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Welcome to the Cheatham County Generation Site Environmental Impact Statement

Scoping Public Open House



Project Overview

TVA is proposing the construction and operation of a simple cycle Combustion Turbine (CT) plant paired with a Battery Energy Storage System (BESS) on a parcel of TVA-owned land in Cheatham County, Tennessee.

The Cheatham County Generation Site (CHG) would generate approximately 900 Megawatts (MW) and replace generation capacity for a portion of the Cumberland Fossil Plant (CUF) second unit retirement planned by the end of 2028.

The CHG CTs would be composed of multiple natural gas-fired frame CTs and natural gas-fired and oil-fired (i.e., dual-fuel) Aeroderivative CTs.

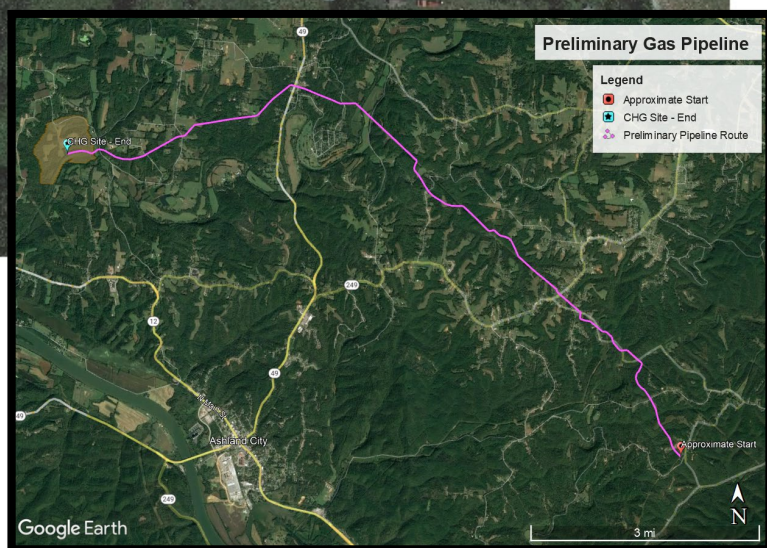
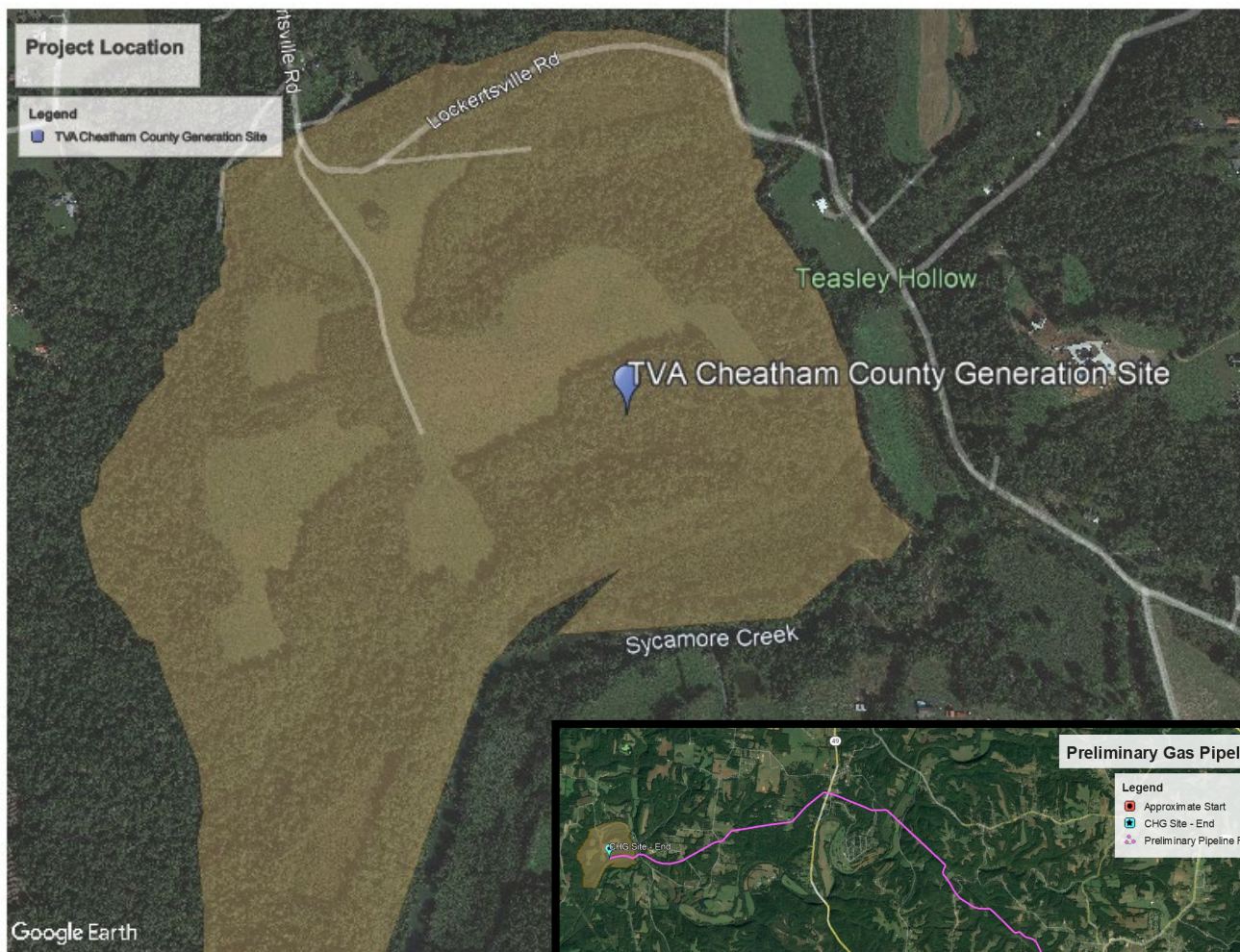


Proposed CHG Site

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Project Location

The TVA-owned land for TVA's proposed project is in Ashland City, Cheatham County, Tennessee, which is approximately 22 miles northwest of Nashville, Tennessee. The total property is approximately 285 acres with the proposed project footprint covering a footprint of approximately 75 acres.



Background

In June 2019, TVA published an Integrated Resource Plan (IRP), which was developed with input from stakeholders and the public.

The target supply mix adopted by the TVA Board through the 2019 IRP included the potential retirement of 2,200 MW of coal-fired generation by 2038.

The IRP included a recommendation to conduct end-of-life evaluations to determine whether retirements greater than 2,200 MW would be appropriate.

Following the publication of the IRP, TVA began conducting evaluations to inform long-term planning. TVA's recent evaluation confirms that the aging coal fleet is among the oldest in the nation and is experiencing deterioration of material condition and performance challenges.

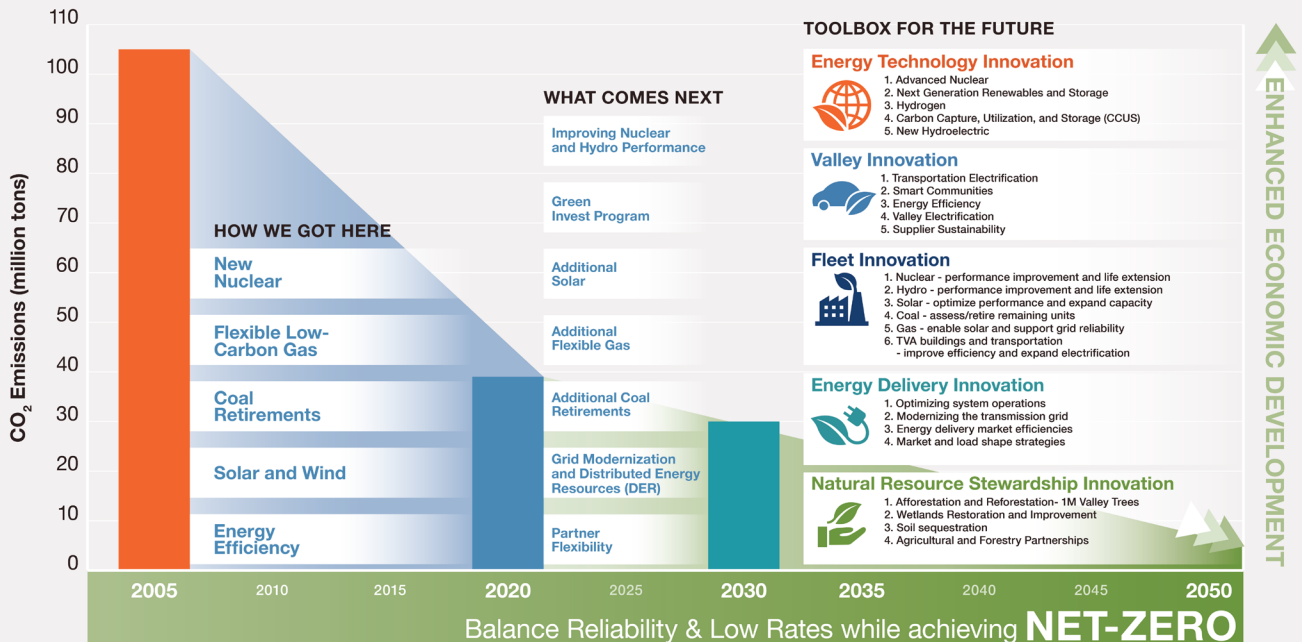
In January 2023, TVA decided to retire the two CUF units and to replace the generation of one of those retired CUF units with a combined cycle gas plant.

Generation from the proposed project would replace a portion of the capacity of the second CUF unit to be retired by the end of 2028. Generation from the proposed project would also be consistent with the target supply mix in the 2019 IRP that proposes the need for the addition of up to 5,200 MW of simple cycle capacity by 2028 to facilitate the integration of solar onto the TVA bulk power system.

TVA's Decarbonization Journey

TVA's proposed Action Alternative aligns with TVA's 2019 IRP near-term actions to evaluate engineering end-of-life dates for aging generation units to inform long-term planning and to enhance system flexibility to integrate renewables and distributed resources. The possible addition of CHG is one piece of the larger decarbonization effort that TVA is undergoing.

TVA'S DECARBONIZATION JOURNEY



Building the Energy System of the Future

TVA's asset strategy incorporates the strategic direction from the 2019 Integrated Resource Plan and continues to support affordable, reliable, and cleaner energy for the customers we serve.

Highlights from the asset strategy include:



Maintaining the existing low-cost, carbon-free nuclear and hydro fleets



Retiring aging coal units as they reach the end of their useful life, expected by 2035



Adding 10 GW of solar by 2035 to meet customer demands and system needs



Using natural gas to enable needed coal retirements and solar expansion as other technologies develop



Leveraging demand-side options, in partnership with local power companies



Partnering to develop new carbon-free technologies for deeper decarbonization

The National Environmental Policy Act (NEPA) and Scoping

NEPA requires the identification and analysis of potential environmental effects of major proposed federal actions and alternatives before those actions take place. NEPA's intent is to protect, restore, or enhance the environment through well-informed federal decisions.

- NEPA was established by Federal statute signed by President Nixon on January 1, 1970
- Council on Environmental Quality (CEQ) is the agency responsible for implementing NEPA
- CEQ regulations, 40 CFR Parts 1500-1508
- TVA NEPA implementing procedures, 18 CFR Part 1318

The purpose of Scoping is to solicit early input from the public on alternatives to be considered and environmental resources to be analyzed in this CHG EIS.

Questions for the public to consider:



What environmental resources should the EIS consider?



Are there any additional alternatives that should be considered?



What potential impacts should be evaluated?



Can you recommend any additional sources of information and analyses? What organizations should TVA be coordinating with?

Project Purpose and Need

Constructing and operating a CT facility with a BESS interconnected to the transmission system at the same location would allow TVA to continue providing dispatchable and reliable energy to the people of the Tennessee Valley. The proposed 400 MW-hour BESS would help TVA maintain grid stability and reliability as generating assets with greater minute-by-minute variability (e.g. wind and solar generating assets) are integrated onto TVA's transmission system and thereby advance TVA's decarbonation goals.



TVA's 2019 Integrated Resource Plan acknowledged continued operational challenges for the aging coal fleet and included a recommendation to conduct end-of-life evaluations on TVA's remaining coal plants.



TVA proposed to replace of a portion of the generation of the CUF second unit that is planned for retirement by the end of 2028.



TVA needs flexible, dispatchable power that can successfully integrate increasing amounts of renewable energy sources while meeting reliability, maximum capacity system demands, and planning reserve margin targets.

Alternatives

TVA anticipates the EIS will evaluate a No Action Alternative and an Action Alternative. Whether these or other alternatives are reasonable warranting further consideration under NEPA would be determined in the course of preparing the EIS.

The **No Action** alternative provides a baseline for comparing against the Action Alternative. Under the No Action Alternative, TVA would not develop the TVA-owned property in Cheatham County for energy generation.

The **Action Alternative** would evaluate the development of the CHG property for construction and operation of a CT interconnected with a BESS. The Action Alternative would include an approximately 13-acre pollinator habitat along Sycamore Creek on the CHG property.

In addition, the EIS would also evaluate related actions, such as the construction of an approximately 12-mile natural gas pipeline lateral and off-site transmission lines. The construction of the natural gas pipeline lateral would be subject to Federal Energy Regulatory Commission (FERC) jurisdiction and additional review will be undertaken by FERC in accordance with its own NEPA procedures.



Anticipated Permits / Authorizations

- Issuance of an air permit under the Clean Air Act
- Clean Water Act Individual or Nationwide Permit under Section 404, and Section 401 Water Quality Certification
- Conformance with Executive Orders on Environmental Justice (12898), Wetlands (11990), Floodplain Management (11988), Migratory Birds (13186), and Invasive Species (13112)
- National Historic Preservation Act Section 106
- Endangered Species Act Section 7
- Other applicable Local, Federal, and State regulations

Anticipated Environmental Impacts

- Air quality
- Aquatics
- Botany
- Climate change and Greenhouse gases
- Cultural resources
- Emergency planning
- Floodplains
- Geology and groundwater
- Land use
- Noise and vibration
- Soil erosion and surface water
- Socioeconomics and environmental justice
- Threatened and endangered species
- Transportation
- Visual
- Waste
- Wetlands
- Wildlife

Measures to avoid, minimize, and mitigate adverse effects will be identified and evaluated in the EIS.

EIS Schedule

Comments received during the scoping period will be included in a Scoping Report and will be reviewed and considered during development of the Draft EIS. The scoping report will summarize public and agency comments received and identify an updated schedule for completing the EIS. The scoping report will be available at www.tva.com/NEPA.

INITIATIVE	MAY	JUNE	JULY	Late 2023	Early 2024	Mid-2024	Late 2024	Early 2025	Mid 2025
Publication of Notice of Intent in the Federal Register and Public Scoping Period		■							
Prepare and Publish Scoping Report			■						
Develop Draft EIS				■	■	■			
Publish Draft EIS							■		
Public Comment Period and Public Meeting							■		
Develop Final EIS								■	
Publish Final EIS									■
Publish Record of Decision in the Federal Register									■

Following completion of the environmental analysis, TVA will post a Draft EIS for public review and comment on the project web page. TVA anticipates holding a public open house after releasing the Draft EIS. Open house details will be posted on TVA's website in conjunction with the Draft EIS. TVA expects to release the Draft EIS in 2024, a Final EIS in 2025, and a Record of Decision at least 30-days after the release of the Final EIS.

How to Submit Comments

TVA invites public comments on the scope of the EIS, alternatives being considered, and environmental issues that should be addressed as a part of this EIS. Federal, state, local agencies, and Native American Tribes are also invited to provide comments.

TVA recommends electronic comment submissions to ensure their timely review and consideration.

Please note that any comments received, including names and addresses, will become part of the project administrative record and will be available for public inspection.

Comments are encouraged and must be submitted or postmarked no later than June 27, 2023.



online at www.tva.com/NEPA



email to nepa@tva.gov



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