

# TEAM CUMBERLAND

April 29, 2025

*Virtual Meeting will begin at 8:30AM CT/9:30AM ET*

*Virtual Link: [Join the meeting now](#)*

*Audio Only: +1 945-468-5504 Conference ID: 261 132 037 144*

1. Welcome & Announcements ..... Leon Jourolmon
2. Opening Remarks..... LTC Green, Virgil Hobbs
3. Washington Update & Federal Hydropower Council..... Barbara Smith/Scott Romero
4. Cumberland System Rates .....Carter Edge
5. Nashville District Water Supply Update.....David Bogema
6. Water Management Update .....David Bogema
7. O&M Maintenance Update..... David Mistakovich
8. Customer Funding Progress Update.....Chris Stoltz
9. Other Discussion Items .....All
10. Summation and Close .....All









# SOUTHEASTERN POWER ADMINISTRATION



## Cumberland System Rates

Team Cumberland

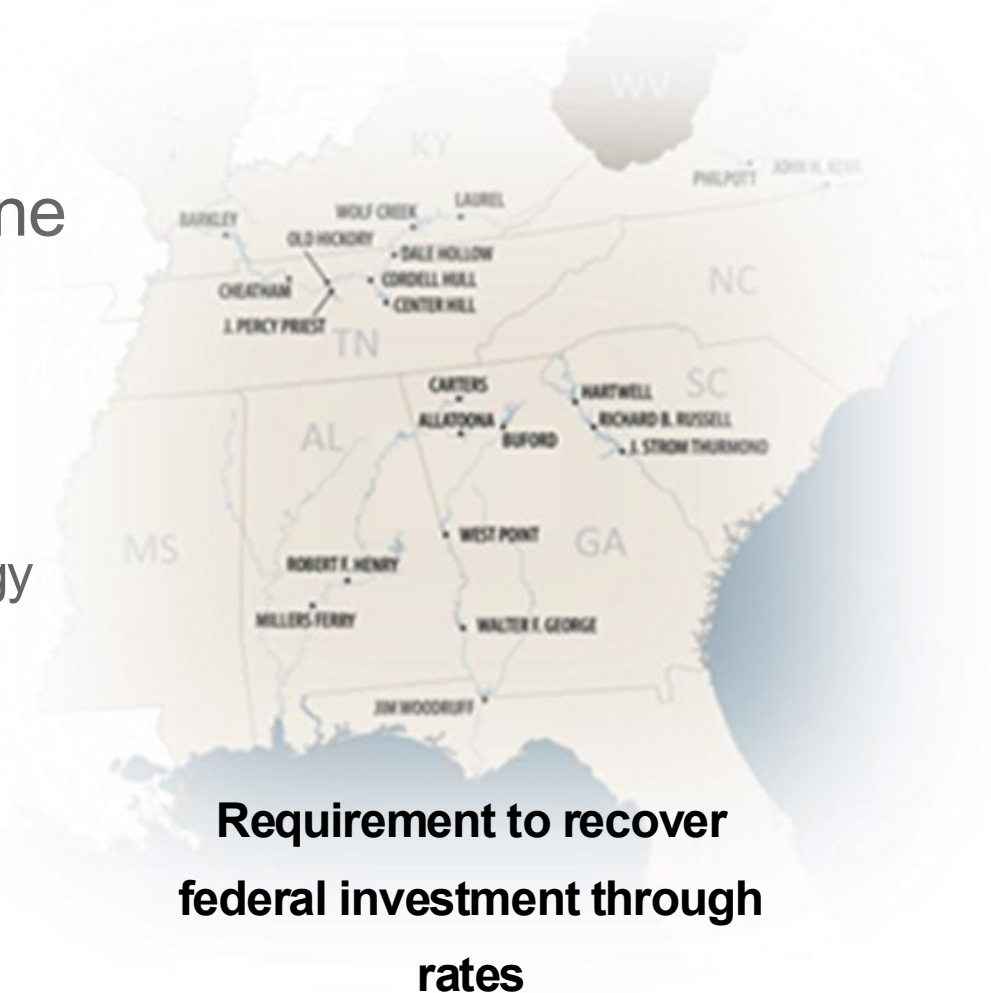
April 29, 2025



# Establish Rates

## Repayment of Federal Investment

- Establishing rates for the power systems is one of the statutory functions Southeastern performs.
- Formulate and establish four regional electric system power rates for five-year terms, which the Federal Energy Regulatory Commission approves on a final basis.
- Conduct annual repayment studies to determine if cost-based power rates will produce sufficient revenue to reimburse all generation, transmission, and marketing expenses.





# Repayment Studies

- The current repayment study for the Cumberland System shows revenues generated by the rates are inadequate to meet the cost recovery criteria specified in DOE Order RA 6120.2 and the rate schedules expire September 30, 2025.
- The increase in the annual Cumberland System revenue requirement is \$15,600,000 per year, or 23.58%

Yearly Percentage Increase Calculator			
Initial Revenue Requirement		66,150,000	
Final Revenue Requirement		81,750,000	
Number of Projected Years		5	
Total Increase		Annual Growth Rate	
23.58%		4.33%	
Total change over 5 years		Average Annual Rate	
Absolute Change per Year		Average Change per Year	
\$15,600,000		\$3,120,000	





# Cumberland Rate Design

**The annual revenue requirement of \$81.75M per year is recovered from capacity, energy, and additional energy charges**

- A contract year is defined as from July 1 to June 30 each year.
- Customer groups outside the TVA Area get an annual allotment of energy to schedule
  - Most have 1,500 hours use at their contract capacity; EKPC has 1,869 hours and Kentucky Groups have 1,800 hours.
- Customers inside the TVA Area receive any generation in the System above the Outside Customer schedule.
- The rate schedules include an annual adjustment for transfers to plant-in-service of specific power investment (assets).





# ***Rate Development Process***

**The Administrator must file the entire record on which the final decision establishing a rate schedule is based.**

- The Administrator must file an explanation of the rate development process. The Record of Decision must include:
  - A discussion of issues raised by customers or the public and how such issues were resolved;
  - A discussion of all statutory, regulatory, or other requirements which governed the Administrator's decision;
  - A description of any methodology used for determining revenue requirements and for developing appropriate rate structures;
  - A list identifying all documents submitted for Commission consideration.

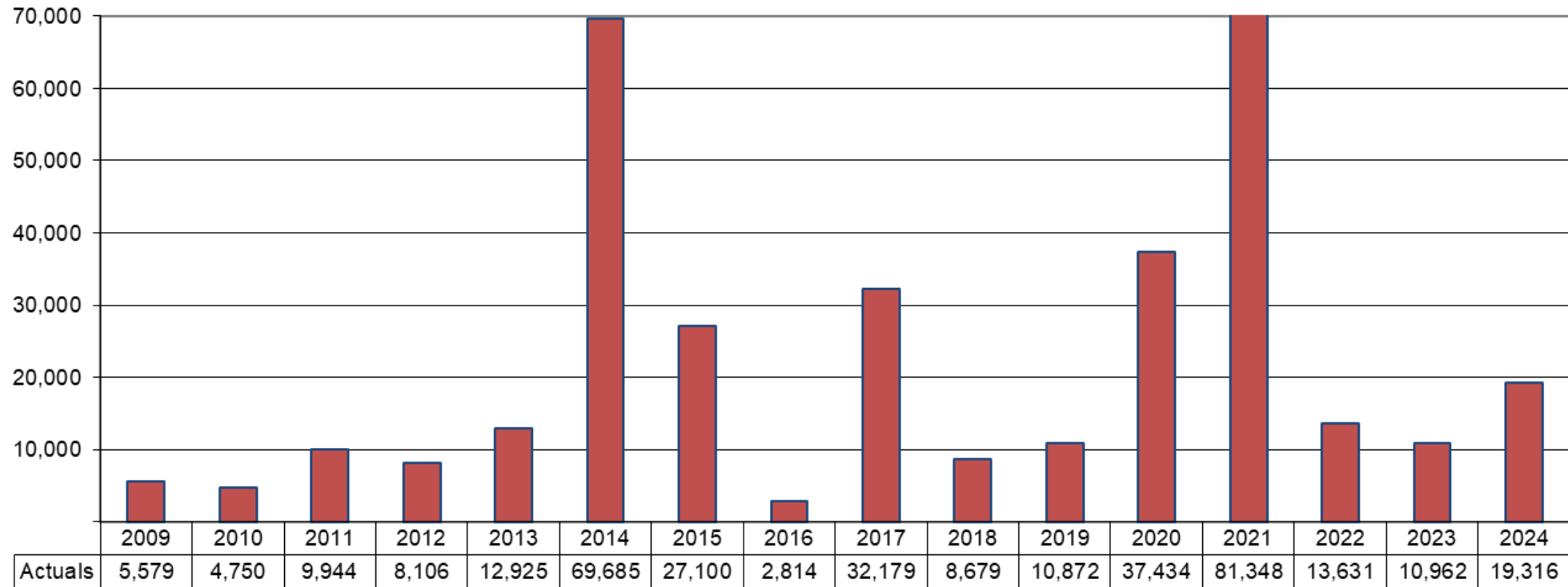
**The Administrator must file a statement certifying that the rate is consistent with applicable laws and that it is the lowest possible rate consistent with sound business principles.**





# Plant Placed in Service

## Capitalized Additions and Replacements





# Construction Work In Progress

- The Cumberland System 2024 Financial Statements show the following CWIP for Power Production (in thousands).

Barkley	26,588
Center Hill	10,864
Cheatham	1,446
Cordell Hull	2,094
Dale Hollow	2,938
J. Percy Priest	578
Laurel	1,216
Old Hickory	31,585
Wolf Creek	33,174
TOTAL CWIP	110,484



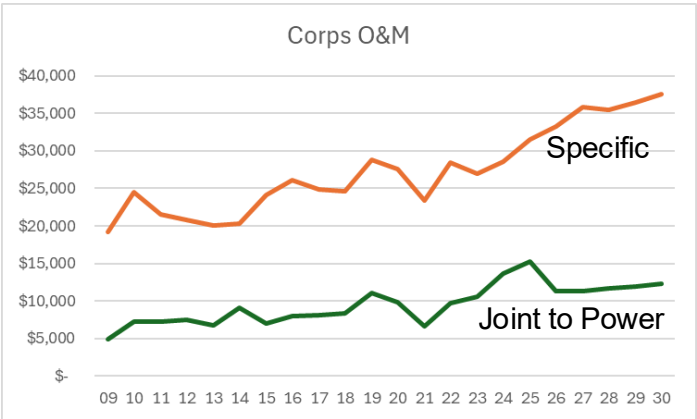
Old Hickory Main Power  
Transformers



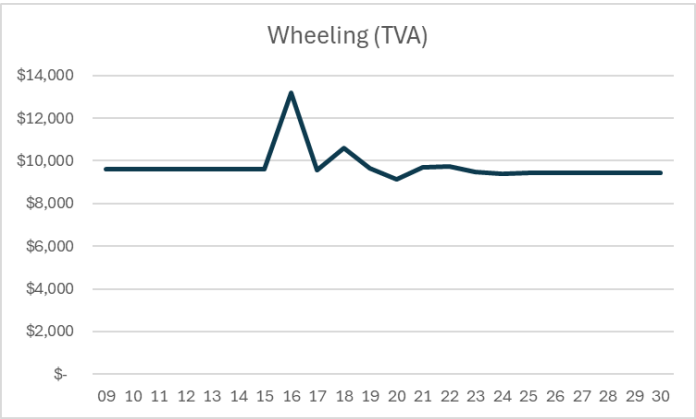


# Operations and Maintenance (\$k)

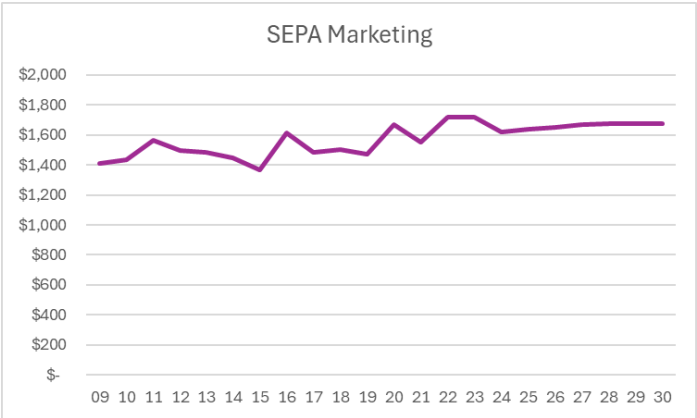
Annual Corps O&M Expenses



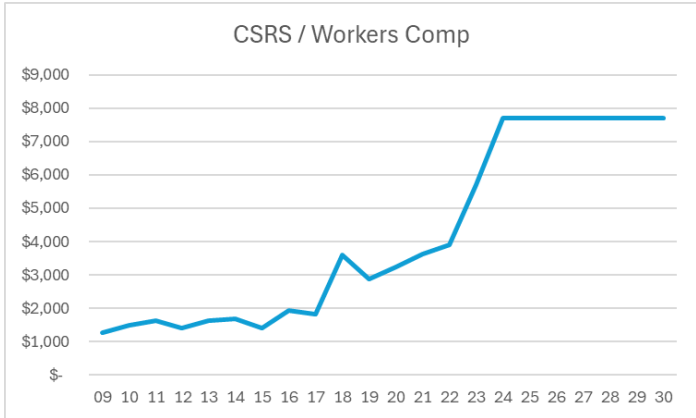
Purchase Power & Wheeling Expenses



Annual Marketing Expenses



Annual CSRS/WC Expenses





# Data Requirements

## Statement A must include:

- Sales and revenues for each rate schedule for the last five years of the historic period;
- For the rate test period, the estimated annual sales and revenues for the existing and each proposed rate schedule, including a separate aggregation of any revenues from sources not covered by the rate schedule according to general classifications of such revenues;
- Brief explanations of how sales and revenue estimates are prepared and explanations of any changes in sales or revenues during the last five years of the historic period.

## Statement A

### Sales and Revenues





# Data Requirements

## Statement B must contain:

- Sales and revenues for each rate schedule for the last five years of the historic period;
- For the rate test period, the estimated annual sales and revenues for the existing and each proposed rate schedule, including a separate aggregation of any revenues from sources not covered by the rate schedule according to general classifications of such revenues;
- Brief explanations of how sales and revenue estimates are prepared and explanations of any changes in sales or revenues during the last five years of the historic period.

## Statement B

### Power Resources





# Data Requirements

The statement shall include a listing, by year, of the following:

- All initial investments and additions to plant, including interest during construction, that produced revenue during the historic period or are expected to produce revenue during the rate test period;
- Capitalized deferred expenses; and
- Replacements made during the historic period and replacements projected to be made during the balance of the repayment period.
- **Statement C must account for all capitalized investments to be repaid from power revenues.**

## Statement C

Capitalized  
Investments or  
Costs





# Data Requirements

## For each such investment, the statement shall specify:

- Whether the investment is an initial investment, an addition, a replacement, or a capitalized deferred annual expense;
- The date the investment was made;
- The year in which repayment is due to be completed;
- For each year, the sum of unpaid individual investments or the unpaid portion of interest groups shown above must equal the unamortized investment shown in the power repayment study for that year.
- The statement must describe the methods used to forecast replacements and the price level used to estimate replacement costs.

## Statement C

### Capitalized Investments or Costs





# Data Requirements

**For each capitalized investment and cost listed in Statement C, Statement D must describe, by interest group:**

- The total unpaid balance outstanding at the end of the historic period;
  - Payments made on principal and interest during each of the last five years of the historic period; and
  - Annual payments expected to be made through the cost evaluation period.
- 
- The statement must describe how the interest expense was determined for each type of investment and include examples of such computations.

## Statement D

Interest  
Expenses;  
Repayment of  
Investments and  
Debt Capital





# Data Requirements

## Statement E must:

- List expenses for each individual source, if purchased power and other similar expenses are derived from more than one source;
  - Explain any significant deviations from trends in expenses or any extraordinary expenses; and
  - Explain the price level used for estimating expenses.
- 
- Statement E must contain, for the last five years of the historic period and for the rate test period, as appropriate, a tabulation of actual and projected operation and maintenance, administrative and general, purchased power, wheeling, and any other expenses, other than interest.

## Statement E

Operation,  
Maintenance  
and Other  
Annual  
Expenses:





# *Data Requirements*

## **Statement F must contain for each multiple-purpose reservoir project, unit, division, or system:**

- A table or other summary showing total investment costs, the total annual operation and maintenance costs, and
- The allocation of all such costs among the various authorized purposes.
- The statement must show any changes from previous allocations, and the procedure used in allocating such costs.

## Statement F

## Cost Allocations







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# WATER MANAGEMENT & WATER SUPPLY



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# WATER SUPPLY PROGRAM UPDATE

2



## On-Going Studies:

- Center Hill: PDT formed, obtaining/validating M&I user demands
- Laurel: Existing users not interested in additional storage. In discussions with Corbin to determine their need for new LAU storage due to PFAS contamination in existing municipal reservoir source.
- Cheatham (System Study): Developing Period of Record inflows and moving to work on system reservoir model. Held discussions with Mallory Valley for potential inter-basin transfer from Cheatham to Duck River users, through HVUD.

## Potential New Reallocation Studies:

- J. Percy Priest: Multiple users (La Vergne, Smyrna, CUD) have expressed interest in additional storage reallocation.





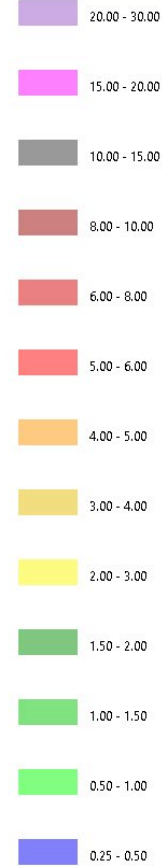
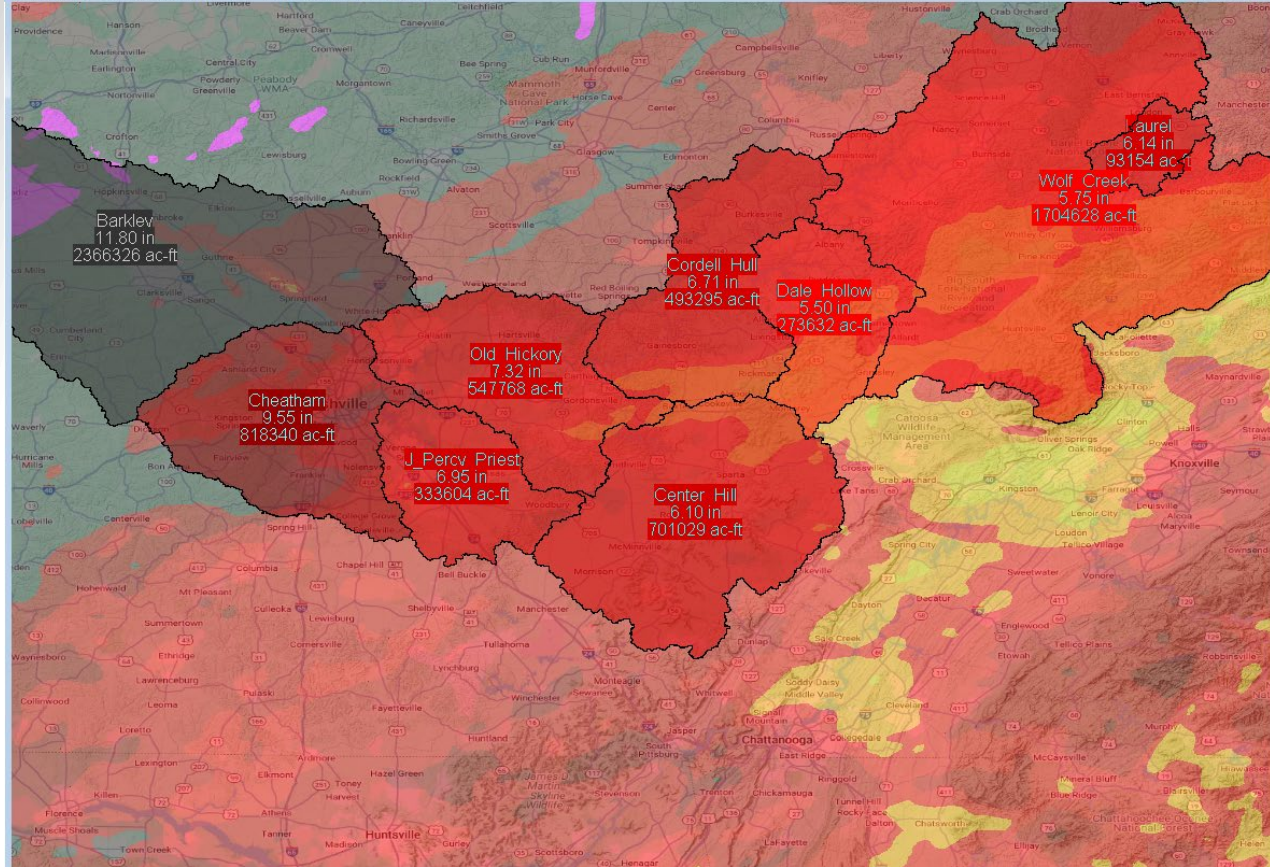
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# OBSERVED RAINFALL OVER THE LAST MONTH

3



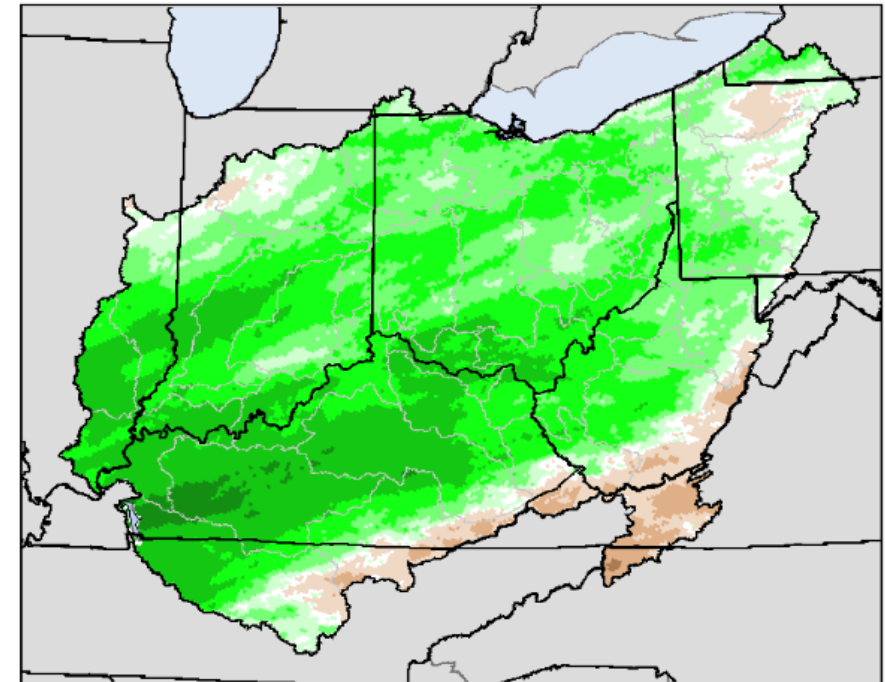
DailyTemp - Observed (26Mar2025 1100 - 25Apr2025 1100 GMT, Duration: 30 Days)



## 30 Day OHRFC Percent of Normal Precipitation

Valid 8 AM EDT, Thu, Apr 24, 2025

Generated: 10:01 AM EDT, Thu, Apr 24, 2025



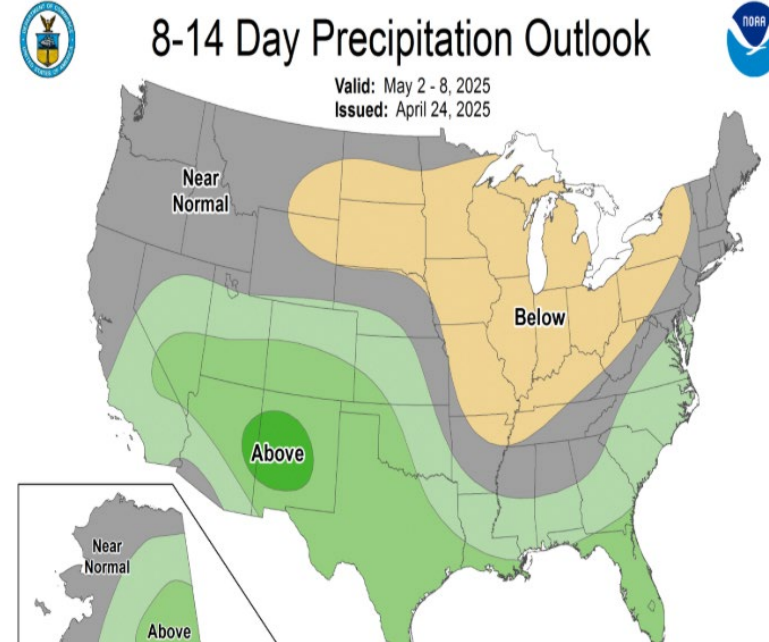
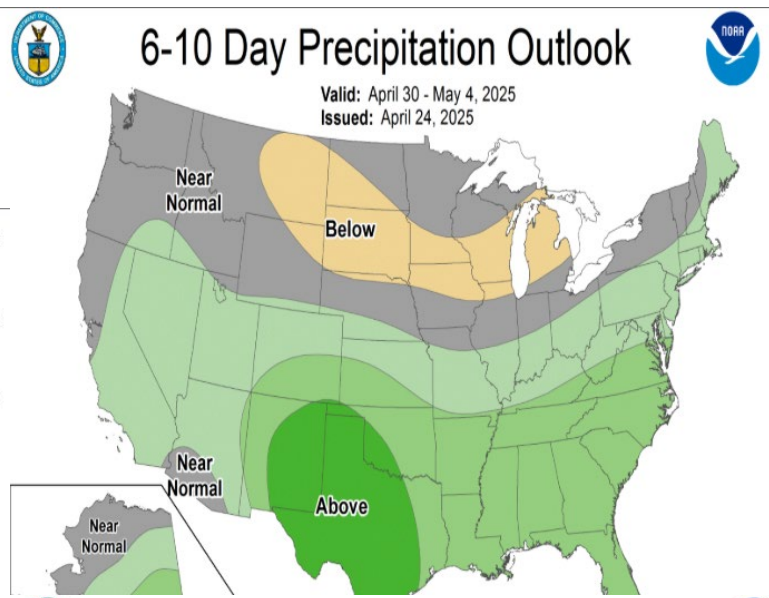
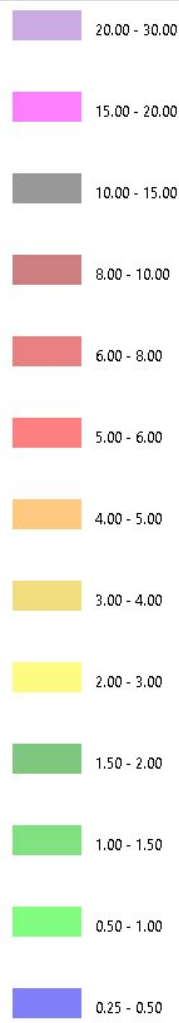
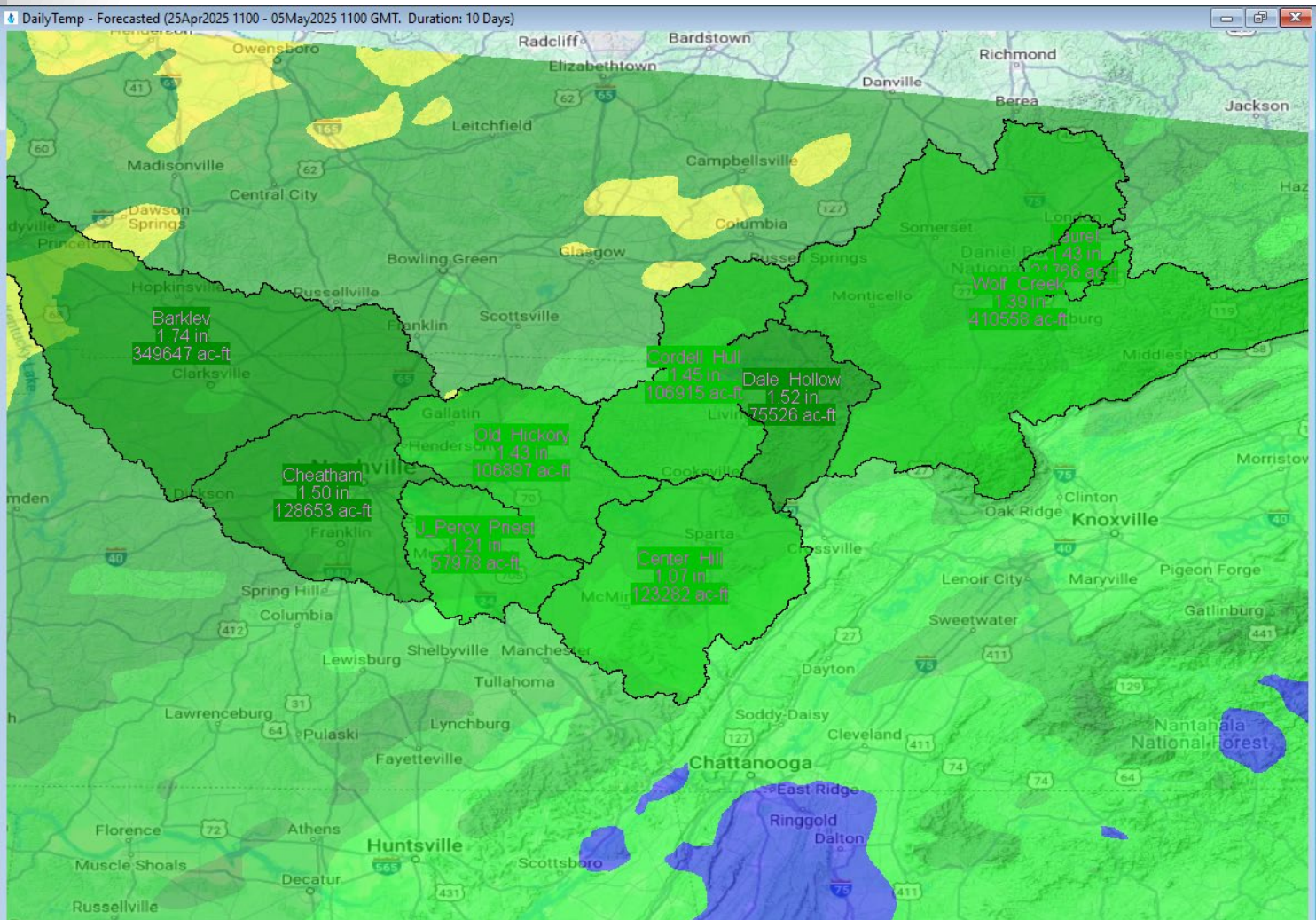




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# WEATHER SERVICE FORECASTS

## Next 7 Day Rainfall Forecast (25APR-2MAY)







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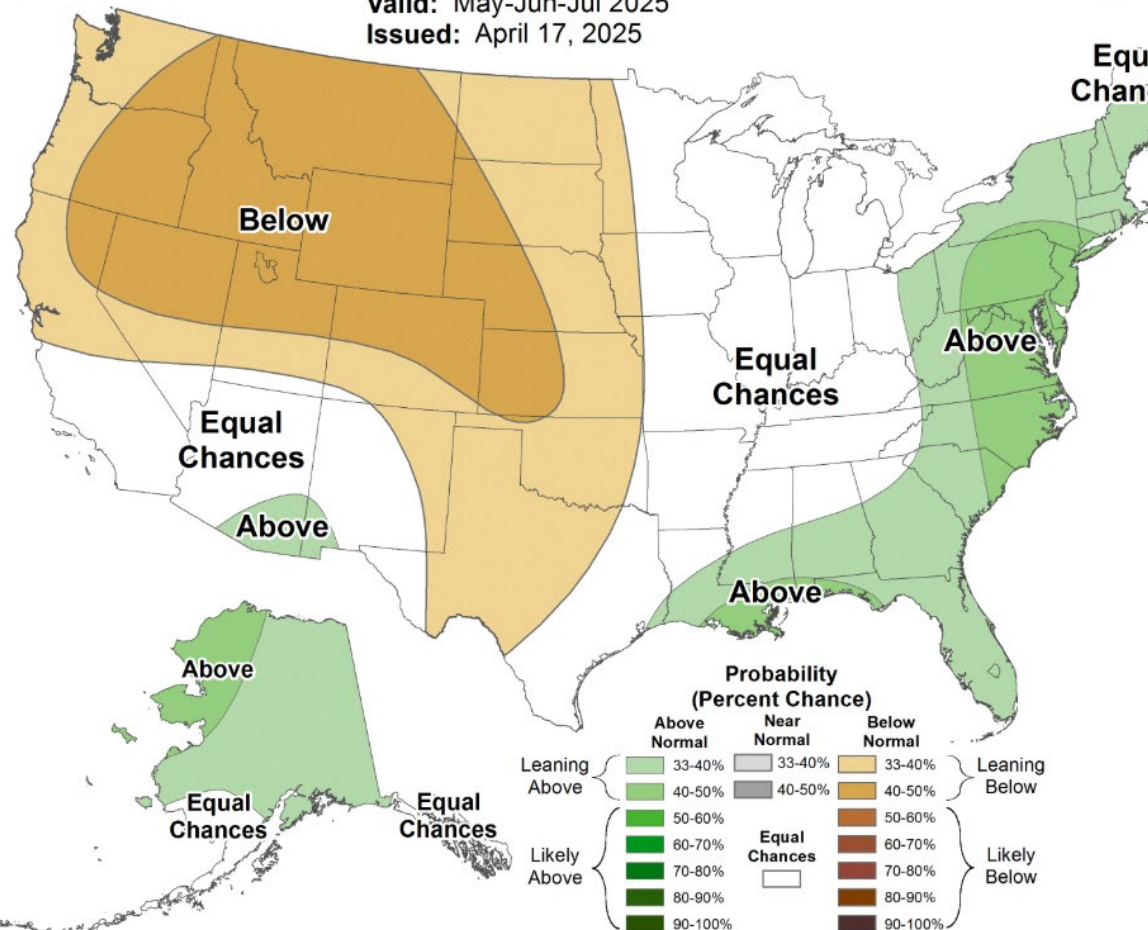
# SEASONAL OUTLOOK



## Seasonal Precipitation Outlook

Valid: May-Jun-Jul 2025

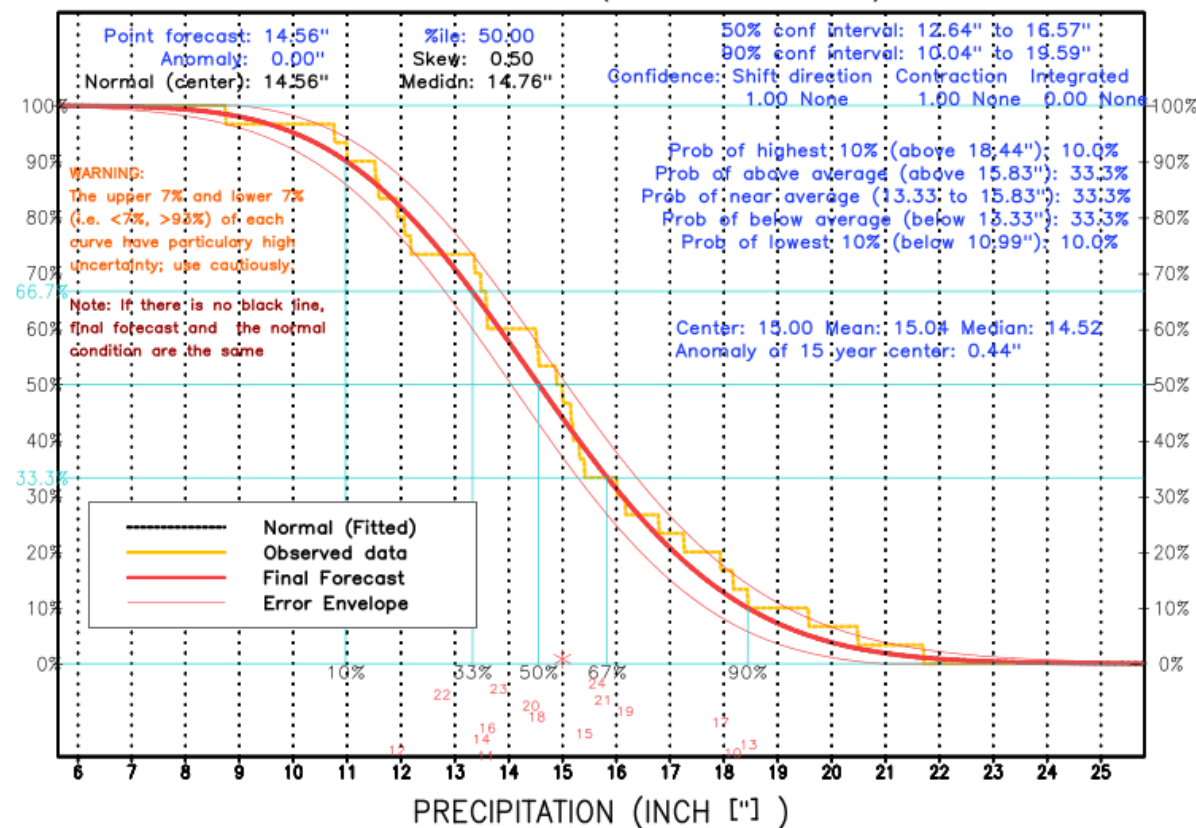
Issued: April 17, 2025



## PRECIPITATION OUTLOOK FOR MJJ 2025

0.5 MONTH LEAD OUTLOOK – MADE Apr 17 2025

Climate Division 50 (Central Tennessee)







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# LRN PROJECT STATUS – WOLF CREEK

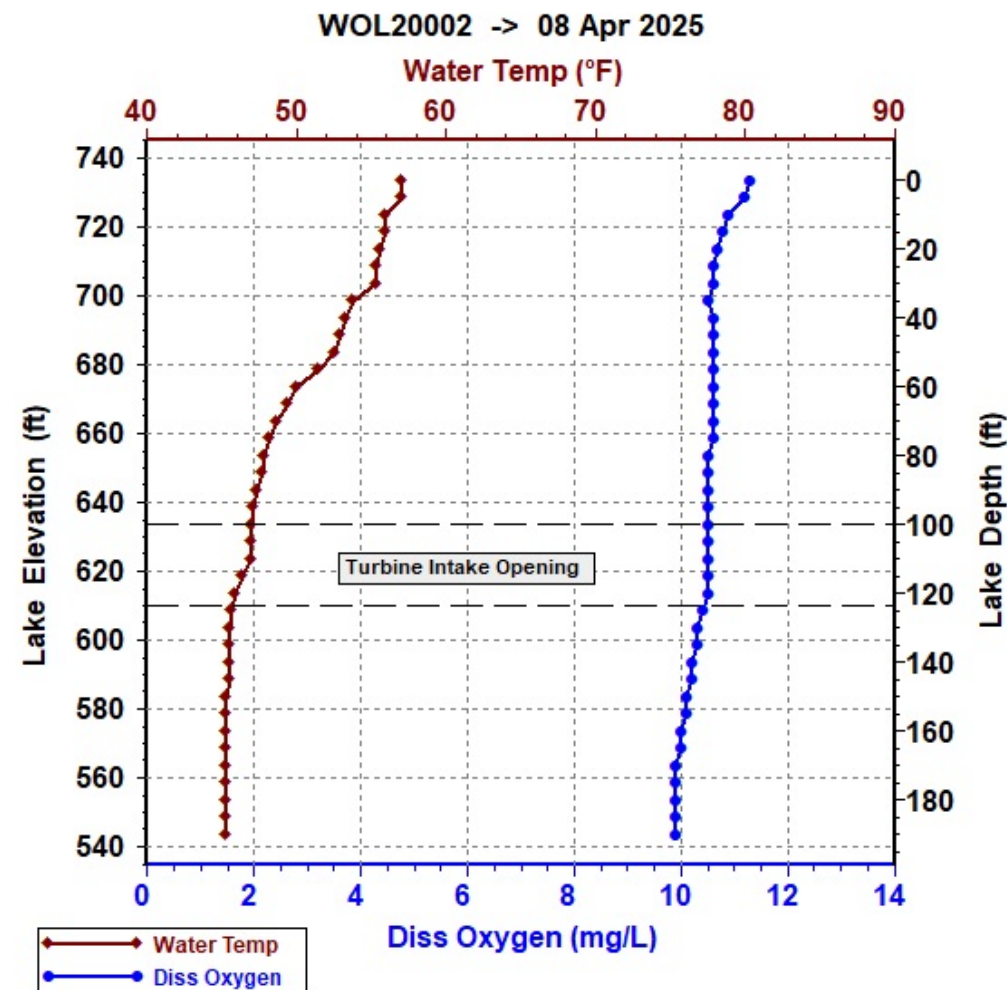
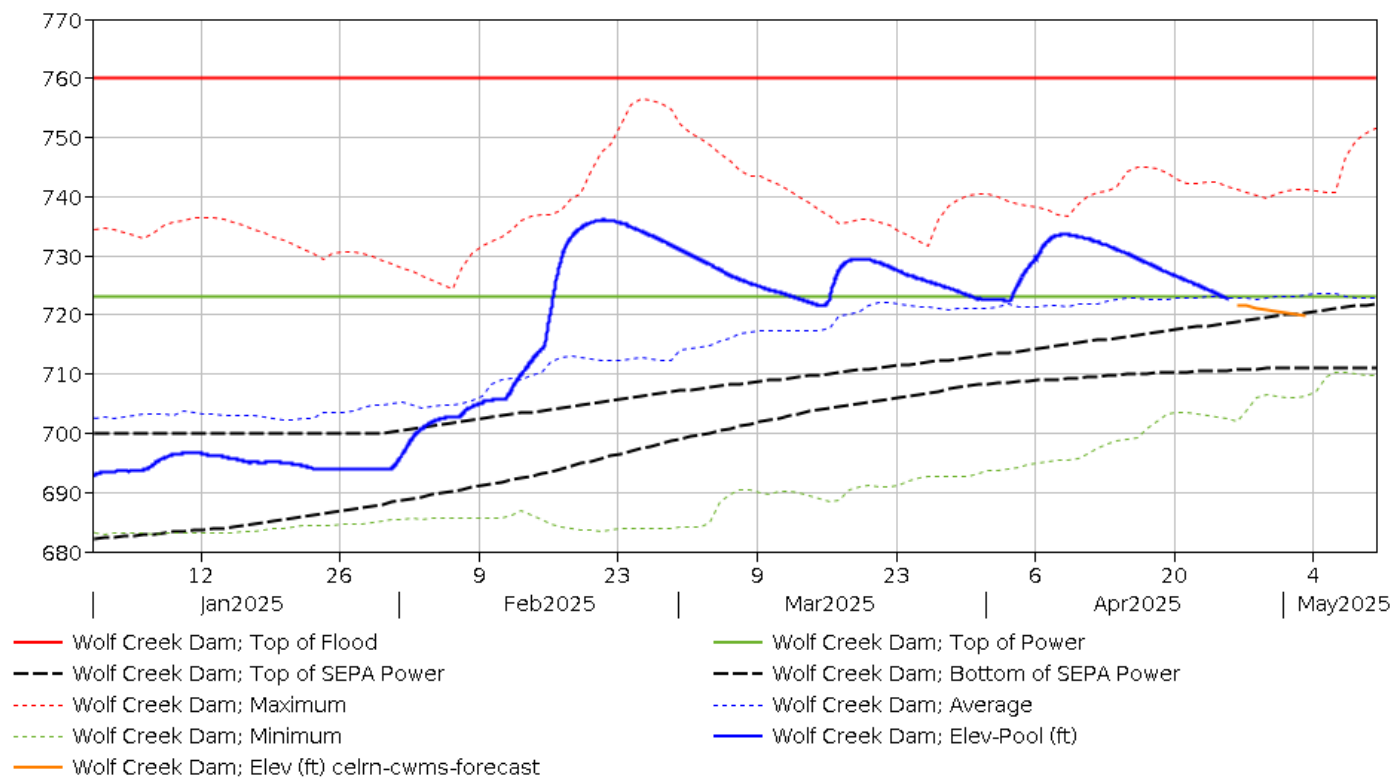
6



Current Elevation: 722 ft

- Near Target Elevation (720 ft)

- 1 May Forecast: 720.5 ft







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# LRN PROJECT STATUS – DALE HOLLOW

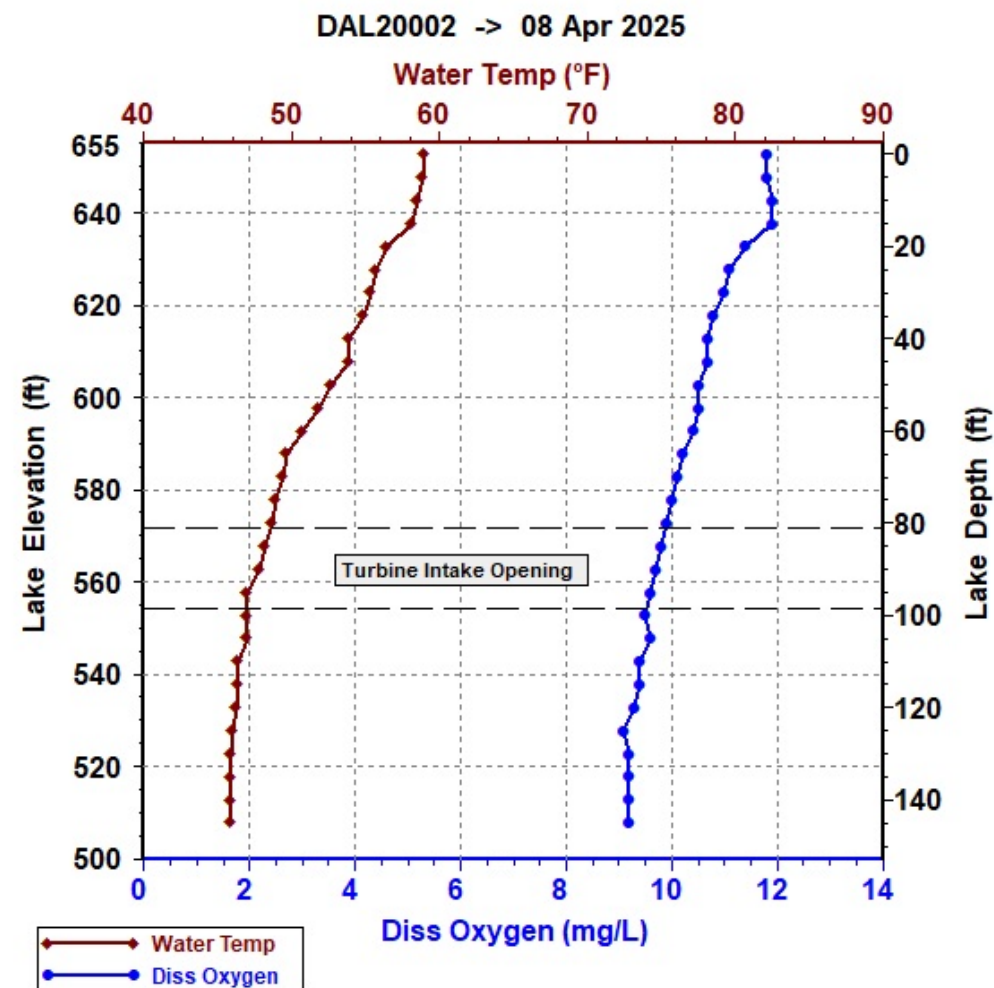
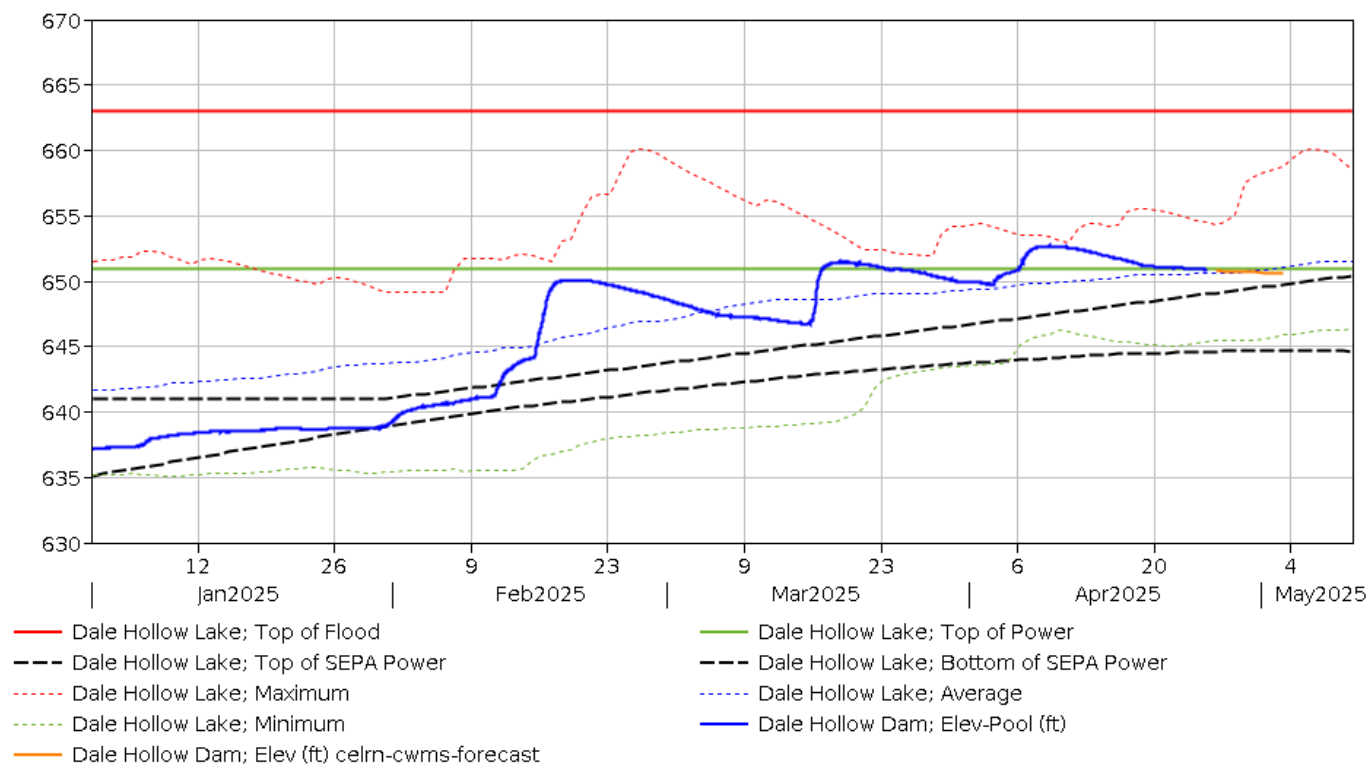
7



**Current Elevation: 650.7 ft**

**- At Summer Fill Target (651 ft)**

**- 1 May Forecast: 650.7 ft**







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# LRN PROJECT STATUS – CENTER HILL

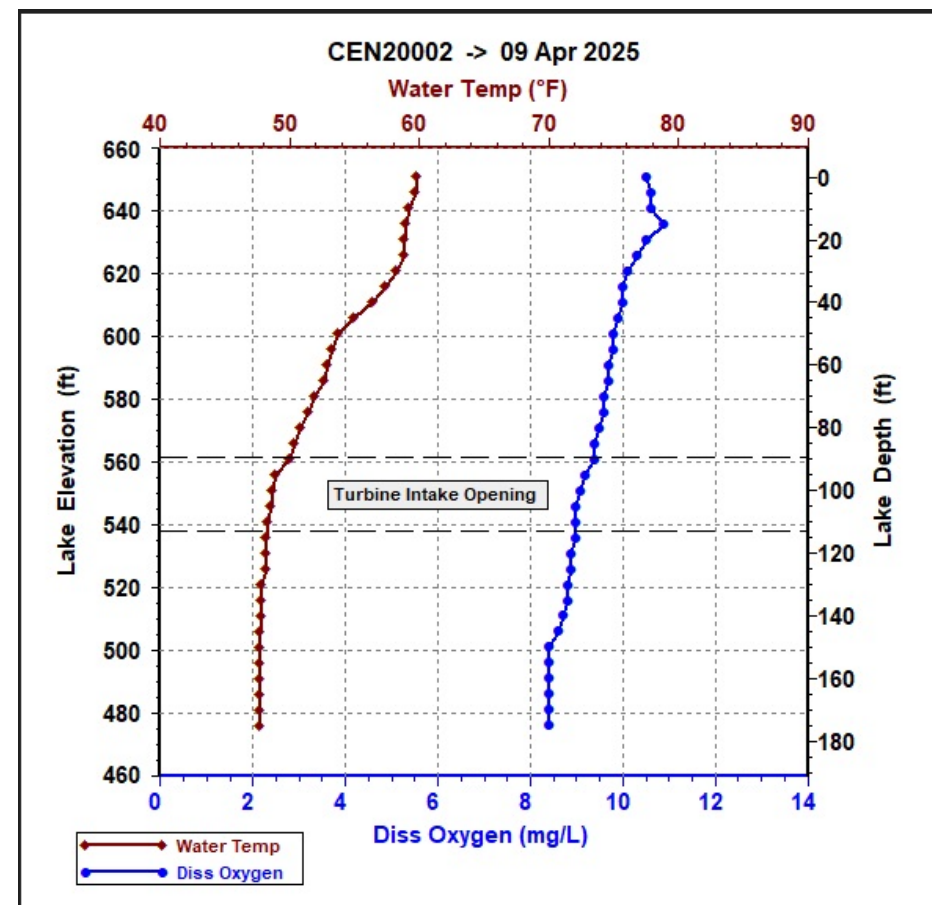
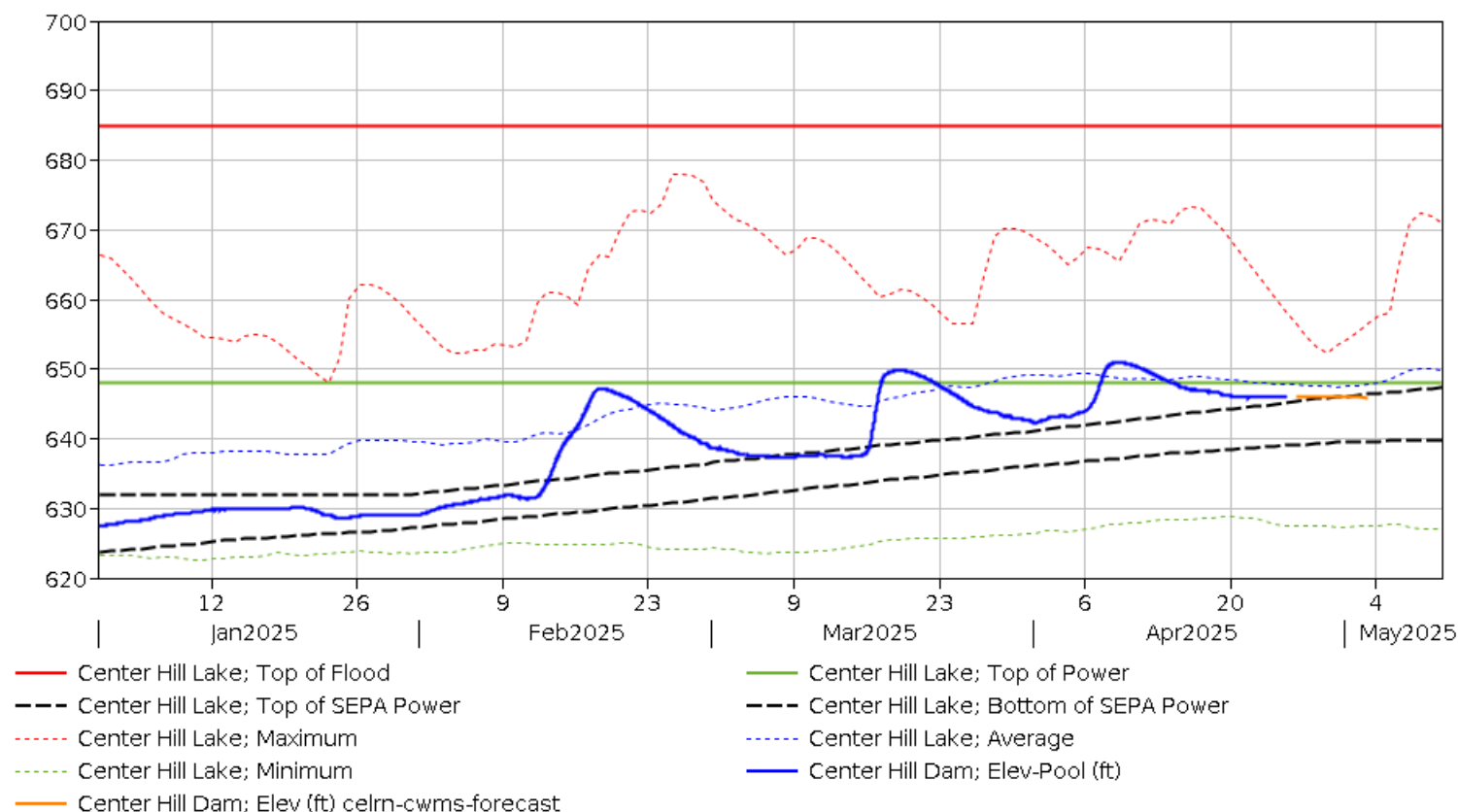
8



**Current Elevation: 646 ft**

**- Near Target Elevation (645 ft)**

**- 1 May Forecast: 646 ft**







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# LRN PROJECT STATUS – J PERCY PRIEST

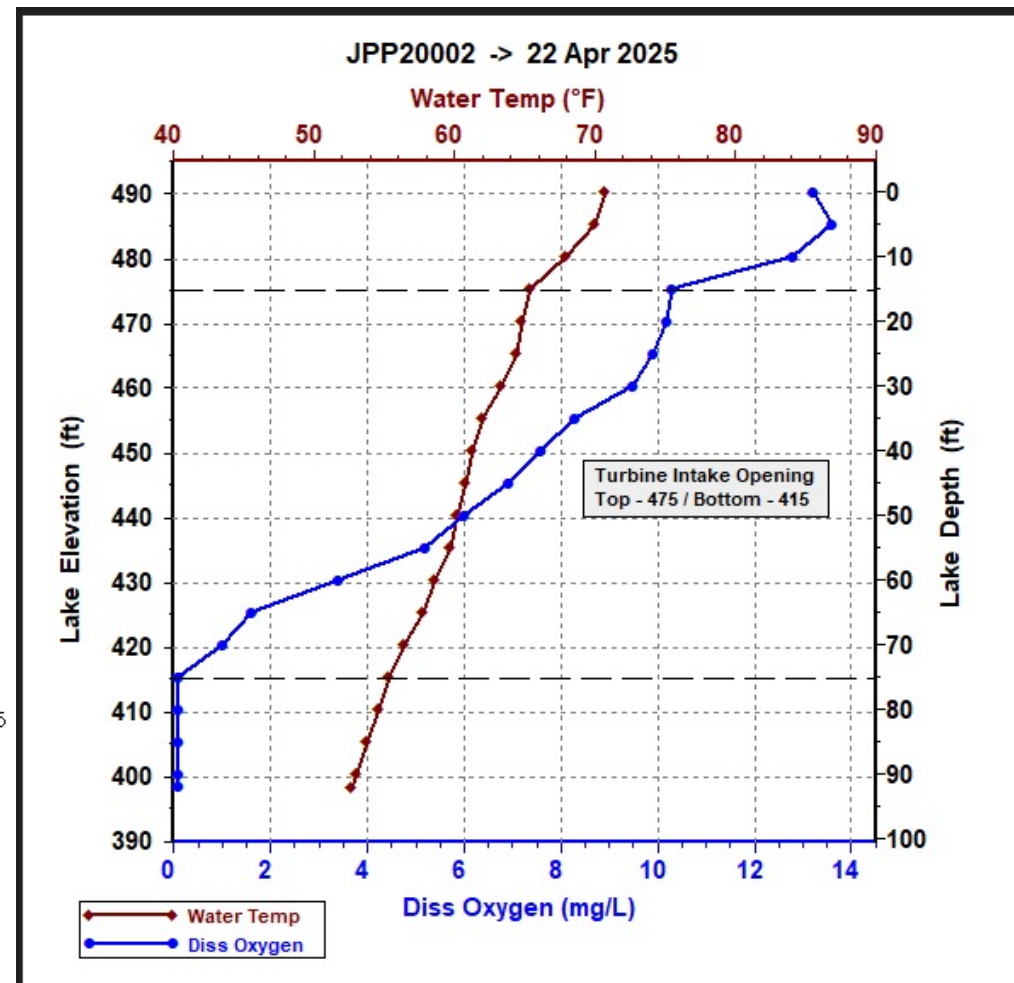
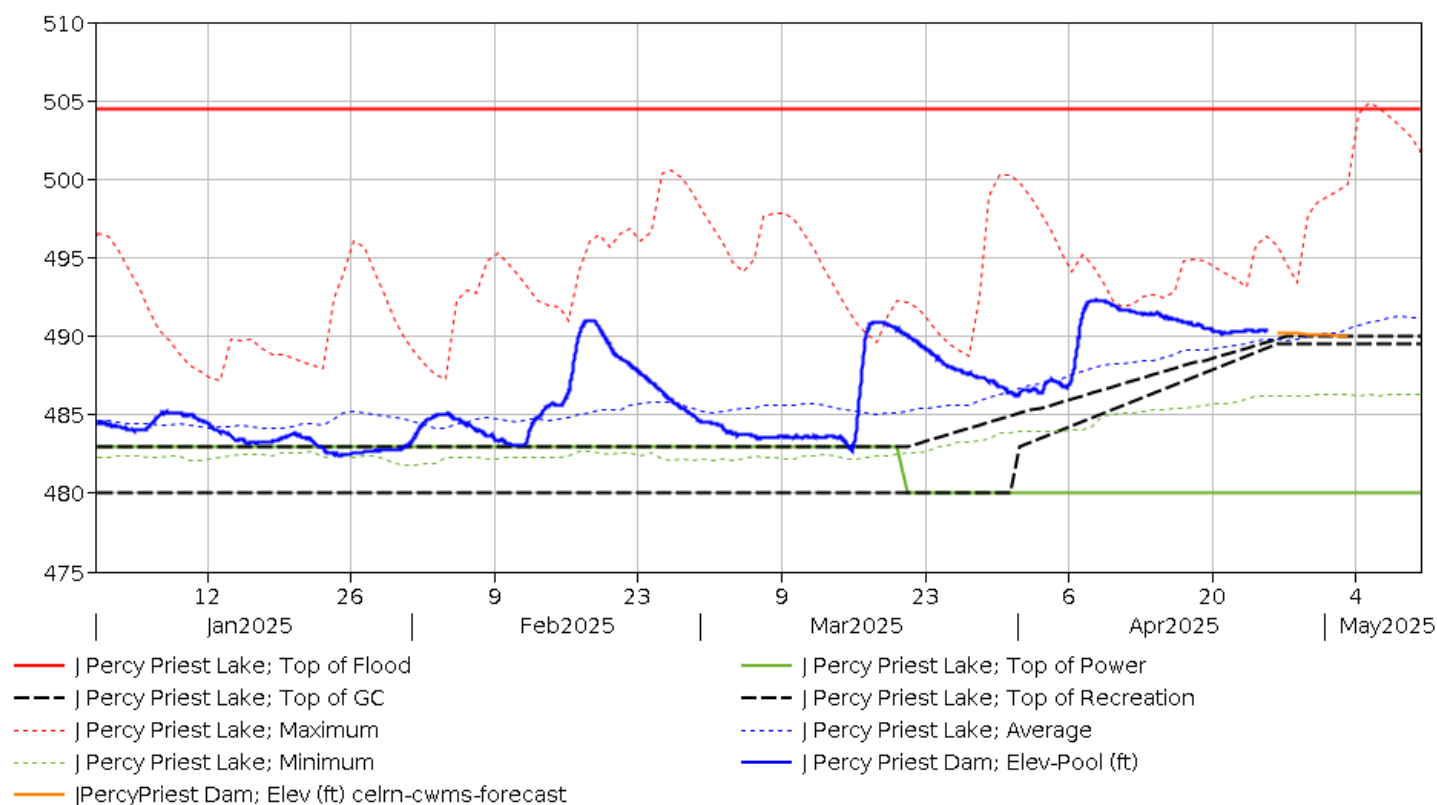
9



**Current Elevation: 490.4 ft**

**- Within Target Zone**

**- 1 May Forecast: 490 ft**





# LRN HYDROPOWER O&M MAINTENANCE UPDATE

David Mistakovich  
Chief, Hydropower O&M Program Section  
LRD/Nashville District  
29 April 2025



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# LRN SCADA REPLACEMENT

11

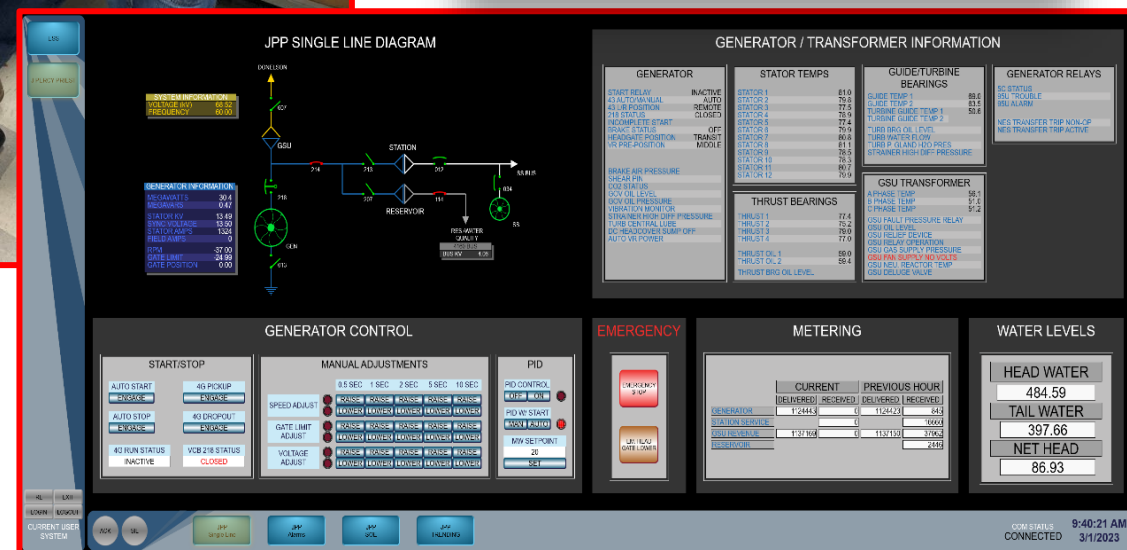
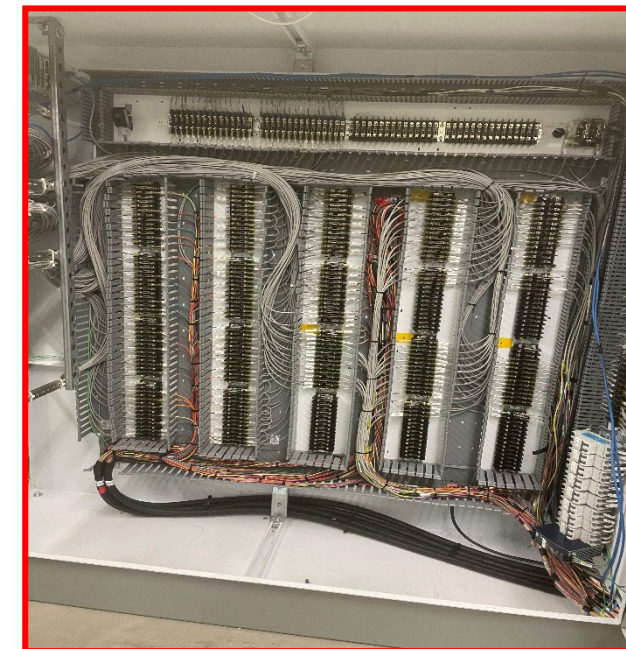


## Scope

- The Five remotely-operated hydroelectric power plants in the U.S. Army Corps of Engineers Nashville District (LRN) have supervisory, control, and data acquisition (SCADA) systems that are near end-of-life. Technical support for firmware, replacement hardware, and modern software are no longer available. The objective of this work is to replace the existing SCADA system, convert all the master plants to remote ready, remote the existing master plants and initially set up two centralized control centers, one at Old Hickory and the other at Cordell Hull with future plans to consolidate to one location strategically located within the Nashville District.

## Progress

- Installation complete at all five sites
  - Center Hill – Completed OCT 2024
  - Laurel – Completed MAR 2025







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# BARKLEY INTAKE/SPILLWAY CRANE

12



## Scope

- To replace the existing Intake/Spillway Gantry Crane and rails with a new 165 Ton Gantry Crane to operate the intake and the spillway.

## Total Project Cost

- \$15.5 Million

## Progress

- Crane is installed on-site.
- Working on punch list items
- Received spillway gate bulkhead lifting beam
- Completion of old crane deconstruction end of 2025.







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# OLD HICKORY INTAKE/SPILLWAY CRANE

13



## Scope

- To replace the existing 75-Ton Intake/Spillway Gantry Crane with a new 105-Ton Gantry Crane to operate the intake and on the spillway.

## Total Project Cost w/ O&M Funds

- \$24.9 million

## Progress

- Contract awarded on 25 SEP 2023
- Contractor is in the design phase
- Mod completed for crane rail replacement
- Design submittals being reviewed
- Contractor mobilizes Fall 2025
- Unit 1 outage for assembly NOV 2025 thru JAN 2026
- Rolling two unit outages for crane rail replacement – JAN 2026 thru MAR 2026
- Completion currently scheduled for Spring 2026







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# OLD HICKORY STORM DAMAGE POWER PLANT & WAREHOUSE REPAIRS - TORNADO RECOVERY



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## Scope

- Permanent recovery, repair, replacement and restoration of project property and assets (i.e., powerhouse, warehouses, structures, utilities, facilities, physical security components, tools, etc).

Total Project Cost - HYD (\$12M) and JNT (\$14.65M)

- Power Plant Repairs (HYD) - \$12M
- Debris Removal (JNT) - \$3M
- Storage Facilities Replacement(JNT) - \$3.6M
- Warehouses, Security, Water, Power, Communications, & Dam Safety Infrastructure Repairs (JNT) - \$8.05M

## Progress

- Debris Removal complete
- Award Date – Powerhouse & Warehouse Repairs Design Build MATOC - Base and options awarded on Dec 2024 to AIS Infrastructure for \$9.71M; Completion: OCT 2026
- Rockland Substation Repairs added to OLD GSU Install project to Koontz Electric for \$1.2M – Waiting for delivery of electrical equipment; Completion: JUN 2026







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# FY25 PRESIDENT'S BUDGET - JOINT



## Barkley

- Phase 2 Spillway Gate Chain Replacement - \$6,954K
- Complete Rehab of Spillway Gates – \$2,853K
- Old Hickory
- Phase 2 Replace Intake and Spillway Crane - \$8,000K
- Wolf Creek
- Supply and Install New Security System - \$1,062K





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# FY25 PRESIDENT'S BUDGET - HYDROPOWER

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## Barkley

- Non Potable Water Intake Piping Replacement - \$300K

## Center Hill

- Replace 2 Line Motor Operated Disconnect Switches - \$150K

## Wolf Creek Dissolved Oxygen O&M

- Not Funded





# DRSAA 2022 - JOINT



Center Hill Spillway Gate Replacement – 172.9M  
Completion Feb. 2029

Wolf Creek Spillway Gate Replacement- 203M  
Completion Feb. 2030



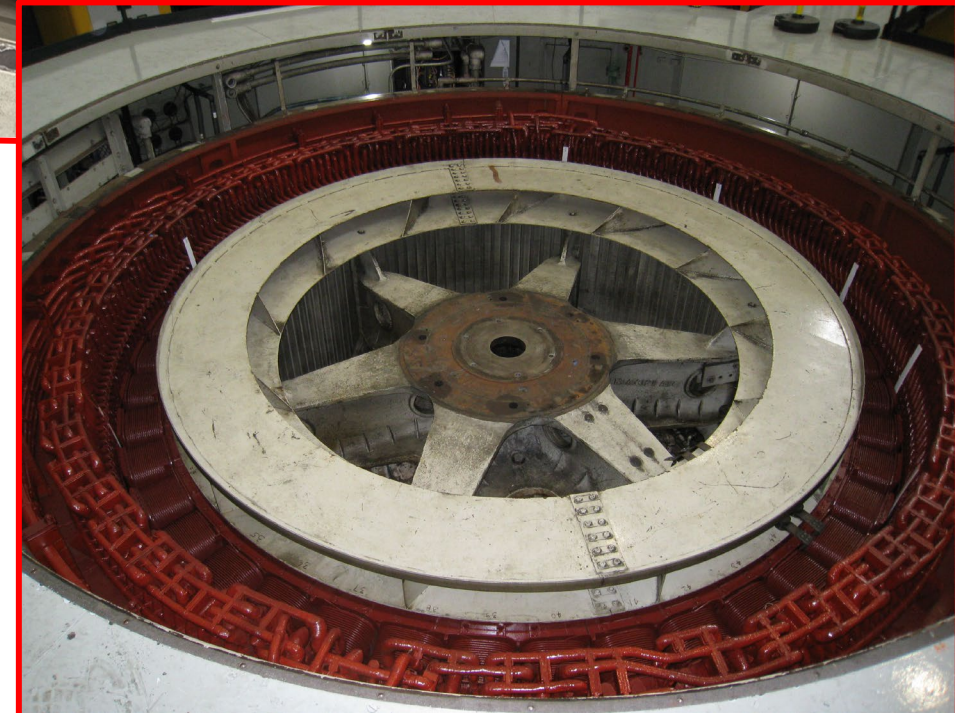
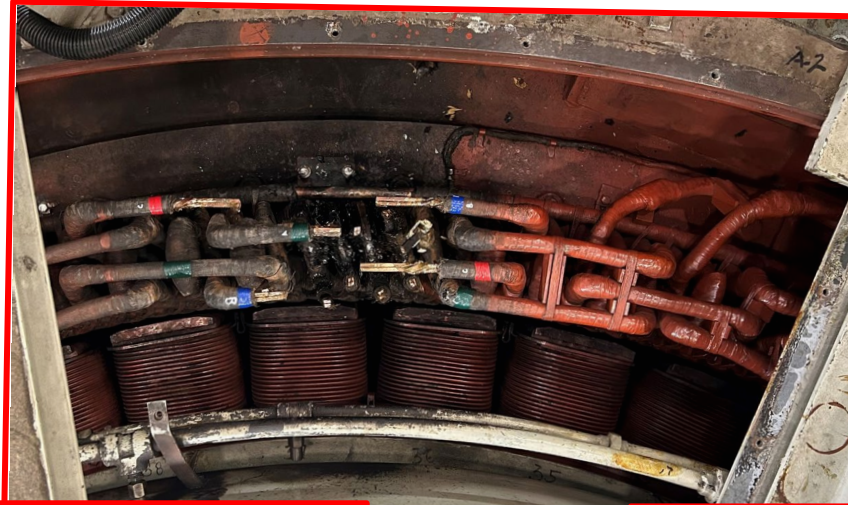


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# DALE HOLLOW UNIT #2 DIFFERENTIAL

- Rotor Installed
- Testing underway





# NASHVILLE DISTRICT SECTION 212 FUNDED PROGRESS UPDATE

Chris Stoltz, P.E., PMP  
Nashville District  
29 April 2025



BAR TG, Stator Coil Installation



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# SUB-AGREEMENT / BALLOT UPDATES

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## Sub Agreements

LT MOA SA13

- Signed – Nov 2024

## Ballots

LT Ballot #22:

- Signed: Oct 2024
- Contingency for OLD GSUs

ST Ballot #4

- Signed: Nov 2024
- Additional funding for WOL GSUs





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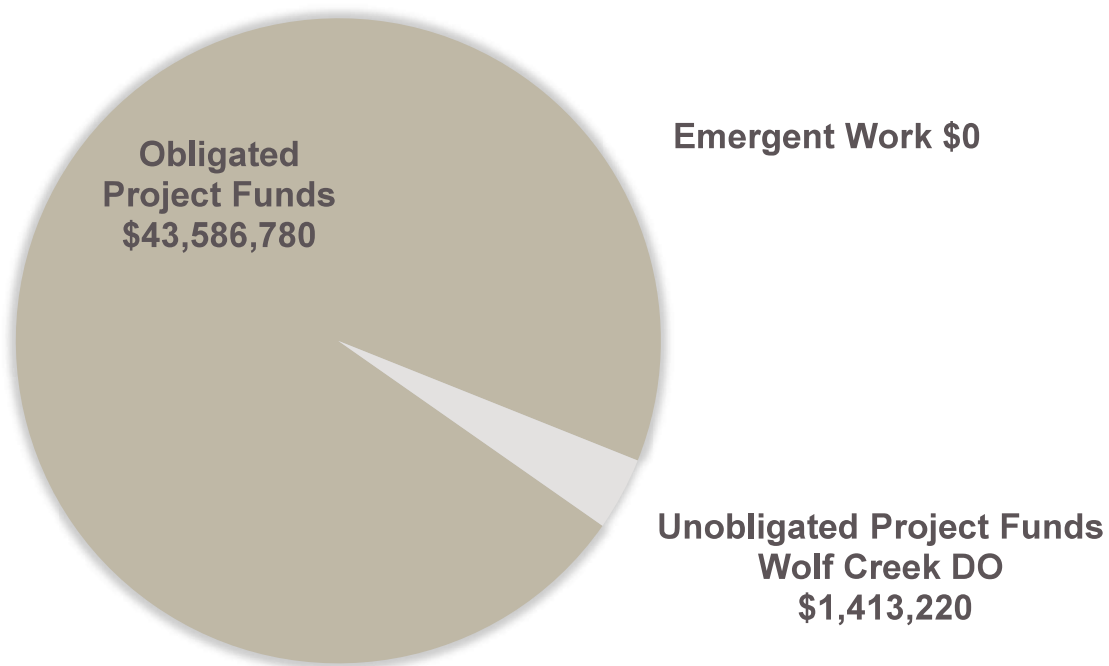
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# LEGACY MOA FINANCIAL STATUS

**FUNDS AUTHORIZED \$45M**

**FUNDS RECEIVED\* \$45M**



\*As of April 2025





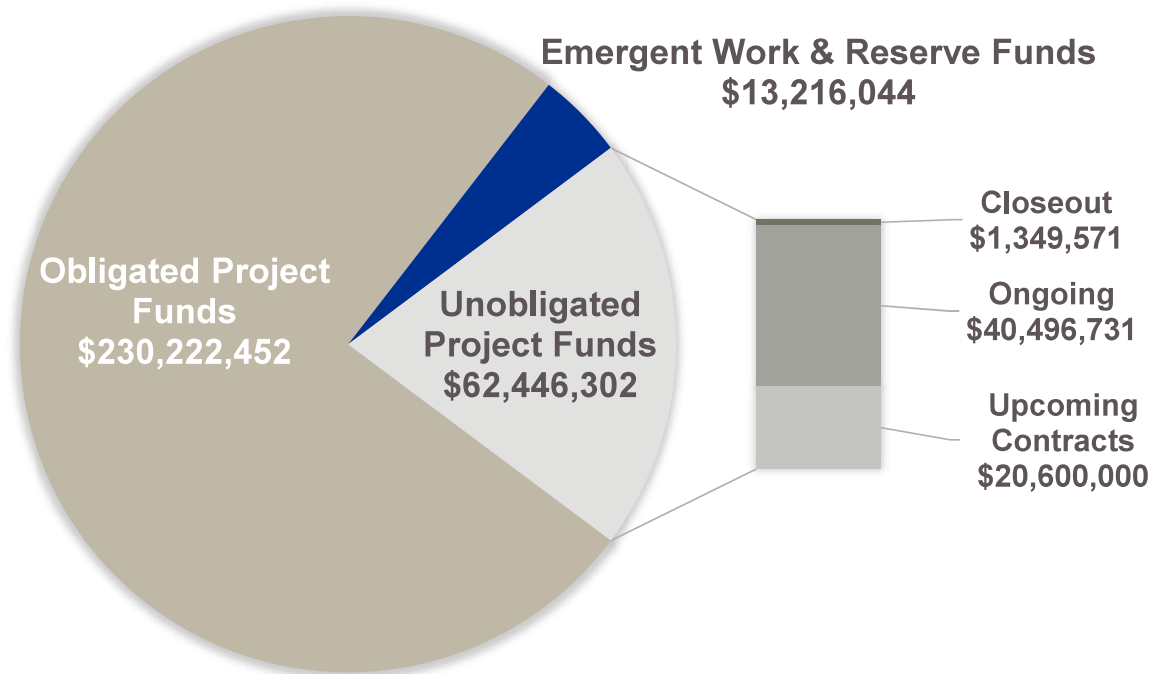
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# LT-MOA FINANCIAL STATUS

FUNDS AUTHORIZED \$325M

FUNDS RECEIVED\* \$306M



\*As of April 2025





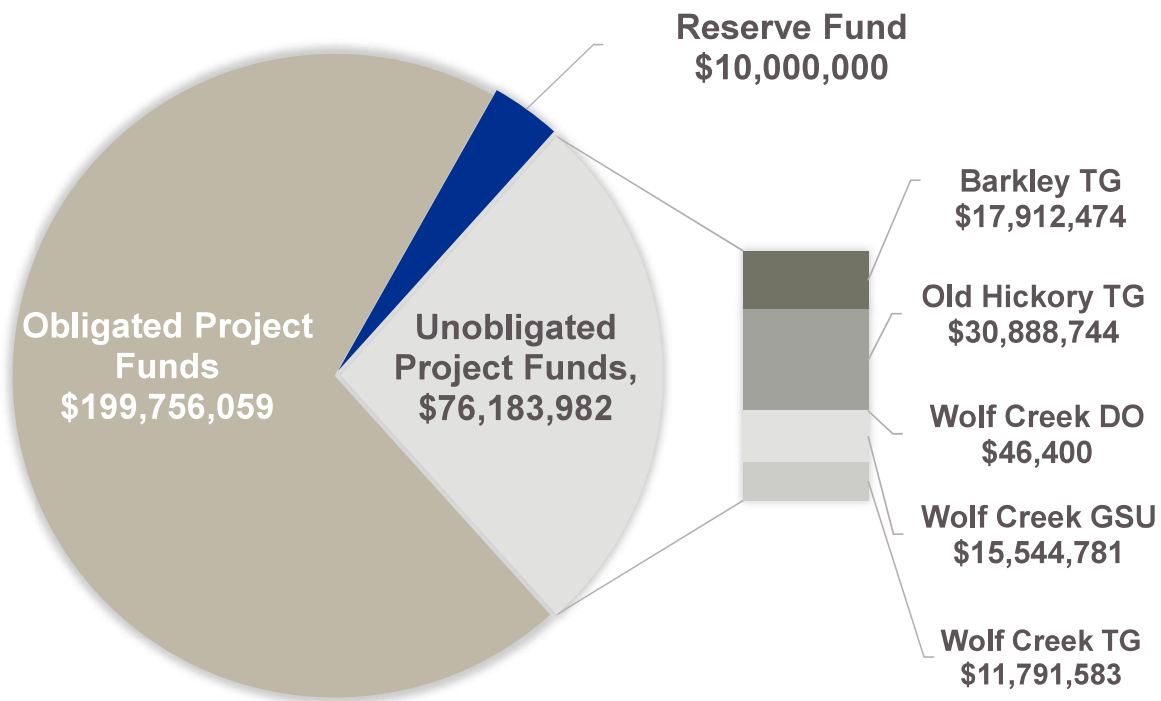
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# ST-MOA FINANCIAL STATUS

FUNDS AUTHORIZED \$300M

FUNDS RECEIVED\* \$286M



\*As of April 2025





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# LRN EXCITATION SATOC

## Old Hickory Excitation

- Construction Completion: Dec 2024
- Close Out: LTMOA Ballot 23

## Wolf Creek Excitation

- Construction Completion: March 2025

## Cheatham Excitation/Governor

- E&D Start – Q3 FY25
- LTMOA Ballot 24

## Laurel Excitation

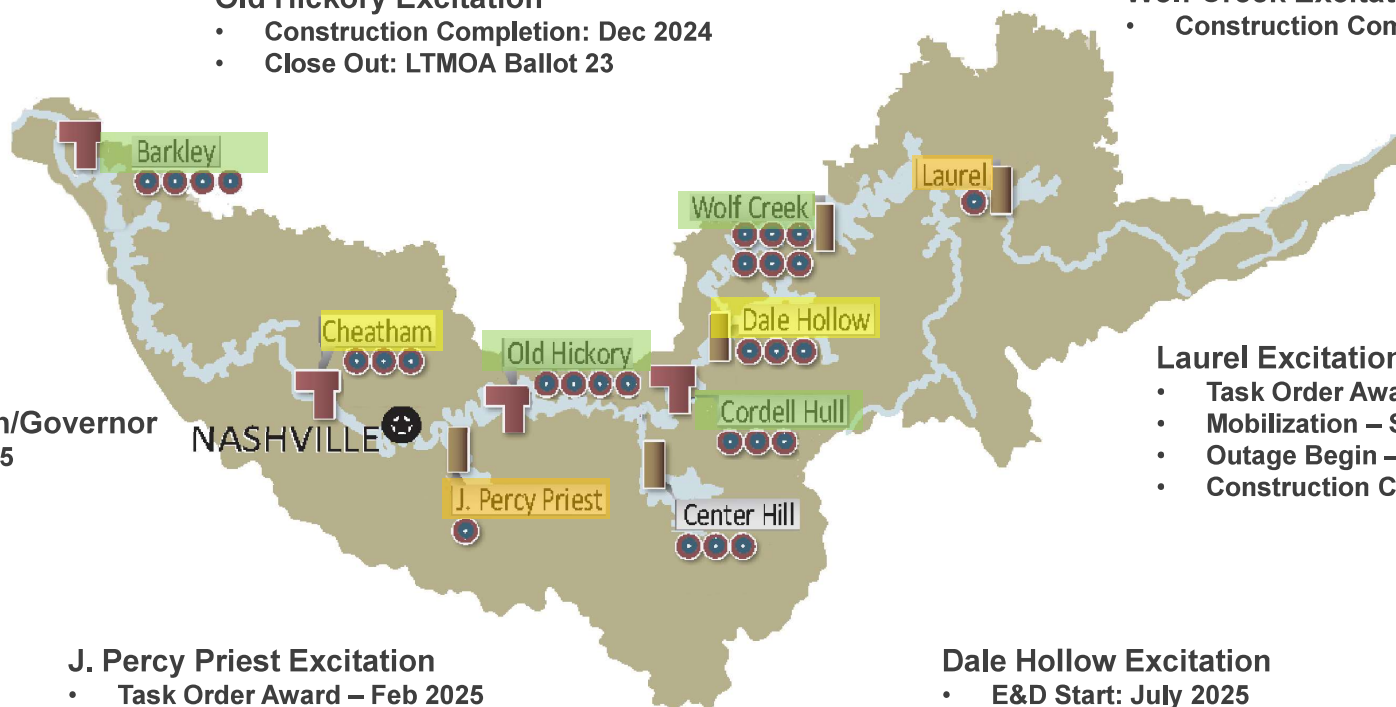
- Task Order Award – July 2024
- Mobilization – Summer 2025
- Outage Begin – Sep 2025
- Construction Completion - Jan 2026

## J. Percy Priest Excitation

- Task Order Award – Feb 2025
- Mobilization – May 2026
- Outage Begin - May 2026
- Construction Completion – Nov 2026

## Dale Hollow Excitation

- E&D Start: July 2025







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# LRN CRANE MATOC

## Barkley Powerhouse Crane

- Repair design underway

## Wolf Creek Powerhouse Crane

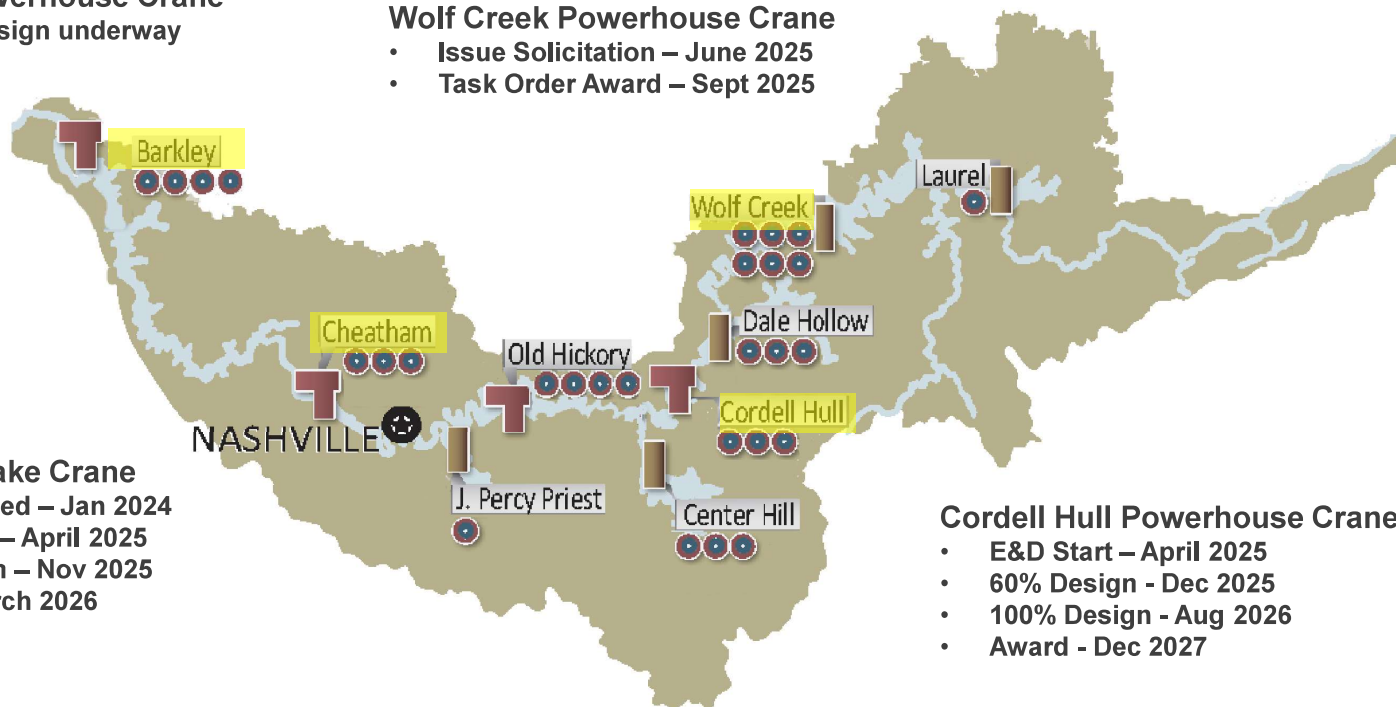
- Issue Solicitation – June 2025
- Task Order Award – Sept 2025

## Cheatham Intake Crane

- Design Started – Jan 2024
- 60% Design – April 2025
- 100% Design – Nov 2025
- Award – March 2026

## Cordell Hull Powerhouse Crane

- E&D Start – April 2025
- 60% Design - Dec 2025
- 100% Design - Aug 2026
- Award - Dec 2027

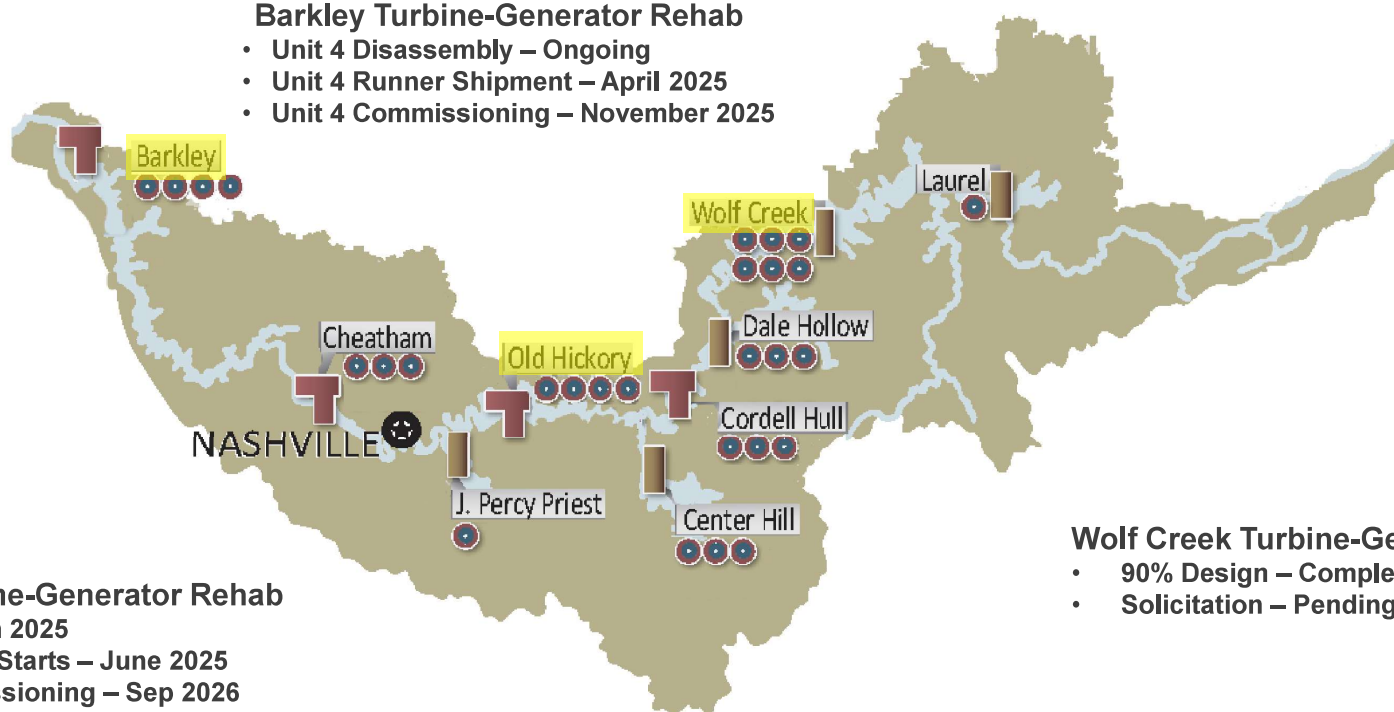




# TG REHAB CONSTRUCTION PROJECTS

## Barkley Turbine-Generator Rehab

- Unit 4 Disassembly – Ongoing
- Unit 4 Runner Shipment – April 2025
- Unit 4 Commissioning – November 2025



## Old Hickory Turbine-Generator Rehab

- Mobilization – Jan 2025
- First Unit Outage Starts – June 2025
- First Unit Commissioning – Sep 2026

## Wolf Creek Turbine-Generator Rehab

- 90% Design – Complete
- Solicitation – Pending Funding





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# OTHER CONSTRUCTION PROJECTS

## Wolf Creek GSU

- Award – March 2025
- Supply Delivery – Aug 2028
- Install Completion – Aug 2030

## Wolf Creek DC Systems

- Award / NTP – Aug 2024
- Mobilize – Oct 2025
- Contract Completion – Feb 2026

## Old Hickory GSU Install

- Awarded – 28 Sep 2023
- Full Plant Outage – 28 Jan – 28 May 2025
- Construction Complete – Jul 2025

## Wolf Creek Dissolved Oxygen

- Supply Award – Jan 2022
- Cryogenic Award – 10 Aug 2023
- System Commissioning – Aug 2025







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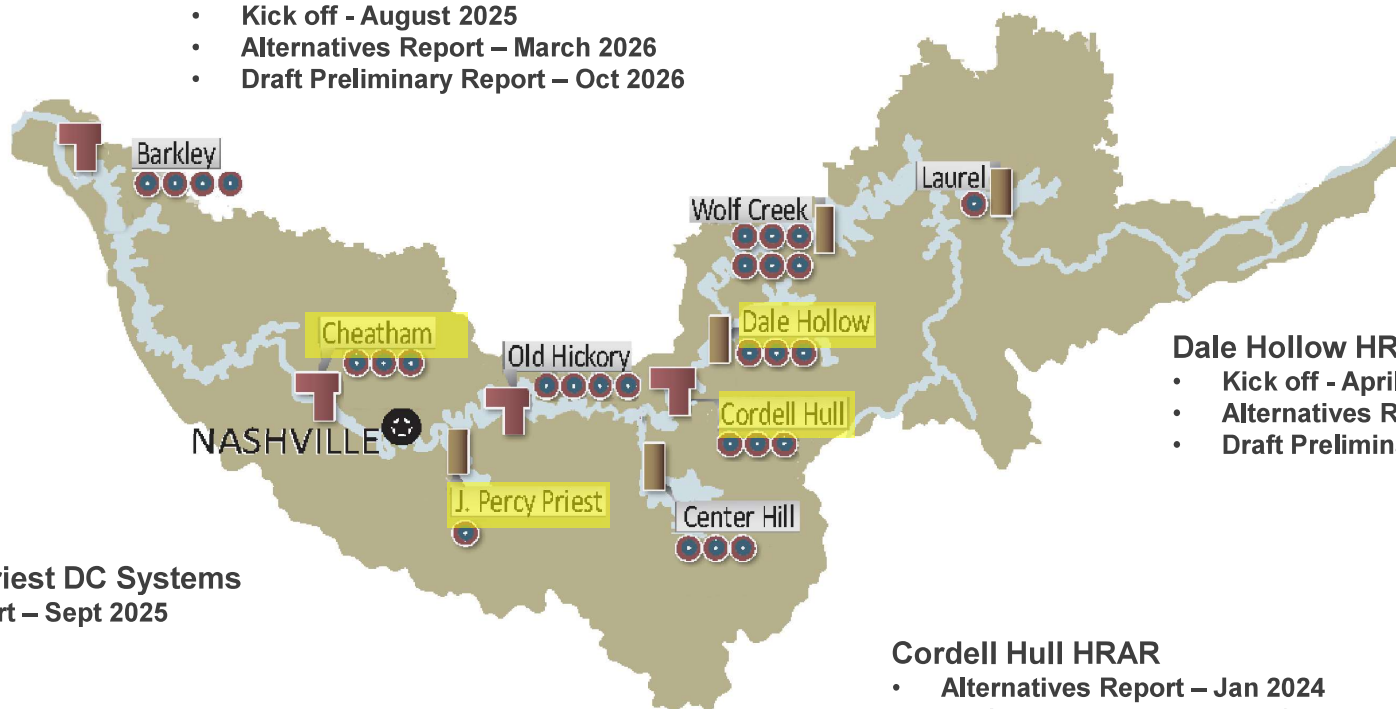
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# PROJECTS IN DESIGN / UPCOMING

## Cheatham HRAR

- Kick off - August 2025
- Alternatives Report – March 2026
- Draft Preliminary Report – Oct 2026



## Dale Hollow HRAR

- Kick off - April 2025
- Alternatives Report – Oct 2025
- Draft Preliminary Report – June 2026

## J. Percy Priest DC Systems

- E&D Start – Sept 2025

## Cordell Hull HRAR

- Alternatives Report – Jan 2024
- Draft Preliminary Report – Oct 2024
- Customer Presentation – Feb 2025





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# UPCOMING ACTIONS

12



## LT MOA Ballot 23

- Close CEN MV Cables and OLD Exciters
- \$1,349,570.83 to Emergent Work

## LT MOA Ballot 24

- CHE Ext/Gov and WOL DO Ballot
- Amend scope and budget for CHE Ext
- Increase WOL DO budget for TVA support

## Master Plan Update

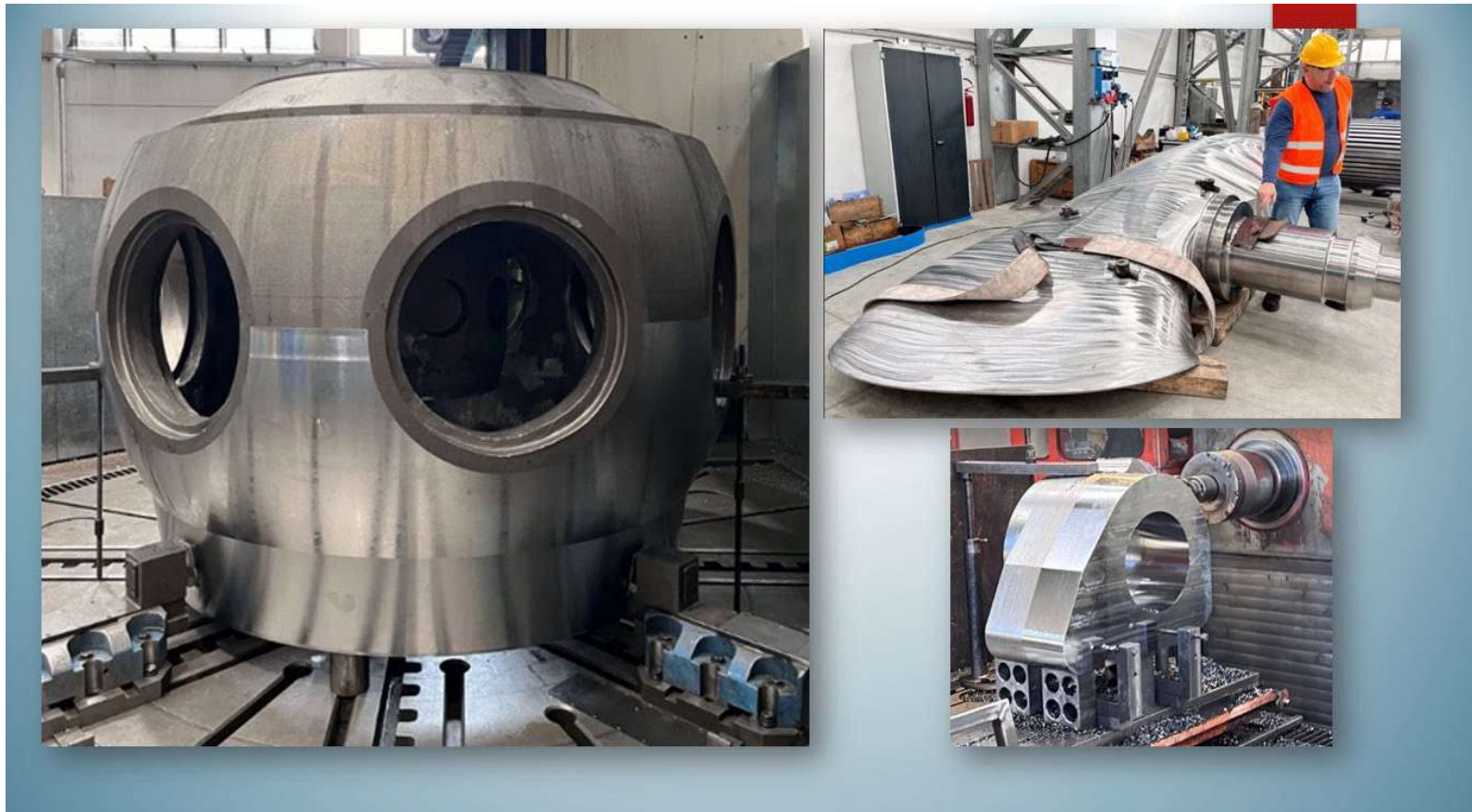
- 5-year update
- Last approved 2021

## Potential ST MOA Amendments

- Incremental Funding
- Reoccurring purchase of LOX



# QUESTIONS



OLD TG Runner Hub, Blade, and Internals