



REQUEST FOR INFORMATION
NATURAL GAS NEEDS ASSESSMENT FOR TENNESSEE

July 25, 2022

Purpose:

The Tennessee State Energy Policy Council (SEPC) issues this Request for Information to solicit input regarding the scope of a comprehensive natural gas needs assessment for the state.

Background:

A recent report commissioned by the SEPC has identified current and anticipated natural gas capacity constraints for regions of the state, in addition to issues related to significant variation in natural gas prices for end-users. Accurately assessing the impact of these issues and developing mitigation strategies is important to the state's economic security and development. The SEPC seeks input from qualified vendors regarding the scope of research to address these issues and determine whether there is interest in responding to a possible future request for proposals.

Contact Information:

Please submit a response to this Request for Information to Dr. Matthew N. Murray, Howard H. Baker Jr. Center for Public Policy, The University of Tennessee, mmurray1@utk.edu by August 31, 2022.

NATURAL GAS NEEDS ASSESSMENT FOR TENNESSEE

A REQUEST FOR INFORMATION

ISSUED BY THE TENNESSEE STATE ENERGY POLICY COUNCIL

JULY 25, 2022

Introduction

As energy sector transitions continue, reliance on natural gas has grown across the U.S. In Tennessee growth in the use of natural gas has been used to meet the needs of utilities, industry, agriculture, households and the transportation sector. Growing reliance on natural gas means that ensuring adequate, safe, stable and competitively-priced natural gas supplies is increasingly important to the state's economic security and economic development prospects both today and in the future.

The [Tennessee State Energy Policy Council \(SEPC\)](#) was established by an act of the Tennessee General Assembly to provide ongoing recommendations to the Governor and General Assembly regarding energy policy. Concerns regarding natural gas supply capacity in the state and potential future impacts on energy security and economic development motivated the SEPC to commission a preliminary inquiry.¹

A particularly salient finding of the referenced report is that natural gas supplies in the eastern-middle and eastern portions of the state are currently constrained by pipeline capacity, leading to mounting concerns regarding the adequacy and reliability of future supplies for economic expansion. No major investments in pipeline capacity are being planned today to meet these broad-based needs. Concerns also surfaced regarding high natural gas prices in some parts of the state that may hamper future economic development. The SEPC views these concerns as sufficient to motivate further inquiry into the problem and identify potential solutions.

This **Request for Information** (RFI) is intended to solicit input regarding a comprehensive natural gas needs assessment for the state of Tennessee. *The SEPC seeks qualified vendors that can provide an assessment of the scope of current and future natural gas supply challenges confronting Tennessee and policies that might be deployed to improve market outcomes for end-users. The SEPC is also seeking information on the cost and timing of such an assessment.* Additional details on the scope of the RFI are provided below.

¹ Matthew N. Murray. *Energy Security Planning: Ensuring Natural Gas Capacity to Meet Tennessee's Economic Development Needs*. Prepared for the Tennessee State Energy Policy Council, March 29, 2022. Available at https://comptroller.tn.gov/content/dam/cot/energy-policy-council/documents/SEPC_Natural_Gas_Report_final_22.pdf

Problem Statement

Natural gas use in Tennessee has risen at a more rapid pace than overall energy use, driven in part by strong growth in industrial applications and centralized power generation.² Relatively attractive natural gas commodity prices driven by increased national supplies have helped fuel the growth in use. The state economy continues to rely heavily on industry as an engine of economic development, with manufacturing accounting for 11.3 percent of all jobs in the state in 2021 compared to 8.5 percent nationally.³ Ensuring adequate natural gas supplies and competitive prices is therefore important to sustaining and increasing industrial activity in Tennessee. A diminished environmental footprint compared to coal has contributed to the increased use of natural gas in power generation to meet baseload demand. Meeting the needs of the power sector also requires adequate and competitively-priced natural gas. Other user groups, including residential households and the agricultural sector, depend heavily on the availability of natural gas supplies.

Unfortunately, Tennessee produces an inconsequential amount of natural gas for its own use. As such, the state is a significant net importer of natural gas and must rely on the privately-held interstate and intrastate pipeline distribution system to ship the commodity to end-users. The interstate system is currently strained because of natural gas shipments to support LNG exports and the absence of significant new transmission capacity. The distribution system in Tennessee, like the national system, has not seen major capacity upgrades in many years.

Several major north-south interstate pipelines traverse the western and central portion of the state providing in-state supply capacity. Lateral lines connect these systems to pipelines held by East Tennessee Natural Gas (ETNG), which moves the gas to the eastern portion of the state; limited supply capacity external to Tennessee supports the east Tennessee ETNG system.

To assess the nature and magnitude of concerns regarding supply capacity and other factors, the report commissioned by the SEPC conducted a survey of local natural gas distributors across the state undertaken through the Tennessee Gas Association. Complementing this survey was an extensive series of interviews with a wide array of experts and stakeholders, including natural gas industry professionals and economic development practitioners.

The most important finding that emerged from this research is that the current natural gas supply capacity along the ETNG pipeline is constrained and does not have an ability to support significant new growth, especially for large industrial users of natural gas. Concerns were noted in other parts of the state regarding the future capacity of the pipeline distribution system to meet increasing demand. Evidence surfaced indicating the presence of significant end-user price differentials, largely driven by commodity transportation charges. Supply stability and increased supply interruptions were identified as growing problems. Pipeline safety was not identified as a current problem.

In response to these findings, the primary recommendation of the SEPC report was to support and enable a comprehensive natural gas needs assessment for the state. Such an assessment requires extensive expertise and the perspective of industry specialists who understand natural gas markets and

² Murray, 2022, pp. 3.

³ Lawrence M. Kessler, et. Al, *An Economic Report to the Governor of the State of Tennessee*, Boyd Center for Business and Economic Research, the University of Tennessee, Appendix Table 1. Available at <https://haslam.utk.edu/wp-content/uploads/2021/12/ERG2022.pdf>

pricing, factors affecting end-user demand, the system of interstate and intrastate natural gas pipelines, and market and policy mechanisms that can affect natural gas market outcomes (i.e., supply and prices).

Request for Information

This RFI is closely linked to the report commissioned by the SEPC, so respondents should be familiar with its scope and recommendations. The SEPC is especially interested in a detailed assessment of how vendors would address four facets of the supply challenge confronting the state, as well as estimated project cost. In scoping such a program of work, respondents are encouraged to consider other issues that may be important to understanding the nature of natural gas constraints and possible remedies and mitigation strategies; any such issues should be clearly identified. Required elements of a submission include:

- *Current and future natural gas needs.* Assessment of natural gas demand and needs in Tennessee, including projections for the future, for the state as a whole and for broad regions. Consider different end-user sectors and needs by region of the state.
- *Capacity to meet projected needs by natural gas suppliers and shippers.* Evaluation of the supply side of the natural gas market in Tennessee, including the intrastate and interstate pipeline distribution system to identify current and future supply constraints. The evaluation should be informed by market and policy trends affecting the national market for natural gas.
- *Natural gas price disparities.* Assessment of natural gas price disparities across regions and customer classes in the state and a discussion of how these might change with increased supply capacity and any other market interventions.
- *Public/private policy options.* Discussion of policy options to address possible paths forward to ensure adequate, safe, stable and competitively-priced natural gas for Tennessee, including key strengths and weaknesses of alternatives.
- *Project cost and timing.* Estimated cost to conduct the needs assessment and the required time to fully complete the project.

The SEPC will evaluate all submissions and use this information to make a funding proposal to key stakeholders, including the State of Tennessee, local natural gas utilities and other key parties. This process will be managed and coordinated by the Howard H. Baker Jr. Center for Public Policy at the University of Tennessee. The intent is to secure funding that could enable the SEPC to commission a comprehensive natural gas needs assessment in fiscal year 2023. A formal request for proposals will be released when funding for the assessment is guaranteed and secured.

Respondents to this RFI should discuss how they would address the points raised above in a document not to exceed 15 pages, single-spaced. Respondents should also provide documentation of their credentials for providing a possible scope of work. Please submit responses to this RFI to Dr. Matthew N. Murray, Howard Baker Center, mmurray1@utk.edu and include *SEPC RFI* in the subject line. Questions can be directed to Dr. Murray or SEPC Chair, Dr. Joe Hoagland (jjhoagland@tva.gov). All responses to this RFI must be received by August 31, 2022.