Commonwealth of Massachusetts

Executive Office of Environmental Affairs ■ MEPA Office

ENF Environmental Notification Form

For Office Use Only *Executive Office of Environmental Affairs*
EOEA No.: 14202
MEPA Analyst: Nick ZAVOLAS
Phone: 617-626-1030

The information requested on this form must be completed to begin MEPA Review in accordance with the provisions of the Massachusetts Environmental Policy Act, 301 CMR 11.00.

Project Name: **Fitchburg Expansion Project**		
Street: Project crosses Lancaster Avenue, Kilburn Street, Leominster Road, Cross Road, Prospect Street, Elm Street, Hollis Street, West Street, and Electric Street before terminating at the KeySpan gate station located off Pleasant Street.		
Municipality: **Lunenburg**	Watershed: **Nashua River Watershed**	
Universal Tranverse Mercator Coordinates: **277620.29m E; 4713176.14m N**	Latitude: **42.53^0 to 42.58^0** Longitude: **-71.70^0 to -71.77^0**	
Estimated commencement date: **Spring 2009**	Estimated completion date: **Fall 2009**	
Approximate cost: **$10.7 million**	Status of project design: **85**%complete	
Proponent: **Tennessee Gas Pipeline Company**		
Street: **1001 Louisiana Street**		
Municipality: **Houston**	State: **Texas**	Zip Code: **77002**
Name of Contact Person From Whom Copies of this ENF May Be Obtained: **John Zimmer**		
Firm/Agency: **ENSR**	Street: **95 State Road**	
Municipality: **Sagamore Beach**	State: **MA**	Zip Code: **02562**
Phone: **(508)888-3900 x226**	Fax: **(508)888-6689**	E-mail: **jzimmer@ensr.aecom.com**

Does this project meet or exceed a mandatory EIR threshold (see 301 CMR 11.03)? ☒Yes ☐No

Has this project been filed with MEPA before? ☐Yes (EOEA No._____) ☒No

Has any project on this site been filed with MEPA before? ☐Yes (EOEA No._____) ☒No

Is this an Expanded ENF (see 301 CMR 11.05(7)) requesting:

a Single EIR? (see 301 CMR 11.06(8))	☒Yes	☐No
a Special Review Procedure? (see 301CMR 11.09)	☐Yes	☒No
a Waiver of mandatory EIR? (see 301 CMR 11.11)	☒Yes	☐No
a Phase I Waiver? (see 301 CMR 11.11)	☐Yes	☒No

Identify any financial assistance or land transfer from an agency of the Commonwealth, including the agency name and the amount of funding or land area (in acres): None

Are you requesting coordinated review with any other federal, state, regional, or local agency? ☐Yes(Specify_____) ☒No

List Local or Federal Permits and Approvals: FERC Certificate of Public Convenience and Necessity; ACOE 404; Order of Conditions- Lunenburg Conservation Commission

Which ENF or EIR review threshold(s) does the project meet or exceed (see 301 CMR 11.03):

- ☒ Land
- ☐ Water
- ☐ Energy
- ☐ ACEC
- ☐ Rare Species
- ☐ Wastewater
- ☐ Air
- ☐ Regulations
- ☒ Wetlands, Waterways, & Tidelands
- ☐ Transportation
- ☐ Solid & Hazardous Waste
- ☐ Historical & Archaeological Resources

Summary of Project Size & Environmental Impacts	Existing	Change	Total
LAND			
Total site acreage	**65.05**		
New acres of land altered		**55.19**	
Acres of impervious area	**0**	**0**	**0**
Square feet of new bordering vegetated wetlands alteration		**7.78 acres (temporary alteration)**	
Square feet of new other wetland alteration		**0**	
Acres of new non-water dependent use of tidelands or waterways		**0**	
STRUCTURES			
Gross square footage	**0**	**0**	**0**
Number of housing units	**0**	**0**	**0**
Maximum height (in feet)	**0**	**0**	**0**
TRANSPORTATION			
Vehicle trips per day	**0**	**0**	**0**
Parking spaces	**0**	**0**	**0**
WATER/WASTEWATER			
Gallons/day (GPD) of water use	**0**	**0**	**0**
GPD water withdrawal	**0**	**0**	**0**
GPD wastewater generation/ treatment	**0**	**0**	**0**
Length of water/sewer mains (in miles)	**0**	**0**	**0**

State Permits & Approvals

- ☒ Order of Conditions
- ☐ Superseding Order of Conditions
- ☐ Chapter 91 License
- ☒ 401 Water Quality Certification
- ☐ MHD or MDC Access Permit
- ☐ Water Management Act Permit
- ☐ New Source Approval
- ☐ DEP or MWRA Sewer Connection/ Extension Permit
- ☒ Other Permits (*including Legislative Approvals*) – Specify:

CONSERVATION LAND: Will the project involve the conversion of public parkland or other Article 97 public natural resources to any purpose not in accordance with Article 97?

☐Yes (Specify_____) ☒No

Will it involve the release of any conservation restriction, preservation restriction, agricultural preservation restriction, or watershed preservation restriction?

☐Yes (Specify_____) ☒No

RARE SPECIES: Does the project site include Estimated Habitat of Rare Species, Vernal Pools, Priority Sites of Rare Species, or Exemplary Natural Communities?

☐Yes (Specify_____) ☒No

HISTORICAL /ARCHAEOLOGICAL RESOURCES: Does the project site include any structure, site or district listed in the State Register of Historic Place or the inventory of Historic and Archaeological Assets of the Commonwealth?

☐Yes (Specify_____) ☒No

If yes, does the project involve any demolition or destruction of any listed or inventoried historic or archaeological resources?

☐Yes (Specify_____) ☒No

AREAS OF CRITICAL ENVIRONMENTAL CONCERN: Is the project in or adjacent to an Area of Critical Environmental Concern?

☐Yes (Specify_____) ☒No

PROJECT DESCRIPTION: The project description should include **(a)** a description of the project site, **(b)** a description of both on-site and off-site alternatives and the impacts associated with each alternative, and **(c)** potential on-site and off-site mitigation measures for each alternative (*You may attach one additional page, if necessary.*)

Tennessee Gas Pipeline Company ("Tennessee") is filing an application for a *Certificate of Public Convenience and Necessity* with the Federal Energy Regnlatory Commission ("Commission") for the Fitchburg Expansion Project ("the Project") in Worcester Connty, Massachusetts. The proposed Project will include the replacement of approximately 5.1 miles of existing six-inch ontside diameter ("OD") natnral gas pipeline in Lunenbnrg, Massachnsetts. The existing pipeline will be replaced with new 12 inch OD pipeline, and the purpose of this replacement is to deliver new firm volnmes of natural gas (12,300dth/d) to the Devens Regional Economic Zone ("Devens"). The delivery point is at the existing Keyspan Energy Delivery ("Keyspan") gate station located off Pleasant Street in Lnnenburg. The pipeline alignment will ntilize the existing pipeline right-of-way ("ROW") to the greatest extent practicable, thereby minimizing alteration of nndistnrbed areas as well as potential landowner impacts.

Tennessee, a subsidiary of El Paso Corporation and a major supplier of natural gas to ntilities and power generators in the northeast, plans to constrnct the Fitchbnrg Expansion Project to npgrade a portion of its existing Fitchburg Lateral in north-central Massachnsetts. The project wonld provide new natural gas transportation service to Devens to serve residential and commercial growth in Middlesex and Worcester Connties, Massachnsetts. The Project wonld increase Tennessee's natural gas capacity by 12,300 dekatherms per day for Devens, which is enough capacity to power approximately 52,000 homes for one year.

The Project will commence at the existing main linc valve ("MLV") at Prospect Street just east of the intersection with Lancaster Street and will extend in a northerly direction east of Massapoag Pond and Lake Whalom. The pipeline will cross Lancaster Avenue, Kilburu Street, Leominster Road, Cross Road, Prospect Street, Elm Street, Hollis Street, West Street, and Electric Avenue before terminating at the existing KeySpan gate station located off Pleasant Street.

Proposed aboveground facilities for the Project include a pig launcher facility at the existing MLV (Site No. 268A-101A) in Framingham, Massachusetts and a pig receiver facility at the existing KeySpan meter station (MP 5.13) off Pleasant Street in Lunenburg, Massachusetts. The pig launcher will require an area of

approximately 2,200 square feet for construction and operation and is sited within a previously disturbed area. The MLV site is located off Millwood Street and is confined by the roadway to the east and by the parking lot area for Richard Callahan State Park to the north. An abandoned raised-grade railroad bed confines the site to the west / northwest, and an agricultural field borders the site to the south.

Alternatives

Section 3 of the Project Narrative of this Expanded ENF provides a detailed alternative analysis to the Project and includes alternatives such as no-action, energy conservation, energy alternative, and system alternatives including additional compression and looping of Tennessee's existing system.

The majority of the pipeline replacement is located within the existing right of way. This enables the pipeline to be replaced and to deliver larger volumes of gas while minimizing environmental impact to the maximum extent practicable. However, during the review of the existing facilities and design of the pipeline replacement, several route variations have been considered due to land use and development that has occurred within the area subsequent to the initial installation of the pipeline approximately 50 years ago.

System Alternatives

Existing Capacity

No major system alternatives were considered for the Project, because there are no other pipelines that are owned and operated by Tennessee in the area that could provide the required volumes of natural gas without significantly greater environmental impacts. Tennessee does not have the current capacity within its existing system to meet the natural gas service requested by Devens. To meet this new demand, additional capacity must be created through the expansion of Tennessee's existing system and related facilities. The addition of these facilities will allow Tennessee to meet the needs of its existing customers and supply Devens. The Project's alignment optimizes economics and minimizes potential adverse environmental effects to the greatest extent practicable.

Compression

An alternative often used to reduce impacts and cost when expanding systems is to increase or add compression to accommodate a greater volume of gas. To serve the existing system load and provide adequate additional capabilities for KeySpan, Tennessee would be required to add a new mid-point lateral compressor station of approximately 500 HP to achieve the required volumes. The primary purpose of the compression would be to provide adequate delivery pressures to the customers downstream of the compressor station by overcoming the excessive pressure drop caused by the six-inch segment of the existing lateral. Such compression would result in an inefficient fuel burn rate and thus would have negative environmental and fuel conservation effects. Constructing a greenfield compressor station would likewise increase the negative environmental effects by increasing permanent land impacts in the area. Considering the inefficiency, environmental impacts, and the fact the restriction posed by the existing six-inch line would remain, the utilization of compression would not be a viable alternative.

Looping

The primary objective of the Project is to provide additional transportation capacity to Devens for its current service and projected future growth in the region. Tennessee's existing Fitchburg Lateral system, as currently designed, does not have the capacity to achieve the primary purpose of the Project. Tennessee has considered the installation of a new, approximately five mile, 12-inch diameter loop pipeline adjacent to the existing pipeline facilities to provide the necessary service to Devens. Constructing this new pipeline would require new right-of-way along the entire length for both construction and operation and would result in new and greater impacts to the environment. Due to these factors, this system alternative was determined to be unacceptable.

Replacing 10-inch with 16-inch Diameter Pipeline

Tennessee examined replacing 5.4 miles of existing ten-inch OD pipe starting at M.P. 268A-101.1+1.89 in Middlesex County, Massachusetts, to meet the customer's needs. This alternative called for replacing the 5.4 miles of ten-inch OD pipe with 5.4 miles of sixteen-inch OD pipe. This pipe replacement would require new right-of-way for much of the route and would result in new and greater impacts to the environment. Due to these factors, this system alternative was determined to be unacceptable.