

#### Merrimack, NH City Council Question Responses

#### June, 2015

- 1. Once the pipeline is installed, what limitations do you normally place on the allowed uses of the area along and above the actual pipeline? Since it could be placed in our conservation land, we want to know if our trail system and currently allowed uses would be impacted. Tennessee Gas Pipeline Company (Tennessee) has a developer review process that is used to review all requests for improvements or construction activities within the permanent easement area on a landowners property. Tennessee is aware of balancing the landowner's use of the land with the safety of the pipeline. Tennessee requires plans for any improvements or construction activities to be submitted to Tennessee for review and approval. Among other things, unpaved and paved trails on the easement are an allowed use. The location and how a trail would be constructed would also be reviewed and balanced with the operation and maintenance needs of the pipeline. Generally Tennessee would request the trail to cross or be located near the edge of the permanent easement. This would minimize any trail disruption while Tennessee maintains its facilities. Tennessee is concerned with heavy equipment working within the permanent easement. Tennessee will monitor and be on site whenever a piece of equipment works within the permanent easement area. Tennessee has created a Developer Handbook that discusses some of the restrictions and requirements for improvements and construction activities in the permanent easement area and will provide the handbook on request.
- 2. If the project will be built, what is your preferred method for doing wetland mitigation as may be necessary per NH State Law and NH DES wetland rules? Will you be making a NH DES ARM mitigation fund deposit or would you be working with the Town and Conservation Commission to find a suitable wetland mitigation project(s) within the Town of Merrimack? Wetlands mitigation requirements will be addressed during the federal, state, and local permitting process. Tennessee will obtain the necessary permits to construct and operate the pipeline facilities and will address resource impacts as conditions to the permits.

#### Fire/Police/Emergency MGMT

#### 1. How will the pipeline ROW be marked?

In compliance with federal regulations (U.S. Department of Transportation regulations, 49 CFR Part 192), signs, marker posts, aerial markers, and decals will be installed and maintained to ensure that the pipeline locations will be visible from the air and ground. See to the right for an example of a Kinder Morgan's pipeline marker.

a. How will brush control be accomplished along the pipe line corridor, through chemical or mechanical processes? If chemicals are used will Safety Data Sheets (SDS) be provided to the Fire Department prior to any product application? For the majority its existing system, Tennessee maintains its easements by mechanical means (e.g. tractor with mower or brush hog). In some instances, as approved by landowners and regulatory agencies, herbicides may be applied in certain fenced locations (typically at compressor stations or above-ground sites such as valves, pig launchers, or receivers). All vegetation control by chemical means is performed by a contractor licensed in the applicable states. All chemicals are approved for use in the state

where they are being applied as well as the US Environmental Protection Agency. SDS sheets are available upon request by any landowner or fire department.

- b. How will Kinder Morgan maintain the pipeline right of way for access, including in winter? Will there be snow plowing to maintain a navigable right of way during winter? Tennessee will only snow plow areas that will require regular access, e.g. main line valves, meter stations and compressor stations.
- c. What is the protocol for vegetation maintenance within wellhead protection areas? See response to Question "a" above- Tennessee will adhere to landowner requests.
- **d.** What type of chemicals will be used? See response to Question 1a above.
- e. What other Right of Way restrictions will be imposed on the MVD where the pipeline crosses our property and through our Wellhead Protection Area (WHPA)? Tennessee requires the right to maintain and operate its pipeline facilities. The easement document will identify and define those rights. As noted above, a Developer Handbook has been prepared which discusses some of Tennessee's restrictions and requirements. Generally, Tennessee will protect the pipeline from grade changes, water impoundment, excavation activities, vegetation encroachment, utility crossings, buildings, pools, sheds or permanent structures.
- 2. Will there be specific training for LOCAL First Responders responding an emergency along the ROW?

While the U.S. Department of Transportation's Pipeline and Hazardous Materials Safety Administration, otherwise known as PHMSA, mandates certain basic areas of competency for pipeline operations employees, Tennessee provides additional training.

Tennessee communicates annually 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 Northeast Energy Direct (NED) Project. Annually, Tennessee's local employees contact local emergency responders to answer questions and provide additional information related to emergency response, safety and local contact information. As the NED Project is constructed, placed in service and operated as part of the Tennessee Gas Pipeline system, Tennessee will continue all of these activities in counties where is its facilities are located, and will begin those activities in counties where new facilities are added.

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

a. Who will train the fire department on what to do in the event of an emergency? See response to Question 2 above.

b. What types of NG training will be provided by Kinder Morgan emergency personnel and will they assume all training costs including personnel overtime? To ensure proper training education will this training be conducted at a minimum of annually for all parties involved

Tennessee will provide free training to emergency personnel prior to the pipelines going into service (refer to list below). Tennessee will make contact with applicable emergency responders each year to make sure that the contact information is accurate, answer any questions that they may have and offer follow up training as needed. The New Hampshire State Fire Marshall also sponsors "Pipeline Emergency Response Training", which is designed to train a trainer within each department. Tennessee is an active participant in this training.

The initial and requested follow up training consists of the following:

- Overview of Pipeline Facilities & Operations
- Tour of Facilities (applicable to what is in area)
- Properties of Natural Gas
- Responding to a pipeline emergency
- Communication during an emergency (Incident Command Structure ICS)

Tennessee works with emergency responders to schedule the training so that there is minimal financial impact to them. Tennessee does not reimburse emergency responders for any overtime.

# 3. Will there be a need to purchase specialized equipment to assist First Responders in responding to an emergency along the ROW?

No specialized equipment will be needed.

- a. If so, where will that funding come from? What equipment will Kinder Morgan provide to the Merrimack Fire Department prior to an emergency, during an emergency and where will personnel be responding from with additional equipment? No specialized equipment is required or will be provided.
- Will there be a cache of equipment along the pipeline, what would be contained in the cache, and how far apart would they be located?
  Equipment will be located at the compressor station proposed to be located in New Ipswich, New Hampshire. Each Tennessee vehicle contains the necessary tools required to safely isolate and depressurize the pipeline in an emergency. Tennessee has material, tools and major equipment throughout the region to support pipeline repairs. Tennessee also has alliance contractors available to support any repair efforts.
- 4. As an identified "Key Resource" and "Critical Infrastructure", what protocols are in place to protect the pipeline/ pressurization stations from sabotage / terrorism? Tennessee has established Security Plans in place to address numerous threat vectors. Details concerning specific security measures are protected against unauthorized disclosure.
  - a. What steps have you taken to "harden" the pipeline/stations from terrorist activity?

Tennessee's Security Plans are based on established pipeline security guidelines, with an emphasis on a risk-based approach. Security measures are designed to mitigate risks, threats and vulnerabilities at baselines and increased threat levels.

#### b. What is your communications strategy re: threats?

Tennessee has an established incident reporting system involving security information and threats. Additionally, Tennessee incorporates the elements of the National Terrorism Advisory System within the process to communicate threatening situations.

c. Does your EOP plan address security issues relative to deterrence, preparation, detection and recovery operations?

Tennessee's Security Plan and assessment process is a risk-based approach designed to deter, detect, and delay potential threats to assets; reduce vulnerabilities; and to ensure resiliency to the maximum extent possible

5. How will you monitor personnel / vehicles on Pipeline or common property/easements? Will monitoring stations be alarmed (video monitored?) against intrusion?

Compressor stations and meter stations and remote controlled valves (RCV's) will include intruder alarms on the buildings and alarmed in Tennessee's Gas Control Center in Houston Texas. On a site by site basis, the use of cameras will be evaluated during detailed design and if the potential risks warrant, cameras will be incorporated into the design. Cameras are not currently anticipated to be included at RCV sites; however this will be evaluated during detailed design.

a. How will Kinder Morgan limit the use of these access roads by unauthorized off road vehicles that could possibly impact any section of exposed NG pipe protruding from the ground?

Tennessee will work with the landowners to deter any unauthorized activity in the easement area.

Please refer to the draft Resource Report 1 (General Project Description) and draft Resource Report 8 (Land Use, Recreation, and Aesthetics) filed with the FERC on March 13, 2015 as part of the draft Environmental Report for further discussion regarding temporary access roads and vehicular access trails.

b. Will there be remote security cameras installed along the route in Merrimack connected to the Merrimack Fire and Police Departments to allow for security and emergency monitoring of the pipe line and provide remote monitoring in the event of an emergency for early notifications?

Tennessee has no plans to install security cameras along the route. All of the pipelines are monitored remotely via a Supervisory Control and Data Acquisition (SCADA) system. Additionally, pipeline valves are monitored 24 hours a day and can be closed remotely from Tennessee's Gas Control Center.

- c. If so, where does that monitoring take place? Monitoring will occur from Tennessee's Control Center in Houston, Texas.
- 6. Will your security plans, system maps and critical infrastructure information be provided to the TSA / DOT?

Tennessee will provide all security plans, records, and documentation as required. Tennessee routinely interacts with regulatory personnel concerning audits and assessments of assets.

# 7. Will there be regular security inspections along the pipeline corridor reference to mitigating security risks?

Tennessee has an established internal audit and assessment process at it relates to identifying and mitigating security vulnerabilities. Additionally, Tennessee participates in regular security inspections conducted by Transportation Security Administration (TSA).

- a. What will the frequency of inspections be along the pipe line and of what type? All compressor and meter station along the pipeline routes are monitored from the 24hour control center through a SCADA system. The pipelines are operated in accordance with Tennessee operating procedures that meet or exceed the requirements of the department of Transportation Pipeline Hazardous Materials Safety Administration (PHMSA) Title 49, Code of Federal Regulations Part 195.
- **b.** Will there be air patrols and/or ground patrols over the pipeline and if so, how often? Tennessee's pipelines are inspected at least 26 times a year by air, vehicle or foot. On Tennessee's existing system, the company currently performs aerial patrols every other week from April through October and once per month from November through March.

#### MVD

1. The MVD will require that a Construction Management Plan, Blasting Plan, Groundwater Monitoring Plan, and a Mitigation Plan be issued to the MVD for review far in advance of any construction of the pipeline. We will request that Kinder Morgan pay for MVD's consultants to implement the groundwater monitoring plan that will include the drilling of monitoring wells, baseline groundwater quality sampling, and subsequent groundwater sampling events during construction and post construction. We would like to know how this type of reimbursement process can be arranged.

Various plans related to construction and mitigations, including a blasting plan, will be included in Tennessee's submittals to the FERC and to other agencies and will be provided on request or available from those agencies. Tennessee would need to fully understand why there is a need for the groundwater monitoring plan and specifically why monitoring wells/ groundwater sampling would be needed for construction of a natural gas pipeline. If determined to be of value and if a scope of work is agreed, Tennessee could contract directly to the MVD consultants for this effort.

2. Would this pipeline be "permitted" to transport other petroleum products? In addition, will the pipeline be *capable* of transporting other liquid petroleum products and if so, is there a potential for transport of other petroleum liquids at some point in the future?

No, the pipeline will only be permitted for natural gas. Any change in product would be subject to all permitting and regulations in accordance to FERC and other agency regulations and would have to go through an entirely new approval process.

3. In sensitive areas, who makes the call on what type of rock removal will be used (i.e. blasting, hammering or other)?

Tennessee has engineering and construction standards that address these issues. Construction procedures and standards are discussed in the draft Resource Report 1 (General Project Description)

of the draft Environmental Report, filed with the Federal Energy Regulatory Commission (FERC) on March 13, 2015 in Docket No. PF14-22-000 and available through Tennessee's Project website (http://www.kindermorgan.com/pages/busin ess/gas\_pipelines/east/neenergydirect/ferc.aspx). Draft Resource Report No. 6 (Geological Resources) contains additional details on blasting impacts and mitigation measures. Ultimately, Tennessee's construction contractor will make final determinations for rock removal in accordance with all specifications, standards, permits and right of way agreements.

- a. What are Kinder Morgan's expectations of blasting during the construction process? Is Kinder Morgan aware of the Town of Merrimack's Blasting Ordinance? Tennessee is in the process of performing an analysis of areas that may require blasting. Tennessee is also developing a Construction Management Plan to address rock management. Options being considered include using rock crushers to create material for roadways, backfilling compressor and meter station foundations, facility yard gravel, concrete aggregate, railroad ballast and using rock as authorized by landowners for rock boulder barricades across the easement along property lines. Please refer to the draft Resource Report 1 (General Project Description) filed with the FERC on March 13, 2015 as part of the draft Environmental Report.
- 4. The proposed NED gas pipeline crosses through the center of one of the principal aquifers that supplies half of our ground water to the residents and businesses of Merrimack. If we were to lose this resource (for even a day) as a direct result from the pipeline location what would Kinder Morgan or Tennessee Gas Pipeline Company do to rectify this situation? Will Kinder Morgan reimburse MVD for costs incurred with regard to oversight of cleanup and restoration of the groundwater? How much of an Insurance Bond is Kinder Morgan going to place on the Wells in the Naticook Brook Aquifer, should they be adversely impaired by the Gas pipeline in any way. Our estimate of the cost to replace these wells (in the rare chance they could be replaced) would exceed \$5,000,000.

See response to question number 1 above.

5. How does Kinder Morgan reimburse the MVD for added costs incurred when repair work needs to be performed on water lines that have been crossed by the gas pipeline or how does Kinder Morgan reimburse for the "added expenses" when future MVD water lines cross the pipeline? MVD will be compensated for the repair of any water lines damaged as a result of pipeline construction. Tennessee does not reimburse MVD when future water lines cross the pipeline.

#### Additional Question Fire/Police/Emergency MGMT

1. Will the natural gas (NG) in the pipeline be odorized? If not what provisions will Kinder Morgan make to provide adequate gas monitoring along the pipeline in the event of a potential release of NG? Will the Fire Chief determine what is adequate monitoring and detection capabilities to ensure the community is safe in the event of a potential release of NG? Who will maintain these sensors and will the data collected by these sensors be available on requested basis for review by the Merrimack Fire Department? Will a separate SCADA (supervisory control and data acquisition) system (or CRT monitor) be installed to monitor gas sensors for emergency management within the Merrimack Fire Department?

The transported natural gas will be odorized in this location. Gas detection sensors will be located within the new facilities which will be monitored by Tennessee's Gas Control Center in Houston, Texas. No sensor will be installed at the Merrimack Fire Department.

2. What type of response from Kinder Morgan would we receive for an odor of gas in the area of the pipeline? What type of response will Kinder Morgan make in the event of NG detector activation and when will the Merrimack Fire Department be notified that there has been a possible detection of a NG Release?

Reports of gas odor are typically received through 911 or directly to our gas control center. As soon as Tennessee is notified, employees will be dispatched to the location to investigate the leak. If the local emergency responder has not been notified, Tennessee will contact them. Tennessee employees have gas detection equipment in their vehicles and can start the investigation as soon as they arrive on site. The onsite Tennessee employee will coordinate with emergency responders.

3. Will there be a Fire Department water supply availability installed along pipeline? Will Fire Hydrants be installed along the access road to meet the regulatory code compliance for building developments within the community?

Tennessee is not proposing to install any fire hydrants along the pipeline route.

4. Will there be automatic or remotely controlled shutoff valves? How far apart will these be located? Where will they be located? Will these remote valves be backed up with manual shutoff valves? What security measures will be taken to protect these protruding gas lines and valves from vandalism, impact from off road vehicles, flooding, lightning and other acts of weather or geological events?

All compressor and meter station along the pipeline routes are monitored from the 24-hour control center in Houston, Texas through a Supervisory Control and Data Acquisition (SCADA) system. The operators in the control center are able to start and stop equipment, make pressure and volume adjustments, and start and stop the pipelines individually and as a system. The pipelines are operated in accordance with Tennessee operating procedures that meet or exceed the requirements of the Department of Transportation Pipeline Hazardous Materials Safety Administration (PHMSA) 49, CFR Part 192.

As part of the proposed pipeline design, Tennessee will be using remote controlled valves (RCVs) and each main line valve (MLV) will have an automatic closure feature that will close the valve when it senses any abnormal change in pressure. Valve spacing is determined by many factors but minimum spacing is defined in the PHMSA Regulations, 49 CFR Part 192. In areas of low population density (defined as Class 1), valves may be located up to 20 miles apart. In areas of medium population density (defined as Class 2), valves may be located up to 15 miles apart. In areas of high population density (defined as Class 3), valves may be located up to 8 miles apart. The locations of the RCVs are being determined as part of the route evaluation, including the area classifications. All RCVs installed can be locally operated manually. All RCV sites will be fenced and locked to prevent vandalism and impact from off road vehicles.

Please refer to the draft Resource Report 1 (General Project Description) and Resource Report No. 11 (Reliability and Safety) filed with the FERC on March 13, 2015 as part of the draft Environmental Report for further discussion regarding valve locations.

5. Will there be documentation provided to the town regarding annual safety/corrosion inspections, manual and automatic valve operation testing to ensure proper operation? Tennessee follows a written operations and maintenance program developed in accordance with applicable pipeline safety regulations. Tennessee also performs regular preventive maintenance on the pipeline and pipeline equipment. Kinder Morgan's pipeline safety record is published on our website and is available for review at http://www.kindermorgan.com/ehs/ehs\_permances/.

#### 6. Will there be a compressor station in town to re-pressurize the NG?

There are currently no plans to construct a compressor station in Merrimack as part of the NED Project.

#### 7. Will there be any Pig launcher/receiver sites within the town of Merrimack? There are currently no plans to construct pig launcher or receiver sites in Merrimack as part of the NED Project.

8. How much time will elapse from the time a possible leak occurs (when detected by the KM control center) until valves are being closed to stop the flow of Natural Gas? Will this shut down procedure start immediately or will KM send a verification crew to inspect the potential incident prior to starting the shutdown procedure?

Once the decision is made to shut-in the area of concern, the valves are designed to close within 60 seconds. As stated in question #4 above, Tennessee will be using remote controlled valves (RCVs) as part of the design so the valves can be closed remotely.

#### 9. How is static build up on/in the pipeline dissipated?

An Alternating Current (AC) Mitigation Plan is under development to address areas where the pipeline will be near power lines. Tennessee has grounding procedures for personnel to use as part of on-going operations and maintenance.

### 10. How does the pipeline company (Kinder Morgan) identify that they have a leak in the system? Is there a threshold below which they will not shut the system down due to minor leaks?

Before an installed pipeline is placed in-service, the pipeline is hydrostatically tested to confirm pipeline integrity. If any leak issues are discovered, repairs are made before the pipeline is placed in-service to flow natural gas. Tennessee closely monitors pipeline operations, including line pressure and surveillance of the pipeline to detect leaks and protect against third-party damage. Tennessee also uses state of the art, in-line inspection tools, known as smart pigs, to periodically internally inspect the pipeline, in accordance with PHMSA Regulations, 49 CFR Part 192.

## 11. What are the capabilities of the pipeline control center for managing operations and emergencies, where will it be located and is there a backup center?

All compressor and meter station along the pipeline routes are monitored from the 24-hour control center through a Supervisory Control and Data Acquisition (SCADA) system. The operators in the control center are able to start and stop equipment, make pressure and volume adjustments, and start and stop the pipelines individually and as a system. The pipelines are operated in accordance with Tennessee operating procedures that meet or exceed the requirements of PHMSA Regulations, 49 CFR Part 192.

If a leak is detected that does not represent a safety concern and is classified as a non-hazardous leak an appropriate repair plan would be developed. An example of a non-hazardous leak that

would not require a system shut down could be a valve packing that can be tightened to stop the leak.

- 12. Will there be a radiological source used on site during the construction and weld testing process, and what are the contingency plans in the event of a radiological emergency? 100% of all welds are non-destructively tested using radiography by licensed operators prequalified by Tennessee. While radiography is being performed on each weld the area is cordoned off to prevent personnel from coming near the source. Once the radiography is completed the source is returned to its container by the licensed operator.
- **13.** When do we start the Emergency Response Plan process and who is involved in the process? In the very unlikely event of emergency response is required, notifications will be made to 911, internal (Tennessee control center) and external entities (National Response Center, State agencies and other county/local and tribal notifications as necessary). An incident command system will be activated with Unified Command. Emergency Responders (fire, police etc.,) will conduct firefighting, search and rescue, evacuations, road closures, perimeter control, hazmat response as required.
- **14.** Is there any confined space areas planned along the pipe line for Merrimack? There are no plans for confined space areas along the proposed pipeline route in Merrimack.
- 15. What Fire Department resources may be needed on site during construction in the event of an emergency medical or trench collapse, etc.? Will access be maintained throughout the construction process for ambulance and fire apparatus?

Tennessee will require the construction contractor to provide necessary fire prevention and suppression equipment in accordance with a detailed fire plan that will be developed by the installation contractor prior to construction. Tennessee will require all contract vehicles to stay on Tennessee's construction ROW to avoid contact between flammable materials and the hot exhaust system of construction equipment and vehicles. As needed, water will be stored in tank trucks for fire suppression or sprayed on the ROW to lower the flammability of the work environment. Access will be maintained throughout the construction process for ambulance and fire apparatuses.

16. How will residents living within the pipeline corridor be notified if there is an emergency? Will there be an audible notification system or only a phone tree for citizen notification? Tennessee has developed response plans to respond to unplanned events, and Tennessee works regularly with local first responder personnel to educate and drill on the procedures. It is always best to check with your local emergency response teams as emergency response protocols vary.

#### 17. What type of seismic protection is used to protect the pipeline?

As a part of the detailed design, a specialist has been contracted to evaluate potential seismic hazards along the pipeline route. Preliminary indications suggest that there are no active faults with a potential for surface rupture mapped by the United States Geological Survey (USGS) along the pipeline route. Transient pipeline strains induced by ground shaking are sufficiently small as to be ignored as a credible threat. It is not anticipated that the pipeline will need additional seismic protection but Tennessee will continue to evaluate this through the design phase.

#### 18. Is any of the pipeline anticipated to be above ground in Merrimack?

The proposed NED mainline pipeline will be 100% buried in Merrimack. Tennessee notes that it is early in the detail design phase and there may be an RCV and/or meter station located in Merrimack that would have some above ground piping (located within a fenced area).

#### **Additional Resident Questions**

- 1. What is the purity of the gas that would run through this pipeline? What chemicals remain in this gas from the fracking process? Will you provide a complete list to the town? All natural gas that is transported on Tennessee's system must meet the gas quality specifications set forth in Tennessee's FERC Gas Tariff. Trace amounts of chemicals used in the hydraulic fracturing process may be found in natural gas produced from hydraulically fractured wells that is transported on pipelines like Tennessee. Organic compounds, like benzene and toluene, are naturally occurring petrochemicals and trace amounts of these chemicals may also be found in conventionally produced natural gas, such as gas coming from the Gulf of Mexico, that have been supplying New England for decades. Tennessee does not plan on providing a list of chemicals to towns due to the constantly changing origin and compositions of gas being shipped through the pipeline.
- 2. Will there be any main line valves, blow off valves, pig launchers, pig catchers, pig receivers, metering stations or compressor stations in Merrimack? What potential harm could these pose? Even if there are no current plans for these, could they be added in the future? There is no compressor station proposed to be located in Merrimack. Tennessee is early in the detail design phase and there may be an RCV and/or meter station located in Merrimack. These facilities will be constructed and operated in accordance with PHMSA Regulations, 49 CFR Part 192 and pose no potential harm.
- 3. Can you describe alternate routes you considered through Merrimack that would avoid blasting through our nature preserve and putting over half of the town's drinking water at risk? Why didn't you choose one of those routes?

Currently Tennessee is evaluating several alternatives in the Amherst/Merrimack area. Each of these alternatives will be evaluated based on environmental impacts, landowner impacts, constructability, and cost.

4. Are land owners required to sign a nondisclosure agreement if they accept an easement with your company?

Landowners are not required to sign a non-disclosure agreement with Tennessee if they grant Tennessee an easement.

5. Your filing states that the amount of property tax that the town of Merrimack may "possibly" receive is based on the value of the pipe. How quickly is this pipeline depreciated? In the past you have requested tax abatements from cities and towns. Can you tell us what caused you to seek these abatements?

The pipeline depreciation for the Town assessment would be determined by the appraiser that the Town hires to value utility property. If the Town uses the NH Department of Revenue value, the depreciation would be straight line based on the TGP Form 2. Tennessee has sought abatements in the past when we believe the Town market value is significantly above our view of market value.

- 6. Will herbicides be used to maintain the right of way in Merrimack? If you say no will you put that in writing. Not that it's not your first choice or they "may" be used. Will you commit in writing that herbicides will <u>not</u> be used by you or your subcontractors to maintain the right of way? Please see previous response to Question 1 A, B, C and D in the "Fire/Police/Emergency" section of this document.
- 7. The proposed pipeline right of way will be very attractive to atv users and horseback riders. How do you prevent unauthorized activities from taking place over the pipeline? Would it be the responsibility of Merrimack police department to monitor those activities? How much will that cost the town?

Please see the response to 5a in the "Fire/Police/Emergency MGMT" section of this document.

8. There have been several instances of spills during horizontal directional drilling that result in Bentonite and drilling muds going into waterways, such as happened in the Upper Delaware River. How will you ensure this won't happen while drilling in our rivers and wetlands? Tennessee has engineering and construction standards that address these issues. The design of the horizontal directionally drilled crossings including the profile and selection of appropriate will be selected to minimize the probability of inadvertent returns.

Construction procedures and standards are discussed in the draft Resource Report 1 (General Project Description) of the draft Environmental Report, filed with the Federal Energy Regulatory Commission (FERC) on March 13, 2015 in Docket No. PF14-22-000.

Tennessee does not anticipate the Project to have any impact on groundwater or surface water quality or supply. Further details can be found in draft Resource Report No. 2 (Water Use and Quality). Draft Resource Report No. 6 (Geological Resources) contains additional details on blasting impacts and mitigation measures.

- 9. Will you create an escrow account to pay property owners for damage caused by pipeline construction, including damage to homes, wells, roadways and waterways? Damages are paid in advance and negotiated individually with each landowner as part of the easement negotiation process. Damage payments cover those damages occurring within the permanent and temporary easements. If damages from the construction activity occur outside of that defined area, Tennessee agrees to be responsible for it.
- 10. Article 12-A of the NH State Constitution prohibits use of eminent domain "if the taking is for the use of private development." The NED project is entirely the domain of a private out-of-state corporation and can in no way be considered a federal-or state-government project. How do you justify using the threat of eminent domain proceedings?

Under the Natural Gas Act (NGA), an interstate pipeline is required to file with the FERC an application for a certificate to construct, operate and maintain an interstate natural gas pipeline. Under this statute, FERC is given exclusive federal authority to determine if the pipeline and related facilities, such as meter and compressor stations, are required by the public convenience and necessity and should be built. If, after review of the certificate 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 accepted by the pipeline company, the NGA provides that the federal doctrine of preemption will apply and supersede any state laws that conflict with the NGA. Issuance of the certificate 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.

- 11. The acceptable rate for leakage on this pipeline is 1%. What is 1% of 2.2 billion cubic feet? We are unsure of the source of this claim and disagree that 1% is an "acceptable rate for leakage". Tennessee's "acceptable rate" for leakage on all existing pipelines as well as the proposed NED project is zero percent.
- 12. Will you state uncategorically, here and now, that KM will never accept a dime of public money or money derived from ratepayer tariffs to offset building the pipeline? The proposed NED Project is not relying on subsidies to be built; rather, the NED Project is a standalone project that will be paid for and constructed by the company and supported by the Project customers who enter into firm transportation capacity commitments on the pipeline to transport their gas via the NED pipeline. Large projects of this scale are not built on spec, and contracted capacity commitments are necessary in order to build such project.

Recent initiatives by the 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 natural gas and electricity service.

There has been discussion that electric distribution companies (EDC) in the region may be willing to contract for additional natural gas transportation capacity to support additional electricity generation if they are able to recover the costs of this capacity from their ratepayers. Whether or not such cost recovery would be in the public interest and permissible would ultimately need to be determined by the state public utilities commissions' that regulate and set the rates of each EDC. If pursued by the EDCs, such a decision would follow a thorough, public process in which the ratepayers would have the opportunity to be heard.

# **13.** In the case of a gas leak or explosion who is responsible for shutting off the gas? What is the response time?

See response to question 8 above. Tennessee is responsible for shutting off the valves on the pipeline if needed and can do so remotely (via remote controlled valves) within 60 seconds.

# 14. The justification for this pipeline is to supply gas to NH and to power generation plants, but only 5% of this gas is contracted for use in NH. Have any power generation plants signed up for gas from this pipeline?

The current structure of the New England wholesale electric markets does not create financial conditions that are conducive for natural gas-fired generation to contract for firm natural gas pipeline capacity, and consequently, gas-fired generators have not typically contracted for pipeline capacity. Because gas-fired generation contracted in the wholesale markets is short-term in nature, gas-fired generators generally cannot demonstrate the creditworthiness required to support the long-term commitments to pipeline capacity contracts that are required for the expansion of pipeline facilities. Due to this lack of contracting by gas-fired generation, the interstate pipelines serving New England have not been sufficiently expanded to accommodate increasing natural gas demand for the generation of electricity, which has limited the ability of gas-fired generatorsto

operate when the pipeline capacity is being utilized by those that do contract for it. The existing shortage of pipeline capacity to serve the demand from the electric generation sector, particularly during the winter, leads to higher natural gas prices, and in turn, higher electricity prices.

A change in the wholesale electric market rules to incentivize gas-fired generation to contract for firm pipeline capacity has not occurred and appears unlikely to occur. Accordingly, New Hampshire, along with other New England states, is considering how electric distribution companies ("EDCs"), which have the creditworthiness to support long-term capacity commitments to pipeline contracts, may contract for pipeline capacity that could be used to reliably fuel gas-fired generators. Tennessee fully supports New Hampshire EDCs contracting for pipeline capacity that would be made available to gas-fired generators and recovering the costs associated with those capacity contracts from its retail electric customers to help mitigate natural gas and electric prices in New Hampshire.

Numerous parties have demonstrated that additional pipeline capacity into New England will provide substantial benefits to the region through lower energy costs. Tennessee firmly believes that its proposed NED Project is an important and critical means of providing essential energy cost relief to both electric and natural gas consumers in New Hampshire. The Project will also provide greater reliability for both the natural gas and electric markets, as well as the opportunity for future natural gas growth within the state for customers that do not currently have access to natural gas. Therefore, the NED Project is an essential and integral part of the preferred solution for resolving New Hampshire's and New England's volatile and high wholesale natural gas and electric prices.

15. How long are the Marcellus supplies forecasted to provide gas if you continue to extract more and more gas each year? (Whatever the number follow up with: Do you feel it is being short sighted not to save the gas to ensure a long lasting supply for the citizens of this country?) Tennessee is a gas pipeline that transports gas and therefore does not drill in the Marcellus Shale area (or any other area) and thus has not performed supplies forecasts for the area. Tennessee notes that it only receives a portion of its natural gas for transport from the Marcellus Shale region. The Tennessee system originates in Louisiana, Texas, and the Gulf of Mexico and extends through a number of states, and receives gas from multiple different sources.

While the NED Project will provide an additional 1.3 to 2.2 Bcf/d of natural gas firm transportation capacity to meet energy needs in the New England region, the NED Project will provide only a small fraction of the total incremental capacity associated with projects proposed to be built to take Marcellus and Utica gas production to the Gulf Coast and Midwest states. There are over 15 Bcf/d (equivalent to 20% of daily U.S. natural gas demand) of proposed capacity additions to connect the Marcellus-Utica basin to the Midwest and Gulf Coast regions by 2018.

16. According to your latest FERC filing, the pipeline will be 5 feet outside of the PSNH easement, requiring another clear-cut corridor next to the PSNH easement. Can you explain why? The decision to site the NED Project pipeline in New Hampshire was primarily made to minimize environmental and landowner impacts via co-location with the existing rights-of-way of Public Service of New Hampshire (Eversource) as compared to a new, or greenfield, installation. The initial starting point for such co-location is to generally place the pipeline centerline 5 feet outside the Eversource easement since dimensional details of the Eversource easement are unknown at this time, including how much of the easement may be available for siting the pipeline inside the

easement. The 5 foot offset of the pipeline centerline will allow using approximately 60 feet of the power line easement as construction workspace for the Project, which will reduce impacts a commensurate width outside the power line easement. Pursuant to Tennessee's ongoing evaluation of the co-location with Eversource, Tennessee's expectation is that the parties will work closely together going forward to provide the least impactful landowner and environmental installation possible.

17. According to your "Benefits to New Hampshire" handout, the pipeline will bring 5 permanent jobs and 520 temporary jobs to New Hampshire. Your report also states that local restaurants, hotels and businesses will see an increase in revenue...that leads me to believe that the jobs are not for local citizens. For the 520 temporary jobs, is there a requirement that they be for New Hampshire residents?

Local contractors will be hired to oversee construction work; the extent of how many of the required jobs are filled with the local workforce depends on the pool of skilled workers in the impacted communities. Tennessee has no requirement that local contractors be New Hampshire residents, however, Tennessee prefers to hire locally whenever possible.

18. Who is going to pay for this pipeline and how and for how long? Your Frequently Asked Questions say the ratepayers, so you are going to destroy our properties, use of our own land and then charge us for doing it. Is that accurate?

Tennessee is responsible for paying for the development of the NED Project facilities. Once NED places the facilities into commercial operation and begins service, the NED Project shippers will begin to make their monthly payments to Tennessee under their long-term (i.e. 20 years) firm transportation agreements.

The NED Project was conceived in response to repeated requests from potential customers and governmental agencies in New England for a pipeline project of sufficient size to meet the growth in natural gas consumption that is forecasted to occur during the next decade in the Northeast, predominantly in New England, while keeping delivered gas prices at reasonable levels and minimizing price spikes in that have occurred historically, including during the 2013-2014 winter.

19. In your "Benefits to New Hampshire" handout on page 3 you show the cost of winter gas prices have gone down. Can you explain why?

The chart you are referencing on pg. 3 of the "Benefits to New Hampshire" handout actually shows the cost of winter gas prices going UP in the past several winters. The 2015-2016 columns on the chart that shows winter natural gas prices is a projection of expected winter natural gas prices assuming the construction of additional natural gas pipeline capacity into New England. This demonstrates the impact the NED Project is anticipated to have in terms of bringing natural gas prices down in the region.

20. In FAQs, you state that there will be "temporary impacts to wildlife and the environment". If birds live in trees and you take down those trees and don't replace them or let them grow back over the pipeline...how is that temporary?

The pipeline route will require the removal of some trees for construction and operation; however, the exact number has not yet been determined. The pipeline will be routed to minimize the disturbance to mature trees and to avoid national forest areas. No trees may be replanted in permanent easement areas, but trees outside the permanent easement will be allowed to grow back.

21. Are you going to supply or pay for necessary emergency infrastructure to each town on the pipeline route? If not, why do the communities need to bear the direct costs of something you build?

Please see the responses to questions 2 and 3 in the previous "Fire/Police/Emergency MGMT" section of this document.

22. As part of this project you are constructing 9 new compressor stations but the exact locations of these compressor stations have not been finalized yet. Since these compressor stations are the largest industrial installations of this project and produce the most noise and pollution, once the sites are finalized, will you then grant the public and towns additional time to study and comment on these sites?

There are currently no plans to construct a compressor station in Merrimack as part of the NED Project. Please see Tennessee's FERC Supplemental filings of June 1, 2015 and June 4, 2015 for the compressor station locations.

23. Can you please give us the name and location of one of your other current 80,000 HP compressor stations handling 1,460 PSI natural gas?

There are currently no existing compressor stations in Kinder Morgan's inventory that match the profile of the 80,000 HP stations proposed for the NED Project. Existing compressor stations utilize different combinations of reciprocating and/or turbine driven compressors in different horsepower configurations. Some examples are shown below

- Tennessee Gas Pipeline, Compressor Station 87 (Portland, TN) 49,700 hp; gas fired reciprocating engines (22) driving reciprocating compressors
- Ruby Pipeline Roberson Creek (Kemmerer, Wyoming) 68,625 hp electric motors (3) driving centrifugal compressors
- Copano Processing, Houston Central Plant (Sheridan, Tx) 77,377 hp; combination of gas fired reciprocating engines driving reciprocating compressors and gas fired turbines driving centrifugal compressors
- EPNG Blanco Plant (San Juan County, NM) 55,000 hp; gas fired turbines (3) driving centrifugal compressors.
- 24. On the common land in Whittier Place, your map shows the pipeline on one side of the power lines then crossing perpendicularly under the power lines to the other side. Does crossing under the power line cause increased corrosion of the pipe and what do you do to protect against this? Why have you chosen to make a perpendicular crossing in such a densely populated neighborhood?

A portion of the NED Project pipeline will be co-located with high voltage electric power lines to minimize landowner and environmental impacts. The pipeline will cross a power line corridor, as required, to avoid interferences such as buildings, environmental features etc. Such power line "crossovers" are common and are no more susceptible to corrosion than the balance of the pipeline pursuant to installation of cathodic protection (CP) and alternating current ("AC") mitigation systems that are being designed by Tennessee's specialist design engineering firm.