FLINT CREEK POWER PLANT
Gentry, Arkansas

Coal Plant Modernization and Resiliency Program

Five coordinated upgrades to improve reliability, efficiency, safety, and long-term performance

Program Portfolio Kick-off Meeting

Award Number: DE-FE0032770

AMERICAN ELECTRIC POWER

SOUTHWESTERN ELECTRIC POWER COMPANY
An AEP Company

Project Location and Background

FLINT CREEK
Northwest Arkansas

1978 Commercial Operation Date
559 MW Summer Gross Output
518 MW Summer Net Output
Coal Primary Fuel: Subbituminous Coal

Air Quality Controls

- Low-NOx Burners
- Precipitator
- NID
- Activated Carbon

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Program Goal

Modernize critical assets: HP/IP Steam Turbine, fuel delivery system, boiler, and low-voltage electrical systems.

Technical Scope

1. **Steam Turbine HP/IP Retrofit - GE Vernova**
   Recover efficiency losses and increase generating capability

2. **Pulverizer Roll Wheels - B&W**
   Improve fuel delivery capacity, reduce pulverizer reliance, and provide installed spare capability

3. **Economizer + Inlet Header - B&W**
   Replace deteriorated pressure-part components

4. **480V MCC Modernization - Eaton**
   Replace original low-voltage motor control equipment

5. **480V Switchgear Modernization - Eaton**
   Replace obsolete low-voltage distribution equipment

Intended Program Impact

16–19 MW potential total output increase
2.5% efficiency increase

Up to 20% more fuel delivery per unit

Increase availability and extend asset life

Safety, reliability, and maintainability

Performance, safety, and reduced failure risk

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FUNDING

$74.5M

TOTAL PROJECT VALUE

40% federal | $29.8M	60% recipient | $44.7M

Performance period: September 1, 2026 to December 31, 2029

1. **Steam Turbine HP/IP Retrofit - GE Vernova**
   $30,801,000 total project cost over 5 milestones beginning with procurement in Q4 2026 and ending with installation in Q4 2029
2. **Pulverizer Roll Wheels - B&W**
   $3,785,107 total project cost over 6 milestones beginning with procurement of first materials in Q4 2026 and ending with installation for final two pulverizers in Q2 2028
3. **Economizer + Inlet Header - B&W**
   $29,303,560 total project cost over 4 milestones beginning with procurement in Q4 2026 and ending with installation in Q4 2029
4. **480V MCC Modernization - Eaton**
   $6,354,401 total project cost over 8 milestones replacing 11 MCCs; beginning with procurement in Q4 2026 and ending with installation in Q4 2029
5. **480V Switchgear Modernization - Eaton**
   $4,276,873 total project cost over 4 milestones replacing 2 complete switchgear and 2 original transformers; beginning with procurement in Q4 2026 and ending with installation in Q4 2029

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IMPLEMENTATION APPROACH

A phased schedule aligns long-lead procurement with outage execution

Performance period: September 1, 2026 to December 31, 2029
10 Quarterly Milestones Composed of 31 Sub-Milestones

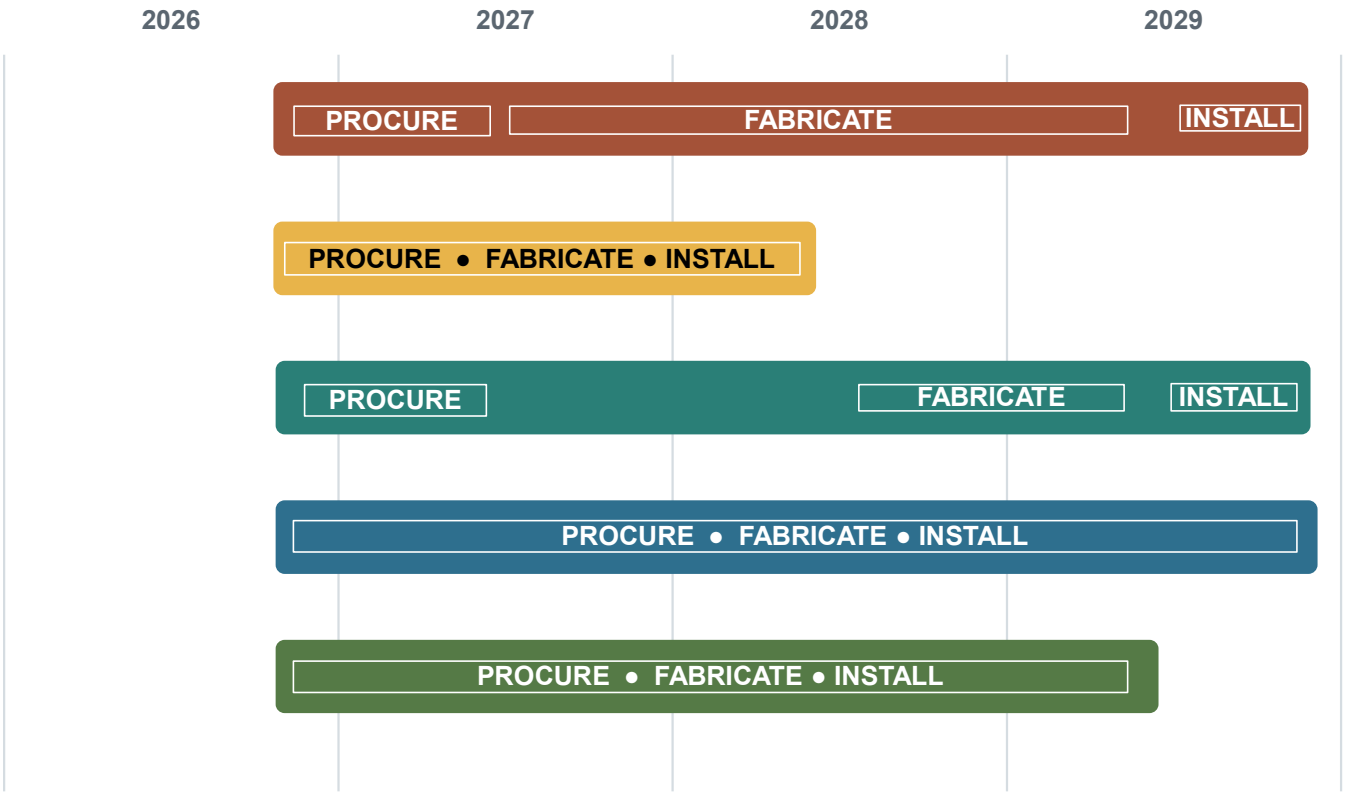
Turbine Dense Pack
10-week major outage in 2029

Pulverizer Roll Wheels
Two staged outage installations

Economizer + Inlet Header
8-week install / commissioning

480V MCC Modernization
Four phased installations for 11 total MCCs

480V Switchgear Modernization
Two phased installations



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CONTROLS AND CLOSEOUT

Execute as one portfolio, measure outcomes, manage the highest risks

SUCCESS METRICS

- On-time milestone delivery
- Budget adherence and forecast accuracy
- Quality acceptance and commissioning
- Output, efficiency, and reliability results

PRIORITY RISKS

- Outage-window and contractor coordination
- Cost escalation and estimate maturity
- HP/IP retrofit material delivery

MITIGATION

- Integrated master schedule and change control
- Early procurement and supplier verification
- Evaluate multiple vendors and procurement strategies

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