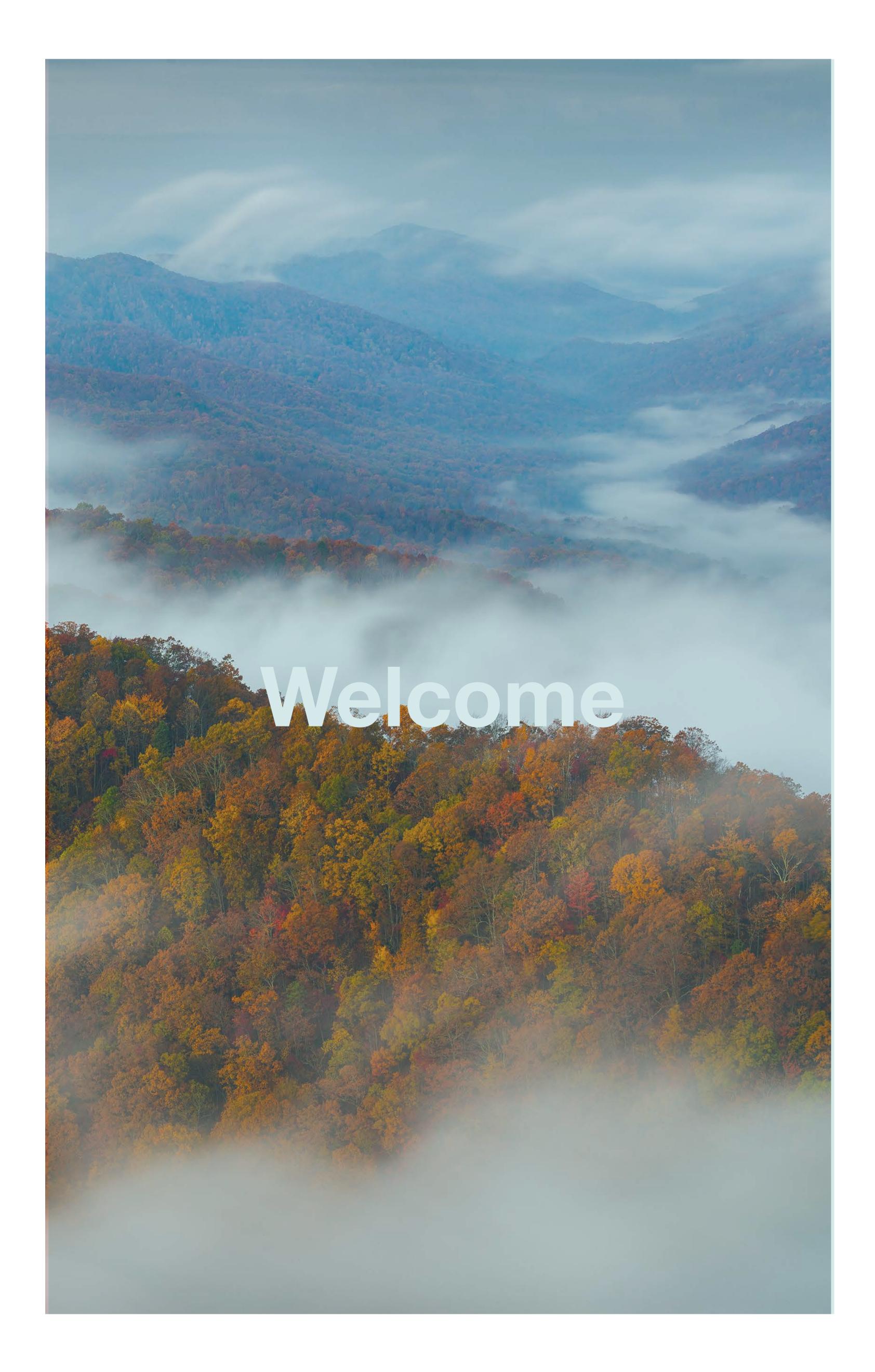
# Welcome

### Public Open Houses Kingston Fossil Plant Retirement Draft Environmental Impact Statement

The purpose of this meeting is to inform the public that TVA has published a Draft Environmental Impact Statement (EIS) for the retirement of the Kingston Fossil Plant (KIF) and construction and operation of facilities to replace the retired generation.

TVA is collecting comments on the Draft EIS from the public between May 19 and July 3, 2023. We want your feedback and comments on issues, questions and concerns related to the proposed project. TVA will not make a decision on the retirement or replacement capacity until the completion of the environmental review.

In addition to two in-person Open Houses, TVA is also hosting a virtual public meeting. We thank you for your interest and hope you enjoy your time with us.



#### WELCOME BOARD



# Project Purpose & Need

TVA's 2019 Integrated Resource Plan (IRP) 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's recent evaluations confirm that the aging coal fleet is among the oldest in the nation and KIF is experiencing deterioration of material condition and performance challenges.

Based on these evaluations, TVA has developed planning assumptions for KIF retirement. TVA proposes to retire all nine units by the end of 2027, and to provide replacement generation that can supply at least 1,500 MW of firm, dispatchable power that accounts for modest load growth. The replacement gerneration would need to be online prior to retirement of the KIF coal units.

The need for the Proposed Action is to ensure that TVA continues to meet the required year-round generation, maximum capacity system demands and planning reserve margin targets, particularly during peak load events; and to provide voltage transmission system support to the local area to maintain overall system stability and reliability.

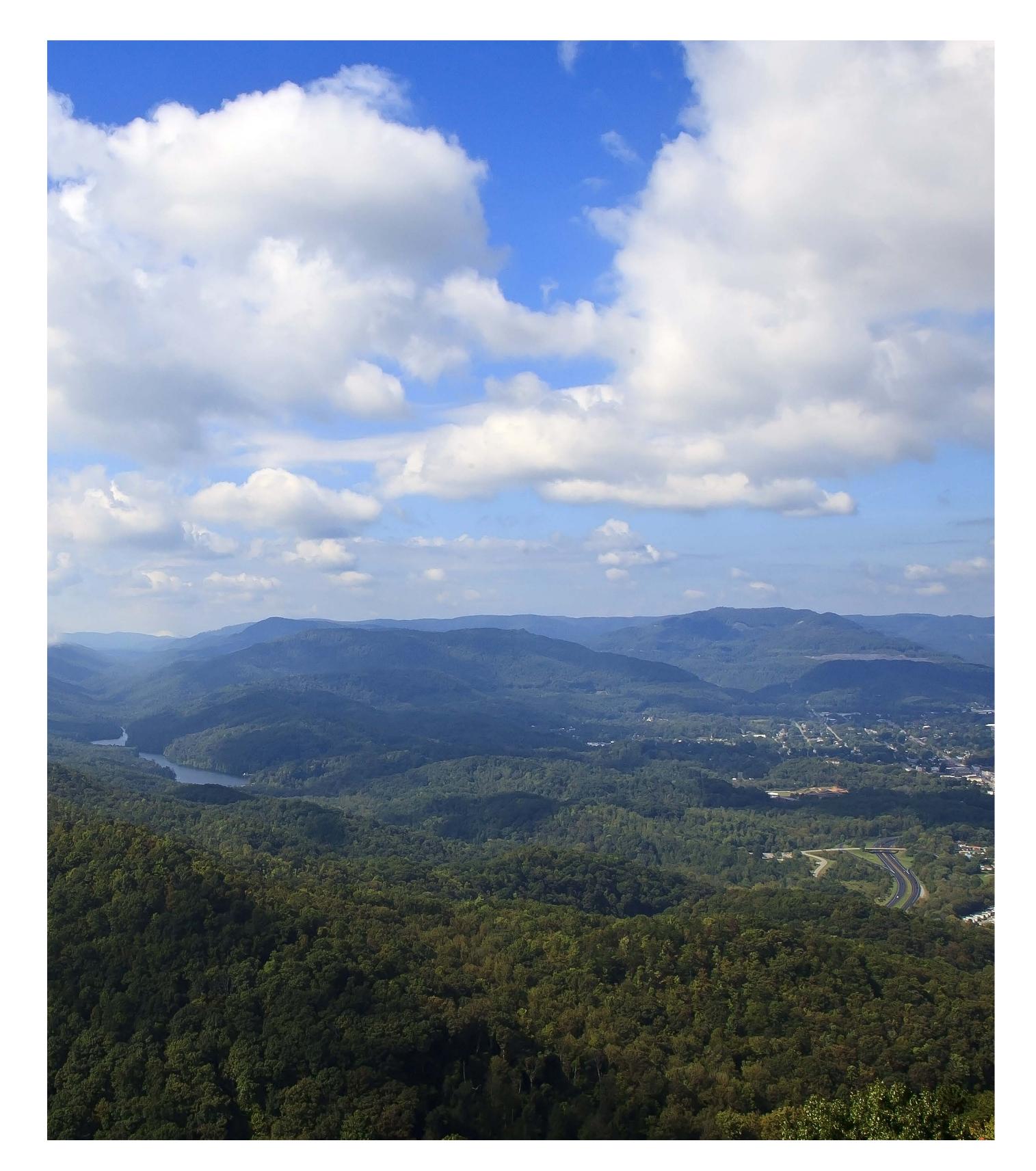


#### PROJECT PURPOSE & NEED



# **Project Alternatives**

The Draft EIS includes various alternatives in addition to the no action alternative (continuing to operate KIF). TVA has evaluated two action alternatives in the Draft EIS.



For each action alternative, the EIS will also analyze the demolition of the KIF plant. Related actions, such as the natural gas pipeline and transmission upgrades as necessary for any particular alternative, will also be considered in this assessment.

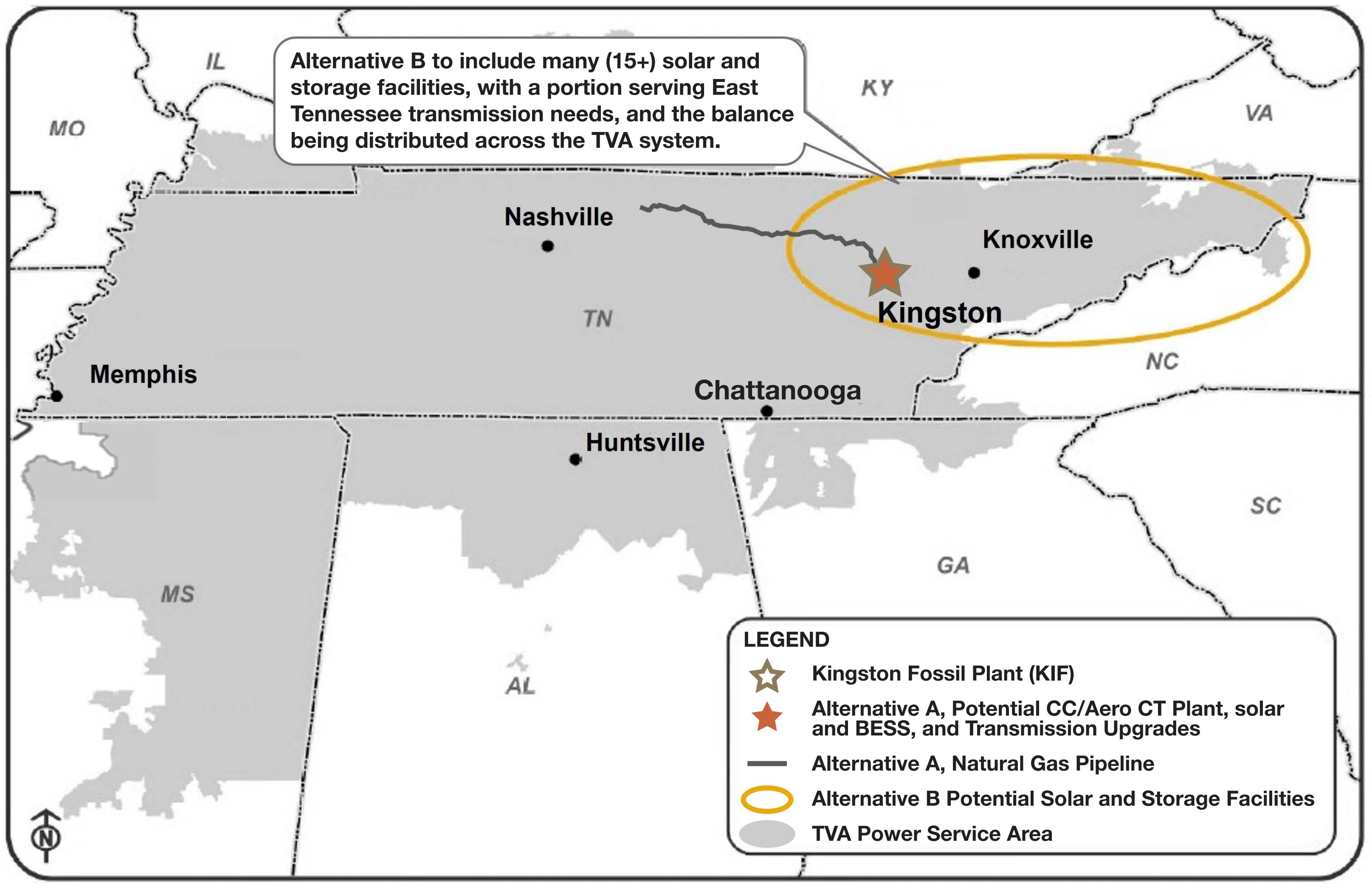


The construction of the natural gas pipeline under Alternative A would be subject to Federal Energy Regulatory Commission (FERC) jurisdiction and additional review will be undertaken by FERC in accordance with its own National Environmental Policy Act (NEPA) procedures.

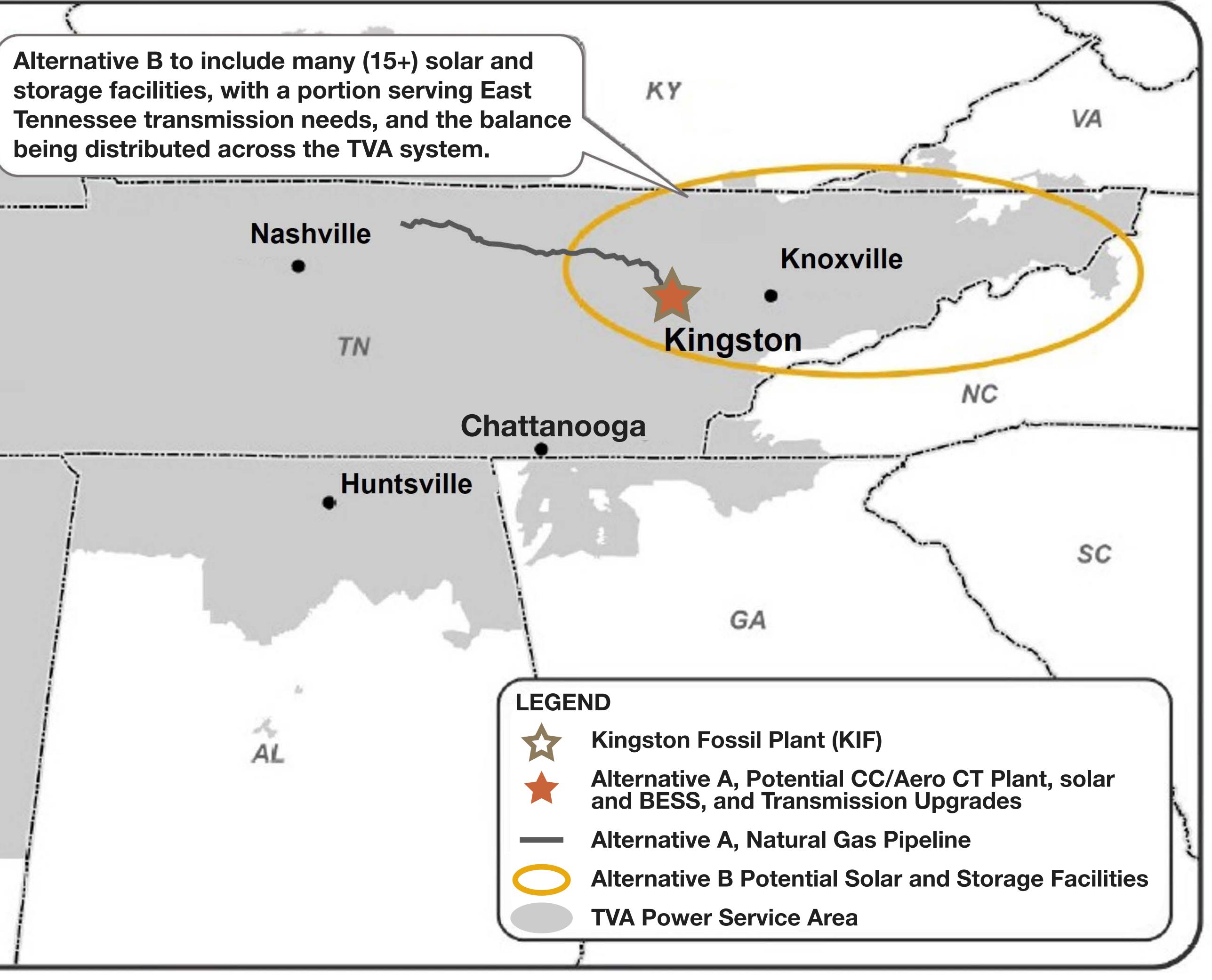
Retirement of KIF, construction and operation of a single gas-fired combined cycle combustion turbine (CC) gas plant paired with 16 dual-fuel Aeroderivative (Aero) combustion turbines (CT) gas plant, a 3-4 MW solar site, and a 100-MW battery storage site at the Kingston Reservation.

Retirement of KIF and construction and operation of multiple solar (15+) and battery energy storage system (BESS) facilities, with a portion to be located at alternate locations in East Tennessee, along with additional investments in local and regional transmission.

TENNESSEE VALLEY AUTHORITY







#### PROJECT ALTERNATIVES



# Summary and Comparison of Alternatives by Resource

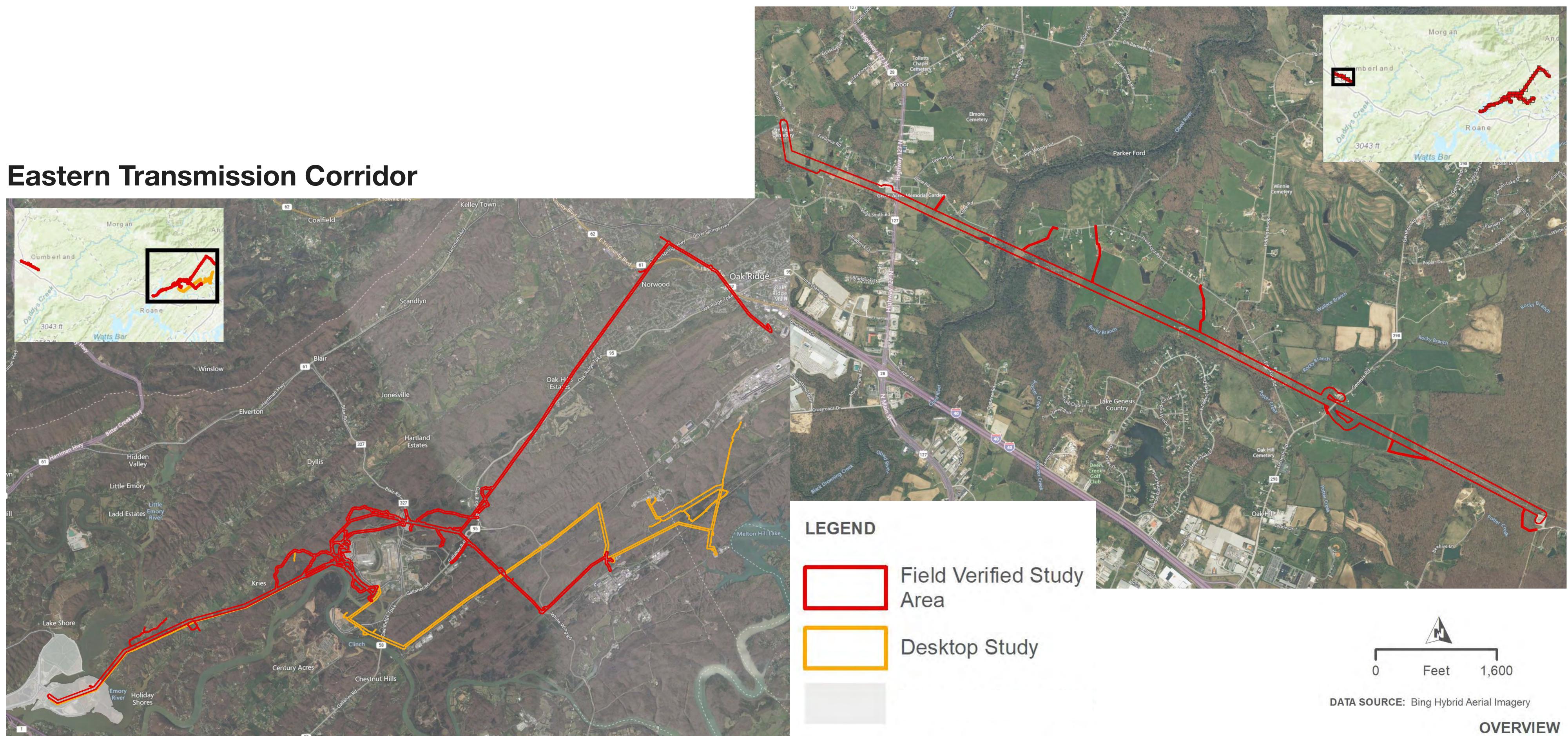
Resource Area	No Action Alternative
<b>Environmental Justice</b>	No Amplified Effects
Land Use	No Effects
Geology	No Effects
Soils	No Effects
Prime Farmland	No Effects
Floodplains	No Effects
Water Resources	No Effects
<b>Biological Resources</b>	No Effects
Natural Areas, Parks, and Recreation	No Effects
Noise	No Effects
Visual	No Effects
Air Quality and GHGs	No Effects
<b>Regional Climate</b>	No Effects
Cultural Resources	No Effects
Utilities	Permanent & Moderate Effects
Waste Management	No Effects
Public Health and Safety	No Effects
Transportation	No Effects
Socioeconomics	No Effects

	Alternative A				
	Retirement and Demolition of KIF Plant (All Action Alternatives)	TVA Actions on Kingston Reservation and Transmission Line Upgrades	Natural Gas Pipeline and Associated Structures		
cts	Permanent, Minor Amplified Effects		Minor amplified indirect effects may occur to subsistence uses from construction activities. Minor and permanent effects may occur from forest and land use conversion.		
	Temporary & Minor Effects	Permanent, Moderate Effects.	Temporary and Permanent, Minor to Moderate, Amplified Effects.		
	Minor Effects	Minor Effects	Minor Effects		
	Temporary & Minor Effects	Permanent, Minor to Moderate Effects (Construction). Temporary, Minor Effects			
	No Effect	No Effects	Minor Effects		
	Minor Effects	Minor Temporary Effects (Construction) & Minor Perma- nent Effects (if Battery Site 1 Selected).	Temporary, Minor Effects		
	Temporary and Minor Effects (Sur- face and Groundwater). Long-term Beneficial Effect (Water Quality).	Minor Beneficial Effects (Groundwater). Temporary & Per- manent Minor Effects (surface waters, wetlands, and groundwater), minized with appropriate BMPs or mitigated.	Temporary and Permanent Minor Effects		
	Temporary and Minor Effects.	Temporary and permanent moderate effects (construction). Periodic minor effects possible to threatened and endangered species (habitat loss/conversion), would be minized with appropriate BMPs or mitigated.	Potential Temporary & Permanent Minor & Moderate Effects (Construction).		
	Temporary and Minor Effects (Demolition). Minor Effects (Recreation on Kingston Reservation).	Temporary and minor effects (Recreation on surface waters adjacent to Kingston Reservation (construction). Long-term, minor beneficial effects after completion (recreational access). Permanent and moderate effects from conversion of forested area to maintained open space where the Eastern Transmission Corridors intersect natural and recreational areas.	Temporary, Minor to Moderate Effects.		
	Temporary, Minor Effects (D4).	Temporary, Minor Effects (Construction). Temporary, Minor Effects (Construction).			
	Temporary, Minor Effects (demolition). Permanent, Beneficial Effects (viewshed).	Long-Term Effects (Vegetation/Forest Clearning), to be Minimized or Mitigated where Required. Permanent, Moderate E veground Structures), to or Mitigated Where Req			
	Temporary, Minor Effects (construc- tion). Permanent, Beneficial Effects.	Temporary, Minor Effects (Construction). Permanent, Beneficial Effects.	Temporary, Minor Effects (Construction). Permanent, Beneficial Effects.		
	No Effects		Minor Adverse Effects, with Permanent, Beneficial Effects on Regional Climate		
	No Effects	No Effects (Historical Archite Consultation and Appropriate be Coordinated with SHPO, Identified Archaeological Res be Avoided by Construction			
	Permanent Effects (Buried Utilities)	Long-term, Minor Beneficial Effects. Long-term, Minor Benefic			
	Temporary, Minor Effects During Demolition Activities		Temporary & Minor Effect (Construction). Moderate effect may occur from solar in- frastructure for end-of-life disposal.		
	Minor, Temporary Effects. Permanent Beneficial Effects.		Minor, Temporary Effects (Construction). Permanent Beneficial Effect (Air Quality)		
	Minor, Temporary Effects		Minor, Temporary Effect (Construction).		
	Minor, Temporary Effects	rary Effects Minor, Temporary Effect. Minor, Temporary Effect.			

Alternatives Summary and Comparison

'Ce	Area
	Alternative B
e and res	Solar and BESS
nay occur to on activities. y occur from	Temporary and Permanent, Minor to Moderate, Amplified Effects.
/linor to	Temporary and Permanent, Minor to Moderate, Amplified Effects. Minor Effects
	Moderate Effects
	Moderate Effects
	Temporary, Minor Effects
	Minor to Moderate Effects
nent Minor ction).	Temporary, Minor Effects
e Effects.	No Effects
	Temporary, Minor Effects (Construction).
s (Abo- Minimized	Temporary, Minor Effects (Construction). Moderate Effects Post-Construction De- pending on Original Character of the Sites.
onstruction). S.	Temporary, Minor Effects (Construction). Permanent, Beneficial Effects.
Permanent, al Climate	Minor Adverse Effects, with Permament, Beneficial Effects on Regional Climate.
al Resources). igation would equired, if ces Cannot /ities.	No Effects, if Significant Cultural Resources can be Avoided in Site Selection.
Effects.	Temporary and Minor Effects. Permanent Beneficial Effects.
onstruction). om solar in- sposal.	Temporary & Minor Effect (Construction). Moderate Effect (End-of-Life Disposal for Potentially Hazardous Infrastructure).
nstruction). Air Quality)	Minor, Temporary Effects (Construction)
	Minor, Temporary Effects (Construction)
	Minor to Moderate, Temporary and Permanent Beneficial Effects.

### Alternative A Proposed Off-site Transmission Upgrades



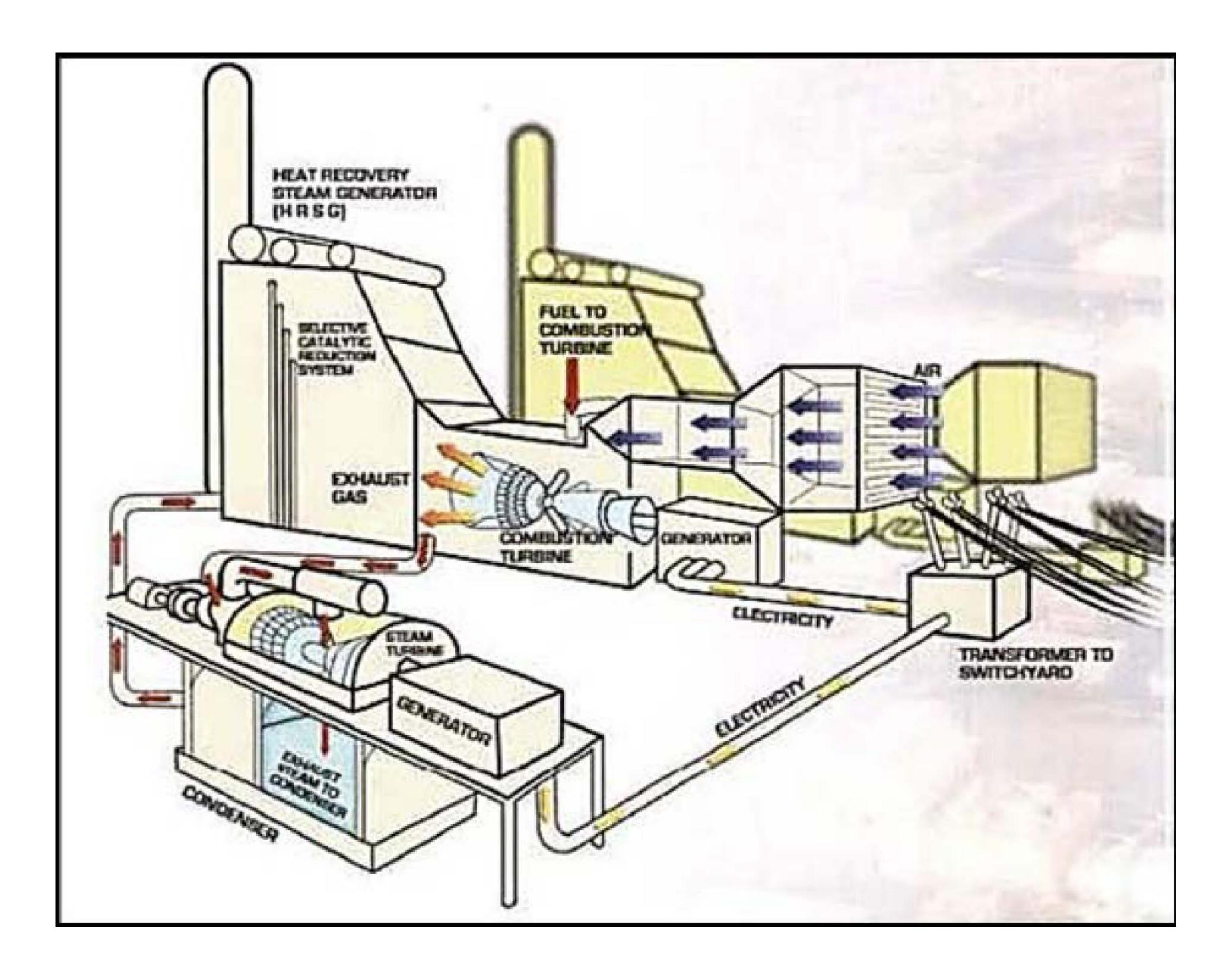


#### ALTERNATIVE A: TVA ACTIONS

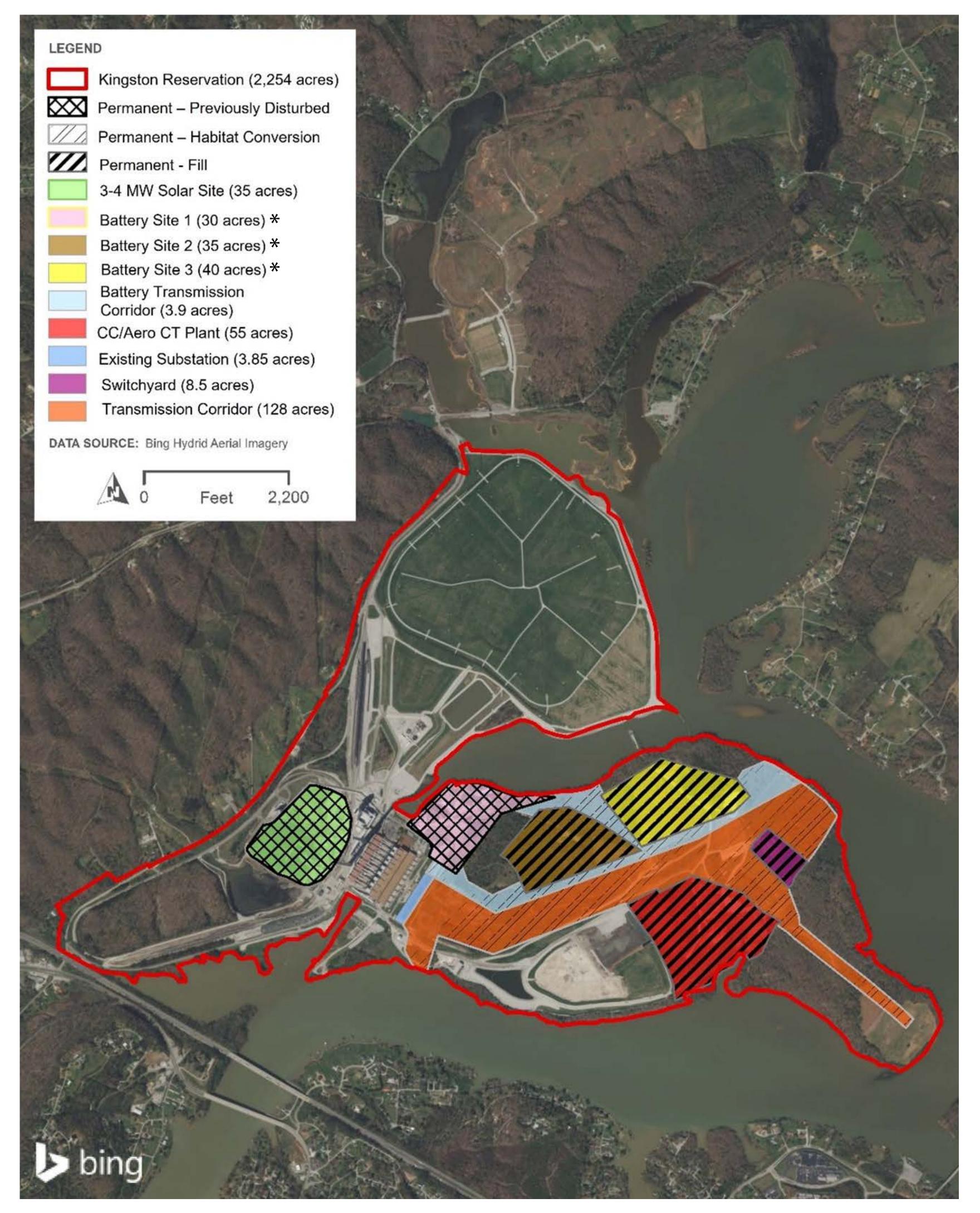




# Alternative A **Kingston Reservation Impacts**



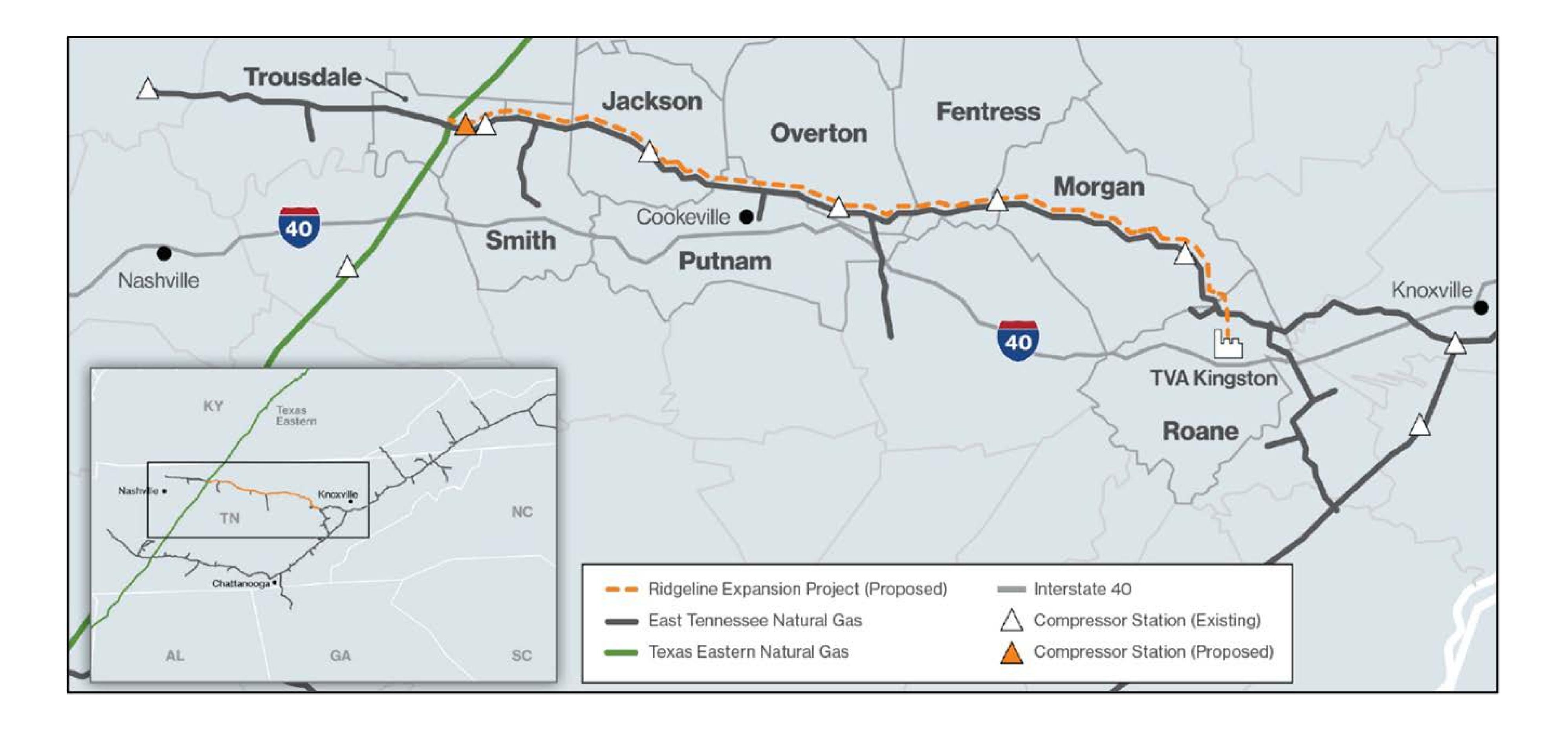
### **Illustration of a Typical Combined Cycle Plant**



\*One Battery Site would be selected from the three sites identified.



### Alternative A East Tennessee Natural Gas Actions

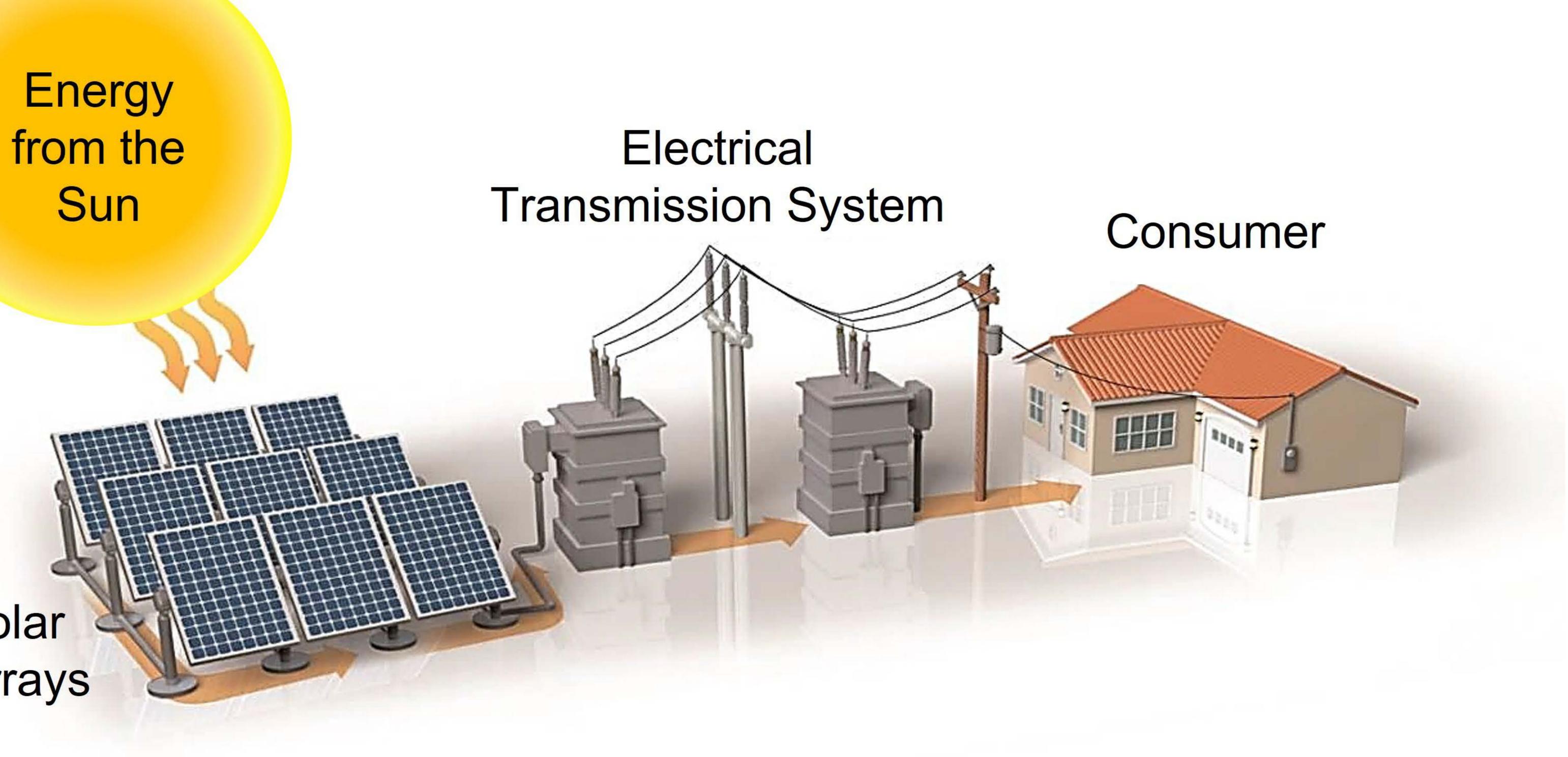


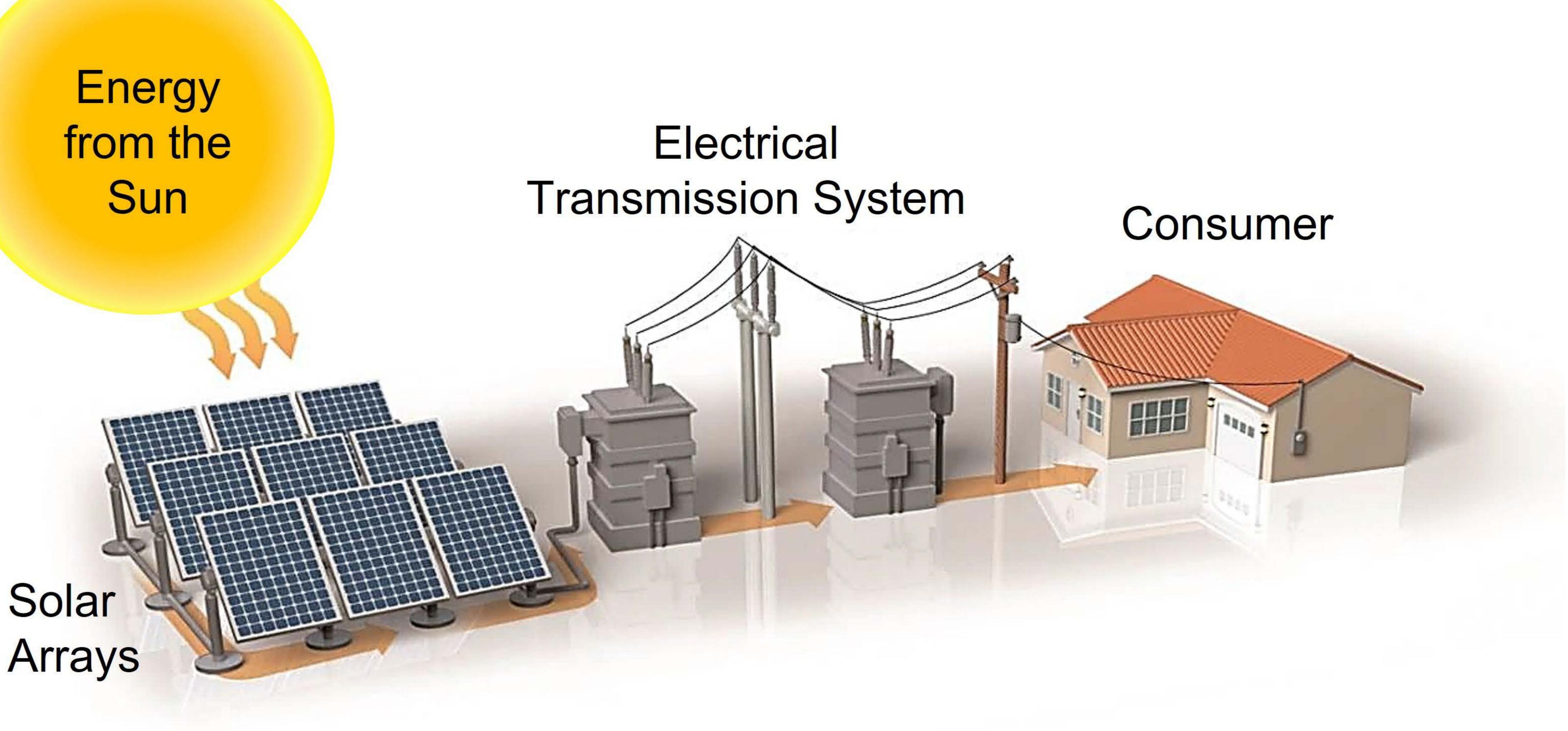


#### ALTERNATIVE A: EAST TENNESSEE NATURAL GAS ACTIONS



# **Alternative B: Illustration of Typical Solar Installation**



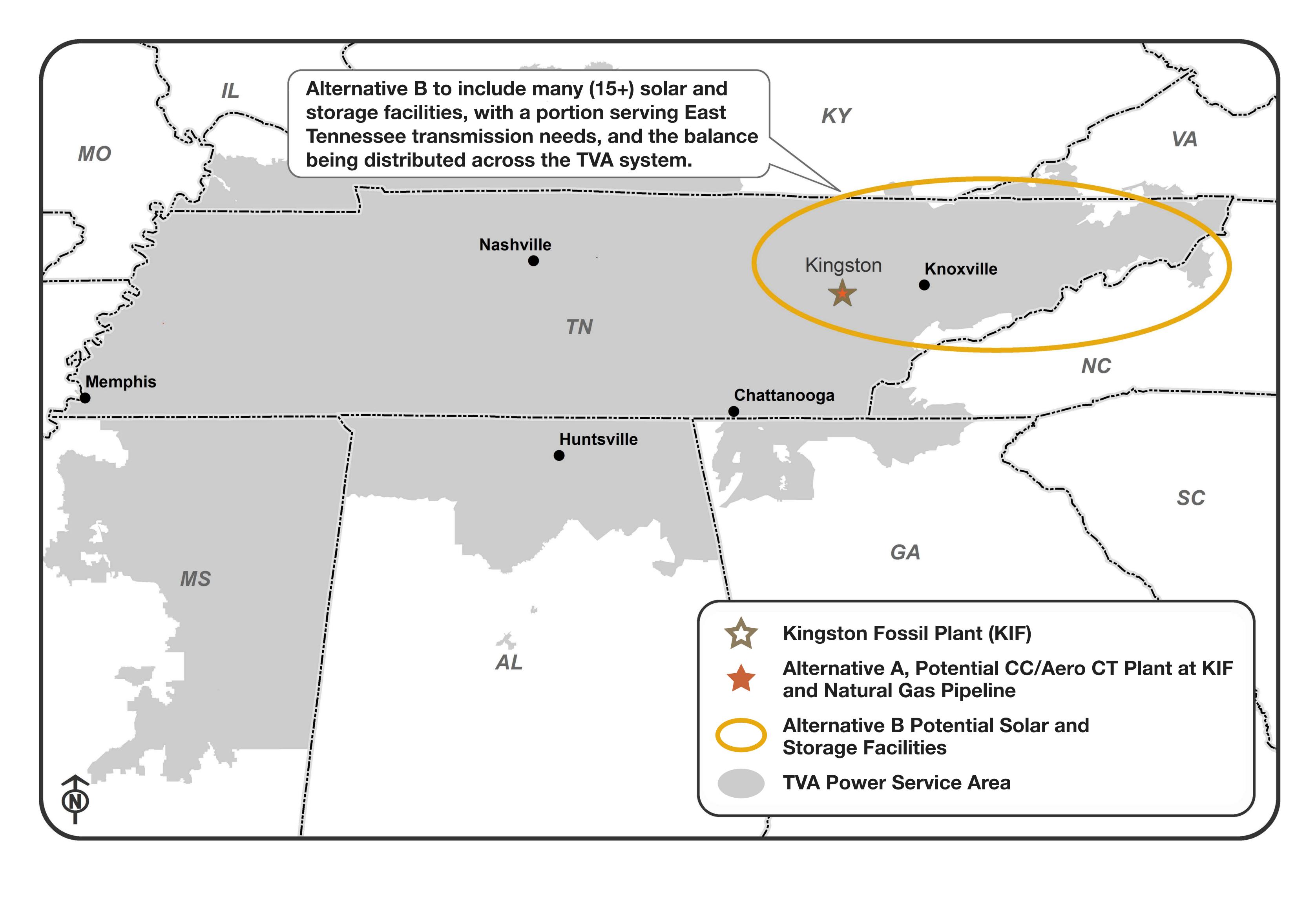








# **Alternative B Map**



#### ALTERNATIVE B MAP



# Alternative B: Retire KIF and Construct Solar & BESS

Retirement of KIF by the end of 2027, with demolition to follow.

Construction and operation of multiple (15+) solar (1,500 MW) and BESS (2,200 MW) to replace the generation and capacity of the KIF units and to account for future load growth.

Alternative uses desktop-level site analysis and assumes procurement via competitive request for proposal (RFP) process with a power purchase agreement (PPA) structure\*, subject to site-specific NEPA review

It is anticipated that a portion of the solar facilities would need to be located in East Tennessee for regional grid support, with the balance located elsewhere in the Valley

Approximately 10,950 acres would be needed to support the potential Solar sites and between 550 and 825 acres would be required for the potential BESS sites.

Extensive transmission upgrades would be required to support Northeast TN, which is estimated to take approximately 8 years to implement.

\*If this alternative is selected a portion of these facilities could be TVA constructed and operated as well, subject to site-specific NEPA review.

#### Alternative B: Retire KIF and Construct Solar & BESS







# **Proposed NEPA Schedule**

### KINGSTON INITIATIVE

Publication of Notice of Intent in Federal Register — June 15, 2021

**Public Scoping Period** June 15 – July 15, 2021

Prepare & Publish Scoping Repor

**Development of Draft EIS** 

Publish Draft EIS Notice of Availability — May 19, 202



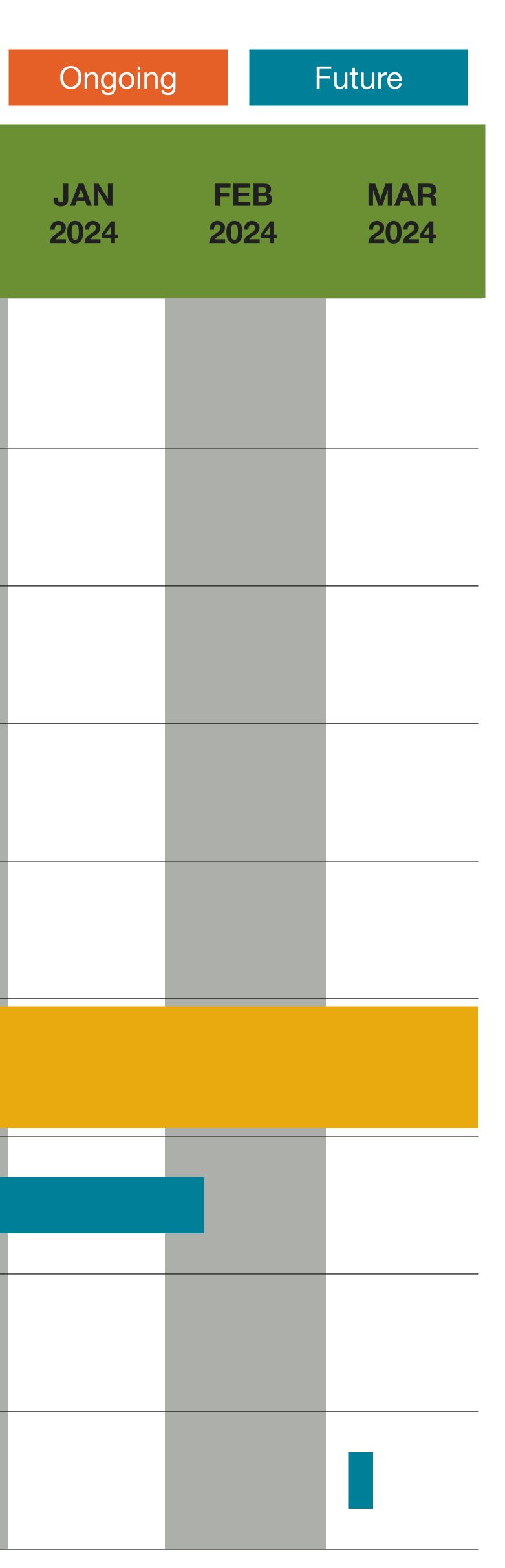
Finalize EIS and Issue to Public & EPA

**30-Day Minimum Waiting Period** Final EIS Review

Signature of Record of Decision

								Co	mplete
	<b>JUNE</b> 2021	JULY 2021	AUG 2021	LATE 2021	EARLY 2022	LATE 2022	EARLY 2023	<b>MID</b> 2023	LATE 2023
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#### PROJECT SCHEDULE





# NEPA

### The National Environmental Policy Act

The National Environmental Policy Act (NEPA) requires the identification and analysis of potential environmental effects of proposed federal actions and alternatives before those actions take place.

TVA is preparing an Environmental Impact Statement (EIS) to assess the impacts associated with the proposed retirement of the nine coal-fired units at KIF and the construction and operation of facilities to replace the retired generation.

Public involvement is integral to the federal decision-making process and is required by NEPA. The intent of NEPA is to protect, restore, or enhance the environment through well-informed federal decisions.

### Why does TVA want to hear from me regarding this project?

Choosing to retire coal assets is not an easy decision. They way that TVA generates power affects you. This environmental review process gives the public and other local, state and federal stakeholders the opportunity to provide input to a plan or project before it is executed. The results of this review, including external feedback and the anticipated environmental and socioeconomic impacts associated with the action, are then considered by TVA in making a final decision.

### How do I learn more and provide TVA my comments?

TVA is collecting comments from the public between May 19 and July 3, 2023 and we want your feedback and comments on issues, questions and concerns related to the proposed project. You may submit comments online at www.tva.gov/nepa, or by email at nepa@tva.gov, by mail to 1101 Market Street, BR 2C-C, Chattanooga, TN 37402, or in-person at one of our upcoming events:

Thursday, June 8, 2023, from 6:30 – 8:00 pm Eastern **Register here: www.tva.gov/nepa** 

Tuesday, June 13, 2023, from 6:30 – 8:00 pm Eastern **Rockwood High School** 512 W. Rockwood St., Rockwood, TN

Wednesday, June 14, 2023, from 6:30 – 8:00 pm Eastern **Kingston Community Center** 201 Patton Ferry Rd., Kingston, TN

#### NEPA



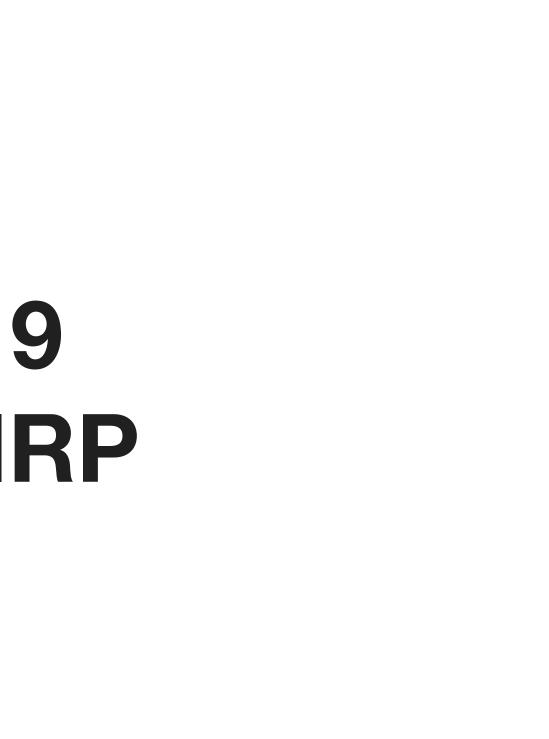
# **Additional Resources**

### Thank you for visiting the Kingston Fossil Draft EIS Plant Virtual Meeting Room. Please use the links below for related information on the project.

### **Federal Register Notice of Availability**



2019 **TVA IRP** 



**400 WEST SUMMIT HILL DRIVE KNOXVILLE, TN 37902** 

ADDITIONAL RESOURCES

### **TVA Webpage for KIF Retirement**



## Leave a Comment

### Click the icon button below to leave a comment.

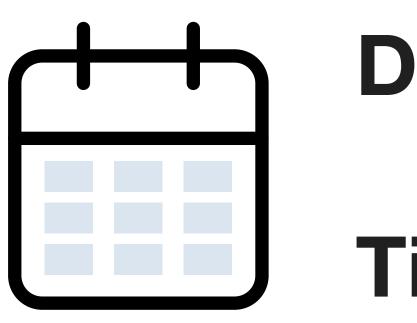


#### LEAVE A COMMENT

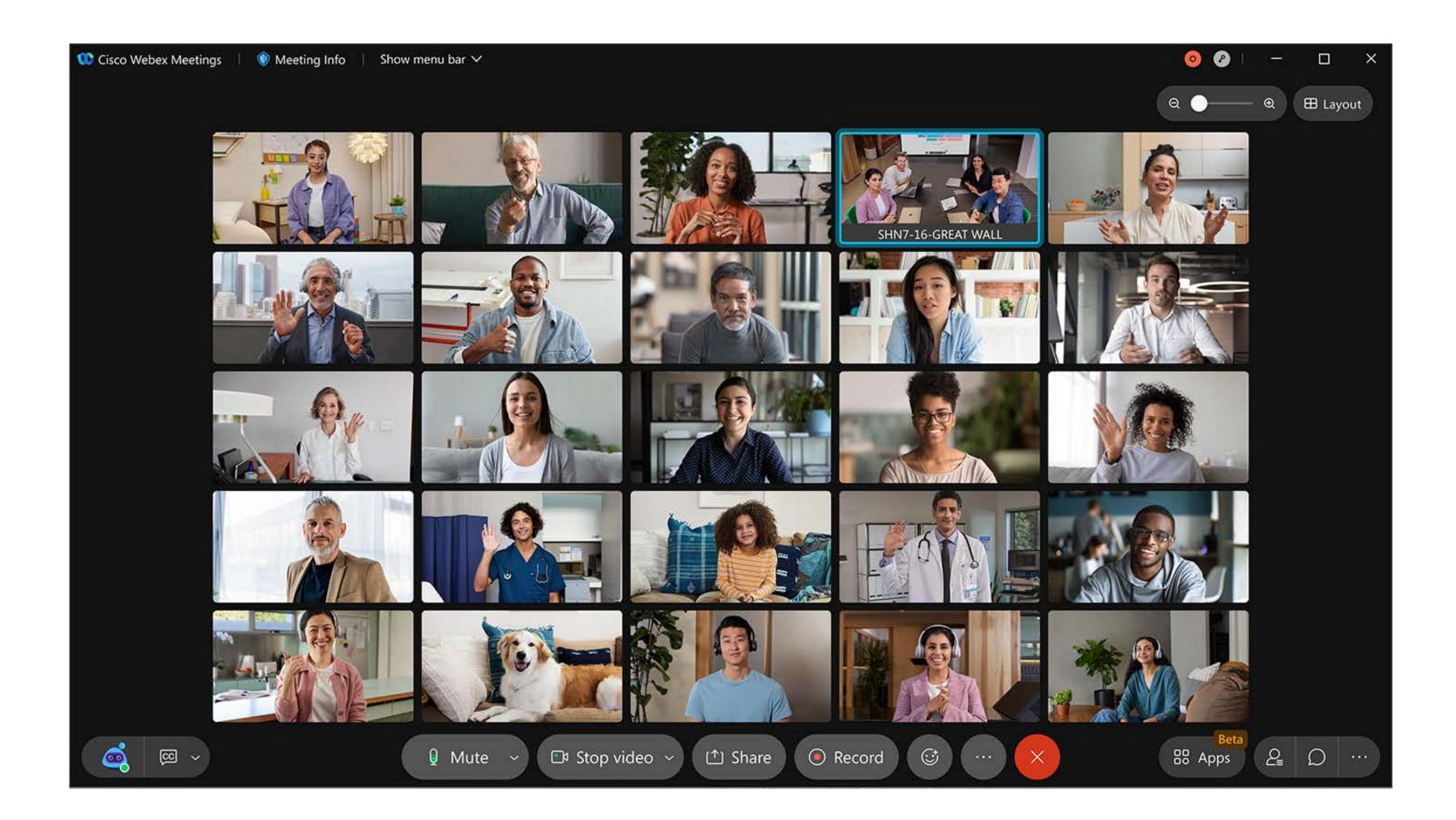


# Virtual Public Meeting Agenda

TVA wants your feedback and comments on issues, questions and concerns related to the proposed project. This information session is an opportunity for the public to learn more about the project and how to provide formal comment.







### **Date:** Thursday, June 8

### Time: 6:30pm to 8:00pm EDT

TIME	A
	Welcome and Intro
<section-header></section-header>	Navigating Cisco W
	Project Overview, Ir Need and Project A
approx. 20 minutes	NEPA Overview
	Proposed NEPA Sc
	How to Provide Co
	Virtual Meeting Roc
approx. 45 minutes	Q&A

PUBLIC MEETING AGENDA

ACTIVITY

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**Nebex** 

Introduction, Purpose and Alternatives

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om Demonstration

