



Tennessee Gas Pipeline  
Company, L.L.C.  
a Kinder Morgan company

**Franklin Regional Council of Governments**  
**Northeast Energy Direct Project Questions & Answers**

**Permitting and the Proposed Route**

1.) Will the proposed pipeline project be subject to the Massachusetts Environmental Policy Act (MEPA) and be required to prepare a full EIR? Please answer yes or no. If No, please explain why the project is not subject to MEPA.

- Yes, the Northeast Energy Direct Project (project) is subject to MEPA.

2.) Will the proposed pipeline project be subject to the National Environmental Policy Act (NEPA) and be required to prepare a full EIS? Please answer yes or no. If No, please explain why the project is not subject to NEPA.

- Yes, this project is subject to NEPA.

3.) Why can't the pipeline be located along the Mass Pike (I-90)?

- Routing pipeline facilities in or along existing highway or road corridors presents several challenges. First and foremost is safety. Highway corridors generally already have existing utility infrastructure located in or around their corridors. By locating a pipeline in a separate corridor, there is much less likelihood that damage will occur to the existing infrastructure during construction, or that the new pipeline will be damaged by third party construction or maintenance activities by other utilities or road crews. Separate corridors are also generally less populated as compared to road corridors. In the planning stage, Tennessee Gas Pipeline (TGP) reviews routing options, including routes that will share corridors with other similar uses such as existing pipelines or power lines.

TGP thoroughly evaluated the option of installing new pipeline adjacent to its existing right-of-way. Since it was constructed in the 1950s, the area around TGP's existing pipeline in Massachusetts has become extremely congested with residential and commercial growth adjacent to existing pipeline easements. Constructing a new pipeline in this corridor would be extremely challenging and impact significantly more landowners than constructing along the new corridor across the northern tier of Massachusetts. Additionally, Tennessee determined that the NED Project can transport significantly more gas to the region in its current configuration as compared to installing adjacent to its existing right-of-way along the 200 Line. Multiple studies continue to suggest that there is a need for up to 2 billion cubic feet per day (Bcf/d) of new pipeline capacity into New England and neighboring markets which is expected to result in lower energy costs for power and natural gas. However, TGP has ongoing communications with Massachusetts Department of Transportation to discuss all these possibilities. Further, these alternative routes will be part of the Federal Energy Regulatory Commission (FERC) filing process as alternative routes.

4.) Why can't the pipeline be installed along the Route I-91 corridor and across Route 2?

See answer to Question 3.

5.) Please explain why you cannot locate the proposed pipeline on existing public rights-of-way.

See answer to Question 3.

6.) Why is Dracut the final location?

- Dracut is an existing natural gas hub. It is where TGP interconnects with the Joint Facilities of Maritimes & Northeast Pipeline and Portland Natural Gas Transmission System which can serve New Hampshire and Maine, Atlantic Canada markets, as well as Algonquin's system via the HubLine. Additionally, the proposed Northeast Energy Direct pipeline also interconnects with the existing TGP 200 Line system which enables us to provide our customers with increased volumes of gas to flow south from Dracut to Tennessee's customers in Massachusetts, Connecticut and Rhode Island.

7.) Please explain federal preemption and eminent domain regarding gas pipeline siting and construction.

- Under the Natural Gas Act, an interstate pipeline is required to file with the FERC an application to build, construct and maintain an interstate natural gas pipeline. Under this act, FERC is given exclusive federal authority to determine if the pipeline and related facilities, such as meter and compressor stations, should be built. If, after review of the application, FERC determines that the pipeline should be built, it will issue a certificate of public convenience and necessity. Once the certificate is issued and the conditions are accepted by the pipeline company, federal law under the federal doctrine of preemption will apply and supersede any state laws that conflict with the Natural Gas Act. Issuance gives the interstate natural gas pipeline authority to exercise the right of eminent domain to condemn private and state lands deemed beneficial for the public interest. Such eminent domain actions are then filed in federal court to determine the value of the property taken and convey title to the pipeline company for an easement to build the pipeline.

#### **Market Demand and Project Financing**

8.) What is the total capacity of the proposed pipeline and what percentage is projected to be used for current and future demand in Massachusetts and New England?

- Although this project is scalable for up to 2.2 billion cubic feet per day into the market, TGP will design the project to accommodate the amount of capacity that is contracted for by our customers in binding long-term agreements. Therefore, the shippers who sign up for capacity on the pipeline will determine where the gas goes. TGP cannot allocate percentages for a certain state or region. However, of the recently announced twelve anchor shippers who we have reached agreement with, subject to customary approvals, all of these customers are New-England based local distribution companies (LDCs), such as National Grid, Berkshire Gas, Columbia Gas and Connecticut Natural Gas Corp, meaning that a large amount of the gas will be staying in New England.

9.) What is the estimated percentage of gas that will be exported to other countries?

- The project is being developed to provide much needed additional firm transportation capacity into the Northeast for LDCs who need the capacity to serve increasing demand in their service territories. Under the Natural Gas Act, TGP is an open-access interstate pipeline system subject to the regulations and policies of the FERC, which require that transportation capacity be allocated on a not unduly discriminatory basis. Under FERC's regulations and policies, TGP cannot discriminate among customers based on the ultimate destination or use of the gas, such as the Northeast versus Canada or another foreign country (via export of liquefied natural gas (LNG)). The ultimate destination of the gas and volumes associated is within the sole control of the project's customers.

The segments of the Atlantic Canada natural gas market are similar to those in the Northeast. They include LDCs, electric utilities, industrial companies, power generators and potential LNG export projects. There are currently four proposed LNG export projects in Atlantic Canada and one LNG export project in northern Maine that could find capacity on the project useful to serve their proposed LNG export facilities. At this time, TGP has not executed any contracts with developers of proposed LNG export facilities.

10.) What amount of the pipeline construction costs will be paid by Kinder Morgan and what amount will be paid by the tariff on ratepayers?

- Kinder Morgan is paying the **entire** cost of the proposed project.

Recent initiatives by New England governors and the New England States Committee on Electricity (NESCOE), a not-for-profit organization representing the collective interests of the six New England states on regional electricity matters, suggest that adding significant natural gas firm transportation capacity to the region's markets would, over time, LOWER the price of gas in New England and enhance the reliability of both gas and electricity service. Certain electric distribution companies (EDCs) (i.e. electric utilities) in the region have also proposed that they may be willing to contract for additional gas transportation capacity to support electricity generation if they were able to recover the costs of this capacity from their ratepayers. Whether or not such cost recovery by EDCs would be in the public interest and permissible would be decided after a thorough and public process by the state public utilities commissions that regulate and set the rates of each EDC.

11.) Who will pay for construction cost overruns, ratepayers or Kinder Morgan?

- See answer to Question 10.

12.) If the proposed tariff on electric ratepayers, that may be authorized by the New England governors and implemented by NESCOE, does not pass or is rejected by the New England governors, will Kinder Morgan still pursue this project?

- See answer to Question 10.

13.) What is the Atlantic Bridge Project that you said is "competing" with you?

- The Atlantic Bridge Project is currently being pursued by Spectra Energy, a company in no way related to Kinder Morgan or any of its subsidiaries. The proposed Atlantic Bridge project would expand the existing Algonquin Gas Transmission and Maritimes & Northeast pipeline systems to provide increased gas supply to New England and the Maritime Provinces. You can contact Spectra Energy for more information about its project.

14.) Six months ago the industry cost estimate to build the pipeline was \$1.6 billion. The most recent estimate is now as much as \$4 billion. Will this project's cost be known accurately before you build it?

- Through the life cycle of the project, the estimated cost will continue to be refined as the full scope and route becomes defined, additional surveys are completed, materials are purchased and construction is contracted. In the early stages of the project, the design was only for the Wright to Dracut segment which has now been expanded to include the Pennsylvania to Wright segment.

15.) Why is the public subsidizing the construction of this pipeline?

- See answer to Question 10.

16.) If the pipeline doesn't get approved, will you still find another way to transport gas to Dracut (e.g. road or rail)?

- TGP is an interstate natural gas pipeline company and currently does not ship gas by rail or truck.

17.) Will any funding provided by electric ratepayers to construct the proposed pipeline be repaid from future profits for transporting or exporting gas?

- No, there are no plans. Please note, however, that electric ratepayers aren't directly paying for the construction of the proposed pipeline, so there's nothing to repay in terms of costs.

18.) What are TGP's debt bond ratings (e.g. Standard and Poor's, etc.)?

- TGP is currently rated as follows:
  - S&P: BBB
  - Moody's: Baa1
  - Fitch: BBB+

### **Construction, Operation, Maintenance and Decommissioning**

19.) The pumping station you showed us in the presentation was on 5-7 acres. You said you needed 50 acres for the pumping stations for this pipeline. Does that mean that the pumping facility will be 10x or more the magnitude in size for this pipeline? If not, why do you need so much land?

- Given the size of the proposed compressor stations (not pumping stations) proposed for this project, 50 acres is a reasonable size to insure that the compressors are located to minimize noise issues with adjacent landowners and to minimize the visual impact while also providing a safety buffer.

20.) Why is there a difference in construction methods and materials used for pipelines located in urban versus rural areas and how will that impact the safety of Franklin County residents?

- Cross country pipelines can be built in long strings in a more factory like construction methodology. Urban construction is required to be performed in short sections with limited amounts of trench opened. In highly populated areas, the U.S. Department of Transportation code requires that different design factors be used compared to sparsely populated areas.

21.) I read that Kinder-Morgan has been cited for maintenance problems in recent years and the maintenance budget has been dramatically reduced. What level of funding will be dedicated to maintenance?

- Funding will be available to maintain the right of way in accordance with the requirements of the U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration.

22.) Who pays for the cost to keep the right-of-way cleared and how is the clearing done. Mechanically? Chemically?

- After constructing the pipeline, TGP will restore the right-of-way as required by, and in accordance with, the conditions imposed by FERC in its certificate of public convenience and necessity. TGP will be responsible for maintenance of the right-of-way. For the majority of its system, TGP maintains its easements by mechanical means (e.g. tractor with mower or bush hog). In some instances, as approved by landowners and regulatory agencies, herbicides may be applied in certain locations (typically at compressor stations or above-ground sites such as valves, pig launchers or pig receivers).

23.) After construction, how wide is the maintained corridor and how is this area kept clear of trees or maintained where it crosses wetlands, small streams and large rivers?

- In upland areas, the maintained corridor is normally the width of the permanent easement and trees are kept clear by mowing or removal on a regular basis. In wetlands, to facilitate periodic pipeline corrosion/leak surveys, a corridor centered on the pipeline and up to 10 feet wide may be maintained in an herbaceous state. In addition, trees within 15 feet of the pipeline greater than 15 feet high may be selectively cut and removed from the permanent right-of-way. Adjacent to water bodies, we limit vegetation maintenance to allow a riparian strip at least 25 feet wide from the high water mark to permanently revegetate with native plant species across the entire construction right-of-way. However, a corridor centered on the pipeline and up to 10 feet wide may be maintained in an herbaceous state to

facilitate periodic corrosion/leak surveys. In addition, trees that are located within 15 feet of the pipeline and that are greater than 15 feet high may be cut and removed from the permanent right-of-way.

24.) How many substations will be situated along the line in Massachusetts? What is the planned distance between them?

- In Massachusetts, it is currently anticipated that three compressor stations (not substations) will be required. The distance between them is 39 -50 miles.

25.) Would a fully funded decommissioning fund, similar to those required for solar projects and wind projects, be a deal breaker?

- FERC regulates the decommissioning requirements for pipelines.

### **Jobs and the Economy**

26.) How will the Kinder Morgan pipeline contribute to the long term economic stability of rural Massachusetts?

- Massachusetts continues to suffer from some of the highest energy costs in the nation. High energy costs make Massachusetts a much less attractive state to locate in for businesses, and particularly energy-intensive industries, compared to neighboring states such as New York and Pennsylvania where energy costs are lower. Associated Industries of Massachusetts, the state's largest nonprofit, nonpartisan association of Massachusetts employers, has noted that its members often cite the cost of electricity as a "determinative factor in deciding where to locate or expand." TGP believes that providing the additional natural gas capacity to power generators and utilities in the state will help bring these costs down and make energy costs less volatile, therefore creating a more business-friendly environment contributing to economic vitality in the state.

27.) You mentioned the creation of 3,000 additional jobs. How many will be given to Massachusetts workers? How long will the jobs last (e.g. 12 months, 18 months, etc.)? How many *long-term or permanent* Massachusetts jobs will be created and what is the range in salaries?

- The final number of permanent jobs will depend on the need for additional compressor stations and facilities along the project route, which has not been finalized. Full-time positions will be hired locally, as they are currently. Since we do not know at this point the titles and responsibilities of the permanent positions that are created, we can't give estimated salaries for these positions. However, in 2013, Kinder Morgan employed 46 people in Massachusetts and paid approximately \$3.6 million in total wages, placing the average salary at over \$78,000.

28.) What types of training and job opportunities for veterans will be available?

- Kinder Morgan provides equal employment opportunity to all employees and applicants for employment without regard to race, color, religion, gender, sexual orientation, national origin, age, disability, marital status, citizenship or status as a covered veteran or any other legally protected status.

29.) If construction and union workers are already working in the industry within Massachusetts, doesn't that mean that you will be *preserving* jobs rather than *creating* them?

- TGP has signed a Memorandum of Agreement with Laborers' International Union of America for the project guaranteeing that the 3,000 construction jobs related to the project will be high paying construction jobs for Laborers' International Union of America and Massachusetts Building Trades Commission members.

TGP does not know the current employment status of all the laborers who would be employed by this project, and thus cannot say that we are preserving rather than creating jobs. Furthermore, all construction jobs are inherently temporary in nature because they end when the job is completed. Laborers rely on new projects for continued employment and this project will provide these positions.

30.) Berkshire Gas says they need more capacity or they won't be able to support any new industry in Franklin County. Is this true? What percentage of the natural gas you'll be transporting does Berkshire Gas need?

- Yes, this is true. While Berkshire Gas is in the best position to answer this question, as it knows the constraints of its delivery system, its situation is as follows: natural gas supply in the United States is plentiful. As such, Berkshire Gas has no [known] problems in contracting for supply. The issue for Berkshire Gas is deliverability. The lateral pipeline serving its customers in Hampshire and Franklin counties from the existing TGP interstate pipeline is nearing capacity. This project will provide a new delivery point that will eliminate current deliverability constraints, augment system reliability and allow Berkshire Gas to continue to support economic development in the region. This will not, however, have an- [known] impact on its ability to continue to provide reliable natural gas service to its existing customers.

It is too early to determine the percentage of gas Tennessee TGP will be transporting that Berkshire Gas needs at this time. However, Berkshire Gas HAS signed on to be an anchor shipper for the Northeast Energy Direct this project and will be receiving gas from the line.

#### **Citizen Input and Private Property Impacts**

31.) Would you stop this project if you felt that local citizens were clearly, by majority, against it?

- Prior to constructing and operating this project, TGP is required to apply to the FERC for a certificate of public convenience and necessity under the Natural Gas Act. In deciding whether to issue a certificate for this project, FERC will balance the public benefits of the project against the potential adverse consequences.

32.) If you consider local input on the pipeline, what will you do in the 22 municipalities that have voted to ban new gas pipelines?

- If the project is approved, the final route will be determined by the FERC in its order issuing a certificate of public convenience and necessity. It is worth noting that the bans several municipalities have passed are nonbinding resolutions.

33.) How can citizens comment on the pipeline project impact statements during the FERC (Federal Energy Regulatory Commission) licensing process?

- Public participation and input is an important component of this project, and the public will have multiple opportunities to provide input to regulators like the FERC and other federal and state agencies during the course of the project.

TGP will conduct multiple open houses in the proposed project area to explain the project and receive input from area residents and other interested parties. In addition, FERC will also solicit input from the public through its scoping process during the pre-filing and certificate application processes.

34.) What are the FERC considerations regarding the individual landowner and the impact on a family's future property value?

- During the permitting process, FERC will examine the project's proposed route as well as alternative routes to identify ways to minimize any negative impacts to landowners and their property, the

environment, air and water quality, and many other factors. FERC answers many questions regarding consideration taken for individual landowners in their Natural Gas Pipeline Citizens Guide which can be found online at <http://www.ferc.gov/for-citizens/citizen-guides/citz-guide-gas.pdf>.

In regards to effects of the project on property values, the pipeline and associated easement should not impact the value of property. Multiple studies across the country have found minimal to no correlation between a property's sales price and its vicinity to a gas transmission pipeline. Please see the following studies for supporting information on the correlation between property values and the presence of pipelines:

- ✓ Diskin, Barry A., PH.D., Jack P. Friedman, PH.D, Spero C. Peppas, PH.D, and Stephanie R. Peppas. "The Effect of Natural Gas Pipelines on Residential Values." Right of Way (2011)
- ✓ Fruits, E., "Natural Gas Pipelines and Residential Property Values: Evidence from Clackamas and Washington Counties." (2008).
- ✓ The INGAA Foundation, Inc., "Natural Gas Pipeline Impact Study." (2001)
- ✓ Kinnard, Williams N., Jr., Sue Ann Dickey, and Mary Beth Geckler. "Natural Gas Pipeline Impact on Residential Property Values: An Empirical Study of Two Market Areas." Right of Way (1994)
- ✓ Wilde, Louis, Christopher Loos, and Jack Williamson. "Pipelines and Property Values: An Eclectic Review of the Literature." Journal of Real Estate Literature 20.2 (2012)

35.) I heard that banks that hold mortgages on properties being scrutinized for pipeline passage are not willing to allow pipeline passage because of the devaluation of property as a result. Is this true?

- TGP is not aware of any such situations

### **Sustainable Energy and the Environment**

36.) When you and others are determining the need for use of fossil fuel, do you ever consider that we need to cut down on unsustainable energy and focus on conservation and renewable energy?

- TGP believes that natural gas is an important part of a balanced and reliable energy portfolio. Currently, New England relies on natural gas fired power generation for 52 percent of its electricity, and that percent is expected to increase in upcoming years as existing coal-fired power plants are retired. Renewable energy sources such as wind and solar are a part of this energy portfolio as well. However, wind and solar technologies, as they exist currently, cannot alone provide the amount of energy or the reliability needed to completely replace fossil fuels. Due to its intermittent nature, renewable energy needs a reliable backup power source that is constantly available- this can be natural gas, coal, nuclear power or hydroelectricity. Of the available options, natural gas is the cleanest, most affordable and most immediately available option to provide reliable power to New England.

37.) What energy conservation efforts does Kinder Morgan undertake to reduce greenhouse gas emissions in its business operations?

- Kinder Morgan regularly reports environmental, health and safety performance to the public on its web site. Every employee is expected to share Kinder Morgan's commitment to pursue the goal of not harming people, protecting the environment, using material and energy efficiently, and promoting best practices, thereby earning the confidence of customers, security holders and society at large, being a good neighbor and contributing to sustainable development. Kinder Morgan complies with all health, safety, security and environmental laws, rules and regulations, not just because it is legally required, but because we believe it is the responsible way to conduct our business.

38.) What are the emissions standards for this project? How are these standards figured? Are they based on population density and is it regulated both by site and in the aggregate?

- The emission standards will be subject to state and federal New Source Review criteria.

39.) What amount of product is vented at pumping stations during normal operation?

- Compressor stations (not pumping stations) do not exhaust or release methane gas under normal operations. Piping systems are specifically designed and tested to prevent methane gas release. Very small quantities of gas are vented when gas is used as a power source for normal compressor station operations. In other special operating circumstances, gas is vented to depressure pipes in the compressor station to allow maintenance or under emergency conditions. When gas is vented, it is done under controlled conditions specifically designed to allow depressurization to be done safely.

40.) Cornell University just published a study analyzing 187,000 inspection reports of gas pipeline leaks from 2000-2012. Why add any proposed new pipes before replacing all old pipes with thousands of leaks?

- Please see response to Question 41.

41.) A recent Conservation Law Foundation (CLF) report, Into Thin Air, estimates that leaking pipelines in Massachusetts release 8-12 billion cubic feet of methane annually. If these leaks were fixed, would additional pipeline capacity still be needed?

- The CLF report specifically cites “intrastate distribution pipelines that deliver natural gas from transmission lines into homes, businesses and institutions” as the cause of methane leaks in Massachusetts, noting the aging cast iron pipe infrastructure in residential and commercial areas. TGP is an interstate transmission line that provides gas to local utilities and power generators. The report acknowledges that interstate transmission lines “are primarily regulated and overseen by the federal Pipeline and Hazardous Materials Safety Administration (“PHMSA”) and the Federal Energy Regulatory Commission (“FERC”),” and not contributing to its estimate of methane leaks. The report is not attributing current methane leaks to TGP or any other existing interstate transmission line, but to local distribution pipelines which TGP does not own or operate.

42.) Has Kinder Morgan considered alternatives to constructing a whole new pipeline to address the shortage that is occurring primarily during winter months when heating demand rises such as increasing the capacity of an existing pipeline or aggressively replacing/repairing leaking pipes?

- The existing TGP pipeline was running at its maximum capacity this past winter and no additional capacity could be added. As discussed in question 40 and 41, TGP is a transmission line, not a distribution line, and is not contributing to the problem of methane leaks. TGP, therefore, does not have any pipes that could be replaced in order to make up for shortage of gas in winter months.

43.) Where and how do you anticipate crossing the Connecticut River?

- The proposed crossing of the Connecticut River is in Franklin County north of the Boston/Maine railroad crossing of the river. It will be constructed using a horizontal directional drilling technique.

44.) Will you cross the Montague Plains?

- Yes.

45.) Will preventing the pipeline from going in stop any further fracking?

- TGP is a transmission company, not a drilling and production company, and cannot say with certainty the outcome this project will have on continued hydraulic fracturing being performed by other companies. However, due to the current high demand for natural gas and the existing infrastructure in



the shale play regions of the country, it is unlikely that the widespread use of hydraulic fracturing will stop if this line is not built.

46.) The Marcellus field estimates indicates that it could last between 30 to 75 years. That's a wide time frame. What current estimate is Kinder Morgan using for the Marcellus field and what is the source of that estimate? What are the implications for financing the construction of the pipeline?

- TGP is a transmission company, not a drilling and production company. TGP does not drill in the Marcellus shale field. TGP's pipelines serve customers in the Marcellus region and other locations via long-term shipping agreements. Because it does not drill for the gas in the Marcellus shale field, TGP has not performed estimates for Marcellus field gas yields. Data on the Marcellus can be found on the U.S. Energy Information Administration website.

### **Archeological**

47.) Who is doing the archaeological survey and what is the company's name?

- Louis Berger and Associates is the firm that is subcontracting the archaeological surveys.

48.) You are presently engaged in archaeological activity prior to obtaining a FERC permit and without federal tribal monitors which seems to bypass Section 106 of the National Historic Preservation Act (requires consultation with any Native American tribe that attaches religious and cultural significance to historic properties that may be affected by the undertaking). Please comment.

- TGP has not started archeological activities in Massachusetts and will not until we consult with the FERC, SHPO and the tribes, and obtain the necessary permits. The consultant is aware of the Section 106 process and we will work with the FERC cultural manager to ensure the process is followed.

### **Public Health and Safety**

49.) Is Kinder-Morgan prepared to reimburse communities for EMS/fire/police efforts and equipment in case of an emergency due to the pipeline?

- TGP does not reimburse local fire/police/EMS departments in the event of an emergency. TGP does conduct annual meetings with first responders, local officials and contractors in all counties, cities and towns where it operates, and will continue this process in any locality where a pipeline is installed as part of the project. TGP's local employees who operate the pipeline attend these meetings to answer questions and provide additional information related to emergency response, safety and local contact information. These employees serve on the Local Emergency Planning Committee and regularly attend meetings within the counties where they live. As the project is constructed, placed in service and operated as part of TGP's system, TGP will continue all of these activities in counties where its facilities are located and will begin those activities in counties where new facilities are added.

The meetings held in communities along TGP's system provide first responders with information about responding to a natural gas incident. In addition, we conduct mock emergency drills with local responders and hold open houses at our facilities to better familiarize first responders with our equipment and facilities. TGP's personnel have access to pipeline emergency training materials and, if requested, can provide workshops or training for first responders.

TGP also keeps our pipelines safe by implementation of the following federal PHMSA regulations:

- a. Design – TGP's pipeline design includes safety features that increase with population density and land usage along the pipeline. This includes: (i) extra wall thickness in more populated areas, (ii) extra wall thickness at road crossings, (iii) additional depth of cover in agricultural areas under active

cultivation, (iv) corrosion protective coatings, and (v) cathodic protection facilities to protect against corrosion.

- b. Testing – TGP further X-rays 100 percent of all pipeline welds and pressure tests the completed pipeline with water at a pressure much higher than it will operate to ensure that it is properly built prior to being placed in service. It also inspects the pipelines internally before placing them in service to help ensure that any anomalies are identified and repaired prior to the line going into service.
- c. Cathodic Protection – TGP applies electrical current, known as cathodic protection, to the pipeline to prevent external corrosion from occurring and regularly checks the pipeline to ensure the protection is consistently applied. By applying the electrical current, the pipe is protected from pipe steel being removed by corrosion.
- d. Encroachment – One of the most common causes of pipeline incidents is damage by a third party. We obtain an approximately 50-foot wide permanent right-of-way to distance third party construction activities from accidentally damaging our pipeline. This gives us room to safely operate and maintain the pipeline.
- e. TGP actively participates in all applicable One Call programs to help prevent third-party damage. TGP will meet with landowners and contractors to discuss excavation, and marks all pipelines prior to excavation when provided with notification by state One Call programs. Depending on the location of the digging, TGP also will have a company employee on site to observe digging operations around its pipelines.
- f. Monitoring – TGP closely monitors pipeline operations, including line pressure and surveillance of the pipeline, to detect leaks and protect against third-party damage.
- g. Inspection – TGP uses state-of-the-art in-line inspection tools, known as smart pigs, to periodically internally inspect the pipeline, in accordance with PHMSA requirements, for potential damage, erosion or corrosion. Any damage or corrosion detected through this process is repaired or replaced.
- h. Shut Off Valves- Shut off valves installed on the new pipeline facilities will include:
  - Valves that will automatically close when a specified change in pipeline conditions occur.

50.) If there is an accident or leak, does Kinder Morgan cover liability for any losses to towns and individuals? Is there compensation for reduced property values?

- If the incident was a result of our actions, then yes, TGP is liable and will cover damages. TGP does not compensate homeowners for reduced property value. Please see response to question 34 for more information on pipelines and property values.

51.) Explain about Class 1 pipelines being the least effective.

- Class 1 is the DOT designation for low population areas and the design factor allowed by code in determining the pipe wall thickness. Class 1 pipe has no correlation to being least effective or lesser quality than Class 2 or 3 pipe.

52.) The Connecticut River is an old, but major fault line. What prevents the pipeline from being affected by geologic forces such as earthquakes and what seismic precautions are undertaken?

- The detailed design of the pipeline will consider seismic activity. Detailed design is in a very early stage at this time. Kinder Morgan operates 80,000 miles of pipelines in North America, many of which cross seismically active areas, and we are very familiar with the precautions needed during pipeline planning and construction in these areas.

53.) Have there been any accidents involving environmental damage, damage to buildings, or injuries on the existing TGP pipeline?

- In the last five years, there have been NO incidents of damage to buildings or injuries to the general public on the existing TGP pipeline in the northeast (Pennsylvania, New Jersey, New York, Connecticut, Rhode Island, Massachusetts and New Hampshire).