

# TVA / Allen Aeroderivative Combustion Turbine Project

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## Welcome to Our Community Open House

Thank you for joining us to learn more about TVA's proposal to modernize and upgrade the Allen Combustion Turbine Plant to meet the growing energy needs of Memphis and the West Tennessee Region.

We want your feedback on the project! You can submit comments during this Open House or access the QR code below for more information.



### Find Out More

Scan the QR code to  
connect with us directly.

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# Our Commitment to You

TVA is committed to serving you through our mission of providing low-cost, reliable power, environmental stewardship and economic development.

This Open House is an opportunity to provide you with information about our proposal to modernize and upgrade our Allen Combustion Turbine Plant.

The stability of our regional economies and the lives of the people we serve depend on a safe, secure energy supply.

We are committed to maintaining the diversity of our system as we work to meet rising customer expectations, electrification, and economic growth across Memphis and the West Tennessee region.



# History of Allen Combustion Turbine Plant

Allen Combustion Turbine Plant began operation in 1971. In 2024, 16 units were removed from service. Below is the future site of the proposed six Aeroderivative Combustion Turbine units.



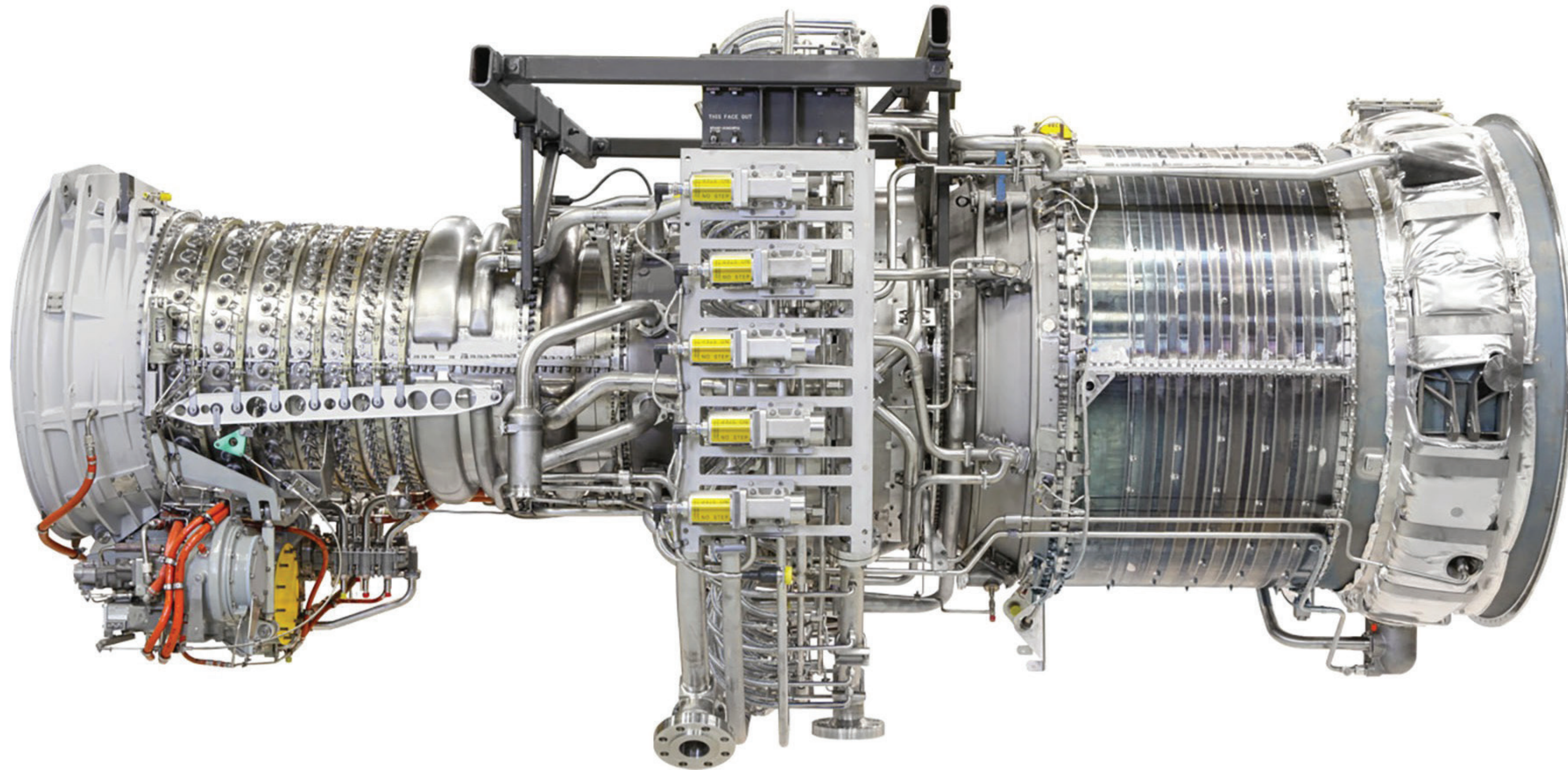
*Proposed Allen Aeroderivative Combustion Turbine*



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# What is an Aeroderivative Combustion Turbine?

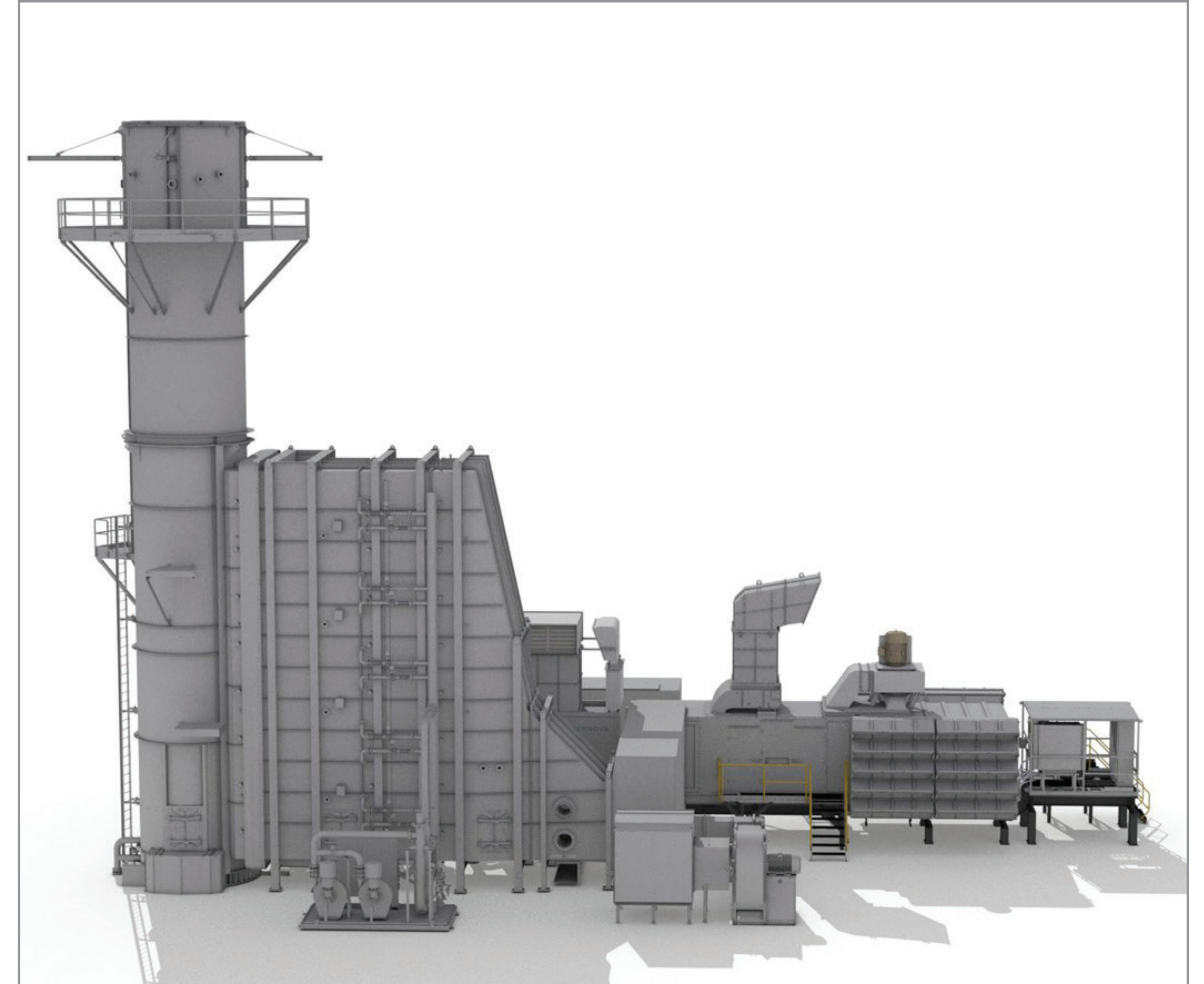
A Combustion Turbine (CT) is essentially the engine of a power plant that converts natural gas to energy. An Aeroderivative Combustion Turbine is a smaller, modern version of the traditional CT that evolved from innovations in airplane jet engines.





# What Are The Benefits Of This Technology?

- Fast start capability
- Synchronous condensing capability to enhance grid stability
- Blackstart capability for quick starts without external power
- Enhanced reliability of the TVA power system
- Enables greater investments in renewable resources (e.g., solar, hydro) and battery storage
- Help meet growing energy needs of Memphis and the West Tennessee region
- Environmental Controls





# Why This Location?

- Enhance the grid stability at the most western part of the TVA grid
- Improve system reliability
- Support peak demand needs
- Capitalize on existing infrastructure





# Environmental Review Process of Project

- Environmental stewardship is a core mission of service at TVA. We take seriously our role and responsibility in protecting natural resources.
- As a federal agency, TVA must follow the requirements of the National Environmental Policy Act (NEPA) prior to making decisions.
- TVA has prepared the draft Environmental Impact Statement that is available for public review. Comments are due April 28, 2025.
- Comments received during this public comment period will be reviewed and considered during development of the Final Environmental Impact Statement document.





# Key Environmental Issues

- Air and greenhouse gas emissions
- Socioeconomics
- Community impacts
- Water supply

## Gas Emissions

Nitrogen Oxides (NO<sub>x</sub>)

\*REDUCTIONS UP TO

98%

Carbon Dioxide (CO<sub>2</sub>)

\*REDUCTIONS UP TO

35%

\*Proposed Aeroderivative Combustion Turbines compared to decommissioned Allen Combustion Turbines

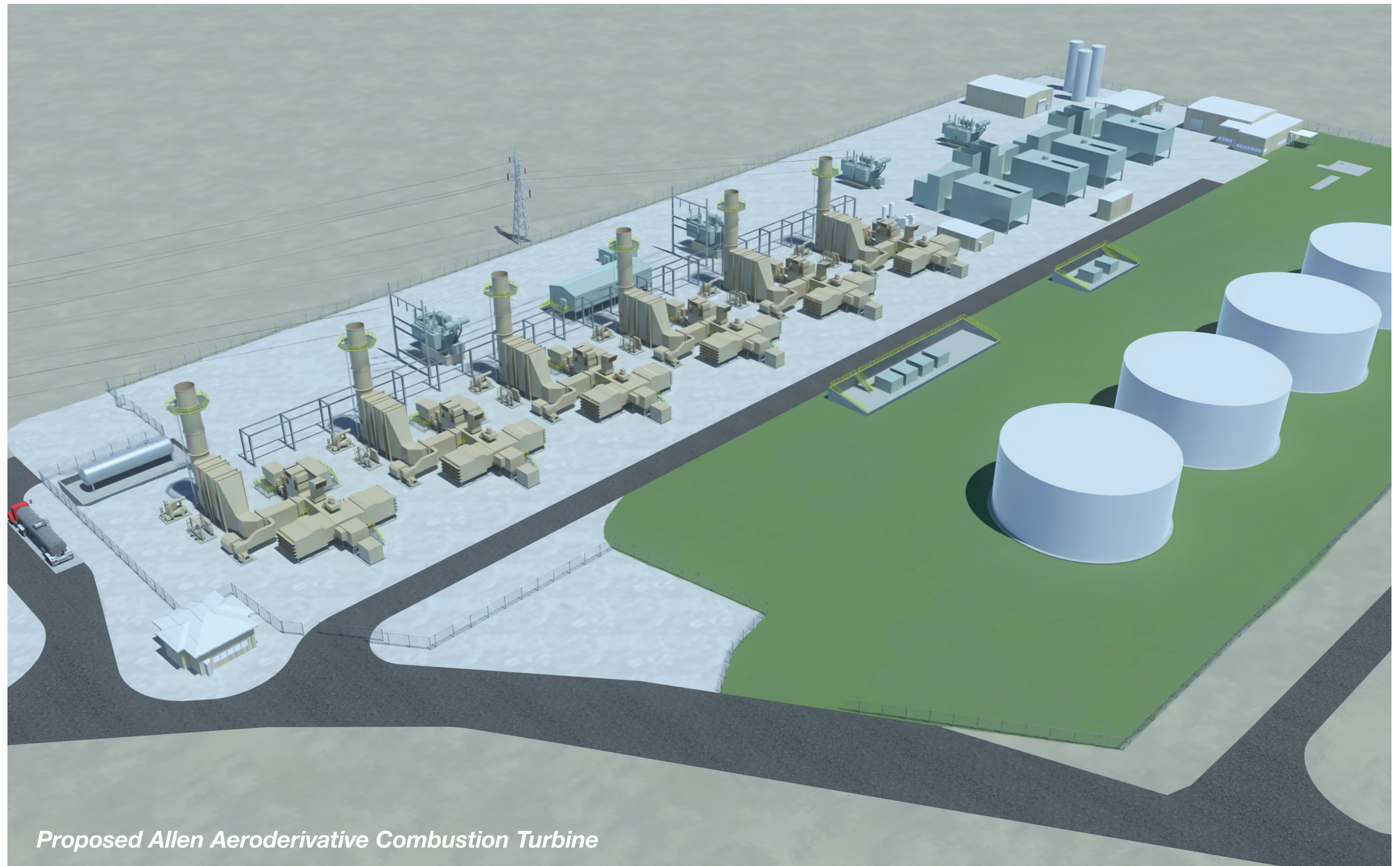


# Schedule for Federal Environmental Review Process

MILESTONE	DATE
Notice of Intent Published	October 13, 2023
Public Open House Meeting (Scoping)	October 24, 2023
Public Webinar (Scoping)	November 2, 2023
Draft Environmental Impact Statement Published	March 10, 2025
Public Comment Period	March 10 through April 28, 2025
- Public Open House Meeting	April 10, 2025
- Public Webinar	April 17, 2025
Publish Final Environmental Impact Statement	August 2025*
Publish Record of Decision	September 2025*

*\*Dates are tentative and subject to change.*





*Proposed Allen Aeroderivative Combustion Turbine*



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# Public Involvement

## Join us for a public webinar

Thursday, April 17, 2025, 6:00 pm CDT

*(Registration required)*

## How to submit public comments

- Online at [www.tva.com/allenct](http://www.tva.com/allenct)
- Via email to: [nepa@tva.gov](mailto:nepa@tva.gov)
- Via mail to:  
Matthew Higdon  
Tennessee Valley Authority  
400 West Summit Hill Drive, WT 11B  
Knoxville, TN 37902



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