><li>• Automated burner-management controls</li></ul> | <ul style="list-style-type: none"><li>• Burner modifications,</li><li>• Adv. fuel-balance/sequencing controls</li><li>• Auxiliary-equipment integration</li></ul> |



Funding Notice DE-FOA-0003606

# Phase I Projects

KNOWN HOST-SITE FOOTPRINT  
4 GW gross capacity | 4 identified plant sites  
14 generating units | additional capacity/sites TBD



Note: For projects with host sites yet to be identified ("site TBD"), the map shows the prime performer's headquarters.



Funding Notice DE-FOA-0003606

## TA 1 Awards

### Topic Area 1: Development and Implementation of Advanced Wastewater Systems

Development, engineering, and implementation of transformational wastewater management systems capable of cost-effective recovery of water and other value-added byproducts from wastewater streams.



1. Advanced Acoustic-Crystallization Technology for High-Purity Magnesium Hydroxide Production and Mercury Stabilization
2. Waste-Heat-Powered Thermal Evaporation for Zero Liquid Discharge (ZLD) of FGD Wastewater
3. Innovative Wastewater Treatment Solutions
4. Thermal Bottom Ash Drying to Reduce Water Burdens and Facilitate Critical Mineral Recovery

Phase II + Phase III: up to \$48M Federal share



## TA 2 & TA 3 Awards

**Topic Area 2:** Engineering, design, and implementation of retrofit systems for existing coal plants that enable automatic switching between coal and natural gas without compromising critical operational parameters

**Topic Area 3:** Development, engineering, and implementation of transformational coal-natural gas co-firing systems and system components (including highly fuel flexible burner designs coupled with advanced control systems)



Merom Generating Station  
Dual-firing, Co-firing



Spurlock, Maysville, KY  
Co-firing



Co-firing, Multi-zone  
In-furnace Monitoring



City Water, Light and Power, IL  
Co-firing

1. Dual-firing retrofit upgrades
2. Coal and Natural gas co-firing retrofit and upgrades
3. Valuation and Mitigation of Natural Gas Co-firing Impacts on Flue Gas Desulfurization and Zero Liquid Discharge
4. Co-Fired Burner Retrofits with Multi-Zone In-Furnace Monitoring and Supervisory Combustion Control

Phase II + Phase III: up to \$48M Federal share (TA-2 + TA-3)



# Agenda Highlights

## WHY WE ARE HERE

01

### Mark the launch

Introduce the 28-project portfolio and establish the investment context.

02

### Set expectations

Clarify leadership expectations for successful project execution.

03

### Highlight impact

Show the intended technical and programmatic impacts across the 28 projects.

04

### Leverage experience

Use past experience and external perspectives to anticipate common challenges.

05

### Connect resources

Link project teams to DOE, NETL, and Coal Center of Excellence expertise and resources.

## AGENDA Items

### DAY 1 • OCTOBER 6

- Leadership welcome, portfolio framing, and National Coal Council Perspective
- NOFO 3605: Project Sessions 1–3
- Project management, business-case guidance, and Coal CoE resource matching

### DAY 2 • OCTOBER 7

- DOE office hours and an operator/EPC perspective
- NOFO 3605 / 3606: Project Sessions 4–6
- Networking, closing synthesis, and the Coal CoE laboratory tour

 Across both days: grouped project presentations followed by moderated Q&A; posters and technical experts are available during breaks and meals.



# Stay Engaged with Us

Explore the Power & Capture program and related DOE resources

NATIONAL ENERGY TECHNOLOGY LABORATORY

## Power & Capture

Strengthening energy competitiveness



### PROGRAM FOCUS

Modernize today's coal fleet, create value from plant waste streams, and advance flexible, high-efficiency coal power technologies.

[OPEN PROGRAM PAGE →](#)



SCAN OR CLICK



### STABILIZE

Modernize and extend the operating life of existing coal power assets.



### OPTIMIZE

Capture and convert plant waste streams into useful products and new value.



### GROW

Advance high-efficiency, modular, flexible coal-based generation technologies.

[HGEO FUNDING OPPORTUNITIES →](#)

[CONTACT NETL →](#)

