

**P♦L♦A♦N**  
**PIPE LINE AWARENESS NETWORK**  
FOR THE **NORTH EAST, INC.**  
[www.plan-ne.org](http://www.plan-ne.org)

August 10, 2018

**VIA EMAIL**

Secretary Matthew Beaton  
Executive Office of Energy and Environmental Affairs  
Attn: MEPA Office, EEA No. 15879  
Alex Strysky, MEPA Analyst  
100 Cambridge Street, Suite 900  
Boston MA 02114

**Re: EEA #15879, Tennessee Gas Pipeline 261 Upgrade Projects, Agawam, MA**

Dear Secretary Beaton:

The Pipe Line Awareness Network for the Northeast, Inc. (“PLAN”) submits the following comments in response to the Expanded Environmental Notification Form (“EENF”) submitted by Tennessee Gas Pipeline Company L.L.C. (“TGP” or the “Company”) for its proposed 261 Upgrade Projects (the “Projects”).

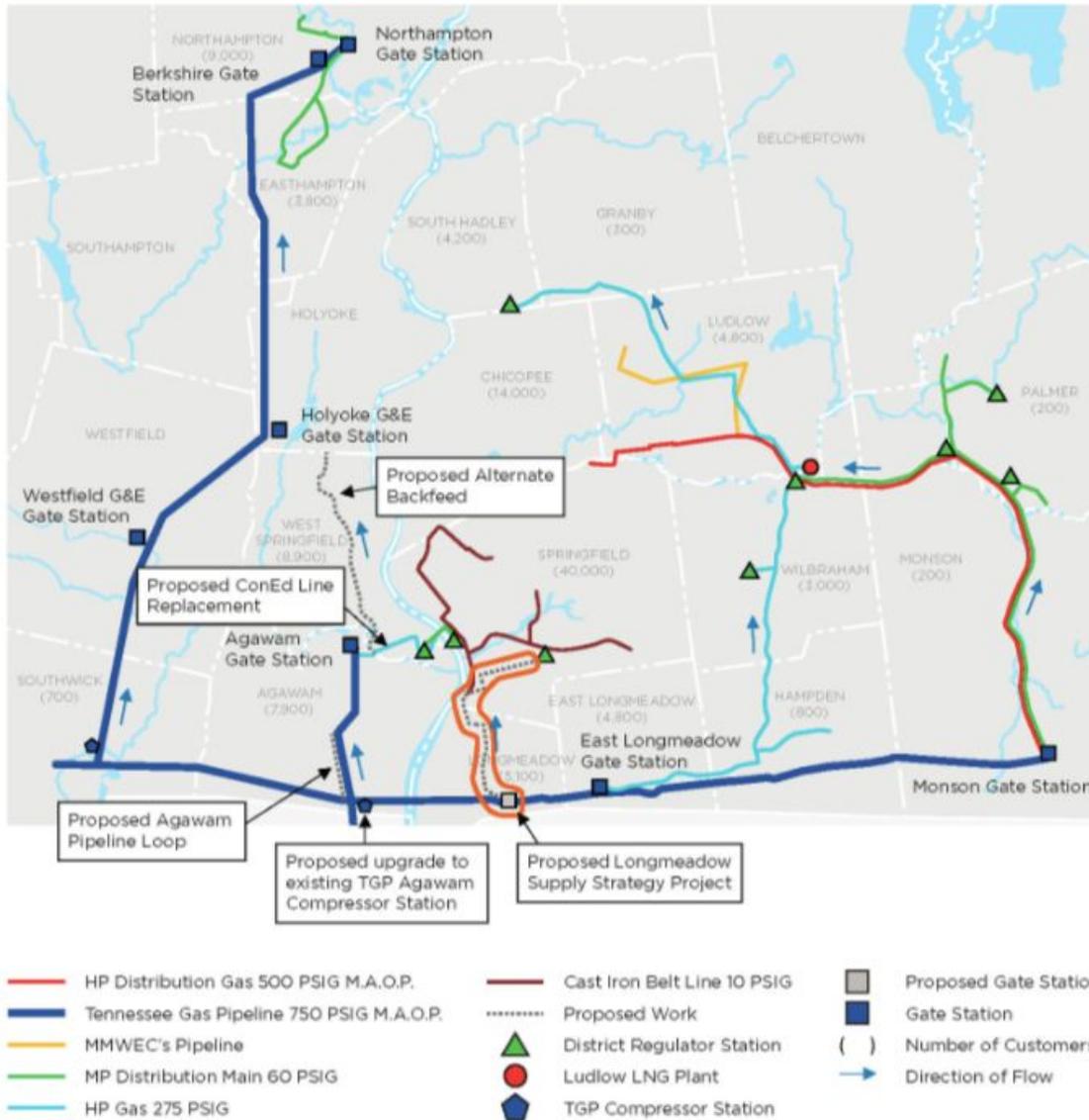
An overarching concern is that the Projects are being evaluated out of context, in isolation from the expansion projects developed by TGP’s customers, Bay State Gas Company dba Columbia Gas of Massachusetts (“Columbia Gas” or “Columbia”) and Holyoke Gas & Electric (“HG&E”) – multiple projects of which the instant Projects are an integral part. When considered as a whole, these *five* projects clearly would result in an overbuild of the system and thus avoidable unjustifiable environmental impacts.

As described in the EENF, TGP proposes to construct 2.1 miles of 12-inch pipeline looping (the “Looping Project”), commencing at the existing Compressor Station #261 and proceeding northerly, roughly following the Company’s existing Agawam Lateral route. TGP proposes to construct one pig receiver and one pig launcher at either end of the Looping Project. TGP also proposes to increase the horsepower of Station #261 (the “HP Project”) by replacing two older turbines with one new more powerful turbine.

These Projects are part of what Columbia Gas has referred to as “five integrated supporting infrastructure projects” (together, the “Springfield Area Reliability Plan”), depicted on the Columbia Gas website<sup>1</sup> and reproduced below:



**Greater Springfield Service Territory Infrastructure**



<sup>1</sup> See [www.columbiagas.com/images/default-source/promotion/reliability-handout-draft---nov-1-draft-6\\_page\\_1.jpg](http://www.columbiagas.com/images/default-source/promotion/reliability-handout-draft---nov-1-draft-6_page_1.jpg); [www.columbiagas.com/images/default-source/promotion/reliability-handout-draft---nov-1-draft-6\\_page\\_2.jpg](http://www.columbiagas.com/images/default-source/promotion/reliability-handout-draft---nov-1-draft-6_page_2.jpg) (last visited August 9, 2018).

## **Single EIR Not Justified**

The Company has requested permission to prepare a single environmental impact report (“EIR”). PLAN does not believe that the EENF as submitted demonstrates “that the planning and design of the Project[s] use all feasible means to avoid potential environmental impacts”, as required under 301 CMR 11.6(8)(c), to allow granting of a Single EIR.

To implement the instant Projects, the Company seeks to impact 36.91 acres in total and to widen its existing permanent right of way to accommodate the proposed adjacent pipeline looping. Further, the Company seeks to impact more than one acre of Bordering Vegetated Wetland, more than one thousand feet of Bank, two hundred thousand square feet of Riverfront Area, to impact Isolated Vegetated Wetlands and Land Under Water, to cross five streams, to convert prime agricultural land, and to engage in construction activities that will result in the “take” of rare species. While TGP understates the environmental impacts of the Projects (asserting that “the vast majority of these wetland impacts will be temporary in nature”), the reality is that everything from wetland resource areas to land currently in agricultural use will be permanently altered by soil compaction, tree and shade loss, and the wide array of hydrologic, vegetative and habitat changes that will result should the Projects be allowed to move forward.

These Projects exceed multiple thresholds for a Mandatory EIR and, as we heard at the July 27, 2018 MEPA Consultation Session, there are many aspects of the Projects that TGP is “still figuring out.” PLAN recommends that the Secretary deny the request for a Single EIR and instead require both a Draft and Final EIR, both of which should comprehensively address the entire Springfield Area Reliability Plan.

## **Alternatives Analysis**

The alternatives analysis provided in TGP’s EENF is inadequate. Reviewing agencies should consider all parts of the Springfield Area Reliability Plan together to determine an appropriate alternative to address the energy needs of Holyoke and the communities in the Columbia Gas Springfield Division. Alternatives that eliminate or reduce the length of proposed new pipeline construction should be investigated, as such alternatives would most likely avoid or minimize adverse environmental impacts that would result from implementing TGP’s preferred alternative.

### ***TGP’s Over-Reliance on Precedent Agreements in Alternatives Analysis***

As a preliminary matter, TGP’s reliance on precedent agreements is inappropriate in the context of a MEPA evaluation of any alternative that would provide less pipeline capacity than the maximum contract amount authorized by the Department of Public Utilities (“DPU”). The claimed “need” for these Projects (which the DPU relied upon when approving TGP’s precedent agreement with Columbia Gas) is founded upon speculative sales forecasting. We have seen the same scenario play out with TGP’s Connecticut Expansion Project, just completed in Agawam and Sandisfield last fall:

the forecasts used to justify the Connecticut Expansion have proven to be drastically overblown, even though the state of Connecticut actively encouraged conversions to gas heat.<sup>2</sup> In the case of the Projects now under review, the forecasts predict a significant rise in demand for natural gas even in municipalities that have declared their intent to transition to 100% renewable energy.<sup>3</sup>

Precedent agreements are in no way binding on state or federal agencies; the parties' agreement to enter into firm transportation contracts are *conditioned* on environmental permits and should not determine the permitting outcome. DPU approval does not diminish the duty of the state's environmental agencies to require a thorough alternatives analysis and to advocate for alternatives that have less negative impact on the environment.

TGP and the utilities' goal of maximizing expansion of gas infrastructure and consumption is at odds with local, regional, and state policies to transition away from fossil fuel consumption, including the mandates of the Global Warming Solutions Act pertaining to greenhouse gas emission reductions and the Green Communities Act pertaining to energy efficiency.

### ***Alternatives Analysis Should Consider Reductions in Capacity Requirements Due to Reductions in Gas Demand***

TGP cites the Pioneer Valley Planning Commission (the "PVPC") 2015 "Plan for Progress" as justification for the expansion of gas supply in region. However, the PVPC's Pioneer Valley Climate Action and Clean Energy Plan ("PVPC Clean Energy Plan") describes two general goals for regional clean energy, in line with state mandates:

1. Reduce energy use.
2. Replace non-renewable energy sources with clean, renewable energy sources generated locally.<sup>4</sup>

Moreover, the PVPC is currently in the process of updating its PVPC Clean Energy Plan. Since the time that the above-mentioned PVPC documents were developed, the Commonwealth of Massachusetts has itself developed a range of incentives to promote efficient heat pumps, rather than natural gas, as the gold standard in clean space heating (and to promote electric vehicles rather than

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<sup>2</sup> "Eversource's gas utility is now targeting 4,700 customer conversions this year, down from an original goal of 9,372, while Avangrid's two gas utilities have revised their combined goal of 20,100 conversions to 6,000[.]" "CT's natural gas expansion plan well behind schedule," *HartfordBusiness.com*, July 16, 2018 ( [www.hartfordbusiness.com/article/20180716/PRINTEDITION/307129946/cts-natural-gas-expansion-plan-well-behind-schedule](http://www.hartfordbusiness.com/article/20180716/PRINTEDITION/307129946/cts-natural-gas-expansion-plan-well-behind-schedule)).

<sup>3</sup> See, e.g., "Resolution of the City Council of the City of Northampton in Support of 100 Percent Renewable Energy," R-18.003, January 4, 2018 (available at [northamptonma.gov/AgendaCenter/ViewFile/Item/9008?fileID=101452P](http://northamptonma.gov/AgendaCenter/ViewFile/Item/9008?fileID=101452P)); see also statement of Alex B. Morse, Mayor, Holyoke, Massachusetts ("Holyoke's commitment to making the transition to 100 percent renewable energy arises from our commitment to safeguard the future of the families and neighborhoods that have built our city.") (available at [100percentrenewable.org/post/171143663021/alex-b-morse-mayor-holyoke-massachusetts](http://100percentrenewable.org/post/171143663021/alex-b-morse-mayor-holyoke-massachusetts)).

<sup>4</sup> Available at [http://www.pvpc.org/sites/default/files/PVPC Climate Action Clean Energy Plan FINAL 02-18-14.pdf](http://www.pvpc.org/sites/default/files/PVPC%20Climate%20Action%20Clean%20Energy%20Plan%20FINAL%2002-18-14.pdf).

vehicles powered by compressed natural gas).<sup>5</sup> The industry myth that natural gas is clean or a bridge to a renewable energy future has been debunked since that 2015 PVPC plan was released. Methane – natural gas – is 86 times more potent a greenhouse gas than carbon dioxide when released into the atmosphere, if you measure the impacts over a 20-year timeframe. Methane is released not just through unintentional leaks, but as a part of regular system operations, so that the life-cycle greenhouse gas impacts of natural gas rival those of coal.<sup>6</sup>

In addition to evaluating alternative means of space heating that would reduce the scope of the proposed Projects, please factor in, at a minimum, energy efficiency plan goals for Columbia Gas that result from the 3-year energy efficiency plan development currently underway and soon to be evaluated by the DPU.

### ***System Alternatives and Segmentation***

The system alternatives discussed below should be considered in connection with the gas demand reduction strategies discussed above.

#### *Longmeadow Alternative*

TGP refers in its EENF to a meter station that it intends to construct in June of 2019 in Longmeadow, along the Company's existing 200 Line.<sup>7</sup> The purpose of the proposed Longmeadow Meter Station is to provide Columbia Gas a point of delivery ("POD") on the east side of the Connecticut River. TGP asserts that its proposed Longmeadow Meter Station is "separate and distinct" from the instant Projects. However, the proposed new Longmeadow POD is part of what Columbia Gas calls the "Longmeadow Supply Strategy Project,"<sup>8</sup> one of the "five integrated supporting infrastructure projects" that constitute the Springfield Area Reliability Plan. **If completed, the Longmeadow Supply Strategy Project will reroute a significant amount of the current demand away from the Agawam Lateral and could eliminate any need for the Looping Project.**

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<sup>5</sup> See, e.g., <http://www.masscec.com/residential/clean-heating-and-cooling>; <https://www.mass.gov/how-to/massevip-fleets>. See also *Pioneer Valley Clean Energy Roadmap* (<http://www.pvpc.org/sites/default/files/doc-clean-energy-roadmap2838.pdf>).

<sup>6</sup> See generally Howarth, R. W. (2015), "Methane emissions and climatic warming risk from hydraulic fracturing and shale gas development: Implications for policy," *Energy Emission Control Technol.*, 3, 45–54 (available at [https://www.eeb.cornell.edu/howarth/publications/f\\_EECT-61539-perspectives-on-air-emissions-of-methane-and-climatic-warmin\\_100815\\_27470.pdf](https://www.eeb.cornell.edu/howarth/publications/f_EECT-61539-perspectives-on-air-emissions-of-methane-and-climatic-warmin_100815_27470.pdf)).

<sup>7</sup> See p. 5 of EENF. Table 2-10 on p. 25 of the EENF describes the proposed Longmeadow Meter Station as "including two 8-inch taps on mainlines 200-1 and 200-2; one 4-inch and one 8-inch meter with 12-inch headers and 8-inch station piping; and access driveway."

<sup>8</sup> See supra note 1.

Columbia Gas has explained that new Longmeadow POD “supplying [its] distribution system east of the Connecticut River (including the City of Springfield and parts of Longmeadow and Chicopee) would improve the reliability of gas service for customers in this area by reducing the risk associated with a single source of supply attached to a bridge crossing the Connecticut River.”<sup>9</sup> Columbia Gas further states: “Improvements to the distribution system include installing between 18,000 and 20,000 feet of 12” and 16” cathodically protected coated steel pipe designed to ultimately operate at 200 psig. This line will connect the new POD to the input of the Company’s large diameter 10 psig cast iron loop that supplies gas to the majority of the City of Springfield and the surrounding communities. **The new system as designed when operating at full capacity will provide the backbone infrastructure to supply gas to the majority of Springfield City and the surrounding communities.**”<sup>10</sup>

In other words, **rather than relying upon gas from TGP’s Agawam Lateral** to serve the main population center in the Columbia Gas Springfield Division, Columbia Gas proposes to create a more direct route to supply Springfield and neighboring communities. Additionally, according to Columbia Gas, the new Longmeadow POD will enable gas to flow east to west across the Connecticut River, to “support the communities of Agawam and West Springfield in the event of supply loss from the Agawam Gate State.”

Please require TGP (in consultation with Columbia Gas) to explain how much gas could be offloaded from the Agawam Lateral by completing the Longmeadow Supply Strategy Project.

#### *Ludlow/Chicopee Alternative*

A driving force behind the Springfield Area Reliability Plan is the perceived need to relieve capacity constraints on the Northampton Lateral and provide more capacity to Columbia’s Northampton/Easthampton territory by constructed new a pipeline (the proposed “Alternate Backfeed” on Columbia’s map) across West Springfield to supply HG&E, so that HG&E’s capacity on the Northampton Lateral can be made available to Columbia under a long-term capacity exchange agreement.<sup>11</sup> Columbia and HG&E have a *temporary* capacity exchange arrangement in place, whereunder Columbia provides HG&E 2,400 Dth/d of gas capacity at the Holyoke/Chicopee border, and HG&E makes that amount of capacity available to Columbia on the TGP Northampton Lateral.<sup>12</sup>

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<sup>9</sup> *Bay State Gas Company D/B/A Columbia Gas of Massachusetts 2017 Long Range Forecast and Supply Plan 2017/2018 – 2021/2022, October 30, 2017*, DPU Docket No. 17-166, 105 (available at <https://eeaonline.eea.state.ma.us/EEA/FileService/FileService.Api/file/FileRoom/9172434>).

<sup>10</sup> Columbia Gas Response to AG 3-2 in DPU Docket No. 17-172 (available at [eeaonline.eea.state.ma.us/EEA/FileService/FileService.Api/file/FileRoom/9167224](https://eeaonline.eea.state.ma.us/EEA/FileService/FileService.Api/file/FileRoom/9167224)) (emphasis added). As of May 2018, the Columbia Gas plan also includes installing “approximately 4,000 feet of new pipe to connect the POD to its existing distribution system in Longmeadow.” (Columbia communication with Longmeadow Selectboard.)

<sup>11</sup> *Id.* at 108-109.

<sup>12</sup> *Id.* at 109.

In the comprehensive alternative analysis of the Springfield Area Reliability Plan, please require analysis of system changes that would be necessary to increase capacity that Columbia could provide to HG&E at the Holyoke/Chicopee border site, rather than building a new high pressure pipeline through the entire length of West Springfield. This alternative could take advantage of LNG liquefaction and storage capacity already existing in Ludlow.

#### *Abandoning Pipeline Segment That Bisects Condominium Complex*

At the July 27, 2018, MEPA Consultation Session it was suggested that the existing pipeline segment that bisects the abutting the Longbrook Estates Condominiums be abandoned as part of the Projects and that a replacement for it be installed alongside the Looping Project that was designed to avoid the complex. Please require TGP to include in the Draft EIR an analysis of whether this is a feasible or possible improvement for the safety of the Company's 261 system. TGP should further evaluate whether the Looping Project pipe could be resized to include the capacity of the pipe that currently bisects the condominium complex, abandoning that existing pipe section and resulting in a single pipe outside Longbrook Estates rather than multiple pipes.

#### **Greenhouse Gas Emissions & Air Quality**

TGP should quantify emissions and analyze proposed mitigation in accordance with the MEPA Greenhouse Gas Emissions Policy and Protocol. Both carbon dioxide (CO<sub>2</sub>) and methane (CH<sub>4</sub>) emissions should be included in that analysis. The volume of methane should not be limited to construction and operational activity (as was done for the EENF), but be quantified from wellhead to burner tip, including planned and unanticipated blowdowns or other releases of raw methane at the compressor station, pigging stations, metering stations and all other infrastructure that releases methane as standard operating procedure.

The PVPC Clean Energy Plan<sup>13</sup> has two greenhouse gas reduction scenarios for the region. Both show a sharp decline in emissions from the "Building Heat" category starting in 2014. To the extent that the Company's Projects deliver increased emissions to the region starting around the estimated completion date of November 2020, the Projects are at odds with the PVPC plan and Massachusetts policy.

Please also require TGP to clarify how the HP Project operating emissions would compare to the operating emissions of the compressor station currently.

#### **Wetland Resource Area Impacts**

TGP proposes to impact 289,000 sq. ft. of Bordering Vegetated Wetlands and 7,800 sq. ft. of Isolated Vegetated Wetlands. Although TGP declares there will be no loss of wetlands as a result of the Projects, conversion of wetland resources from one category to another is a permanent loss of habitat.

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<sup>13</sup> PVPC Clean Energy Plan, supra note 4, ch. 6 (Greenhouse Gas Reduction Scenarios For The Region), p.77.

TGP should amend the Looping Project to further minimize conversions and accelerate restoration plans if the Company continues to pursue the Looping Project.<sup>14</sup>

The EENF states that “the EI would determine whether or not rubber-tired equipment would damage root systems by surveying the wetland ahead of clearing equipment for degree of saturation. Where wetlands are saturated and root damage is likely, clearing will be done manually or will be completed with equipment operating on timber mats.” If it could *all* be cleared manually, then it should be *required* to be cleared manually. Risking damage to the root systems within wetlands is not appropriate if it is avoidable.

If the Company continues to pursue the Looping Project, please require TGP to amend its plans for tree clearing to avoid this unnecessary risk to root systems.

### **Stream and Riverfront Area Impacts**

TGP proposes to cross five (5) streams, which will impact 1,001 linear feet of Bank and 6,500 sq. ft. of Land Under Water. All temporary or permanent impacts to Bank and associated riparian buffers should be avoided to the maximum extent. Please require TGP to describe how each crossing will be done – proposed in the EENF as possible different forms of open trenching – and to explain why less impactful, though more costly, horizontal directional drilling is not planned. The Massachusetts River and Stream Crossing Standards should be met to the maximum extent practicable for all crossings.

Two of the five streams to be crossed are classified as Cold Water Fisheries; two are unclassified and therefore, under MassWildlife protocols, presumed to be Cold Water Fisheries as well. Cold Water Fisheries only need a one-degree temperature change to be negatively impacted. TGP should explain how the Company will guarantee that the crossing method chosen will avoid harmful temperature changes, turbidity, silt, and riparian buffer impacts.

The EENF states that impacts to the Riverfront Area are proposed to be 200,000 sq.ft., 1.6 acres (70,000 sq. ft.) of which is permanent. A formal alternatives analysis of the impacts, required by the Riverfront Protection Act, must be provided to show there is no practicable and substantially equivalent economic alternative with less adverse effects.

The Bank, LUW, and RFA impacts proposed are enough to require that TGP perform a Detailed Wildlife Habitat Evaluation (WHE).

### **Endangered Species and Species of Greatest Conservation Need Impacts**

The proposed Projects impacts BioMap2 Core Habitat featuring Species of Conservation Concern, and Critical Natural Landscape containing Wetland Core Buffer and Landscape Block, along with Priority Habitat of Rare Species #780 and Estimated Habitat of Rare Wildlife #643 as mentioned in the EENF.

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<sup>14</sup> The majority of the comments that follow are only applicable if the Company continues to pursue the Looping Project.

As proposed, the Projects would impact two endangered species – Eastern Box Turtle and Eastern Worm Snake - and multiple species of greatest conservation need – American Eel, White Sucker, Blacknose Dace, Tessellated Darter, Eastern Brook Trout, and Fallfish along with Brown Trout. The EENF states that the Projects will result in a “take” of rare species. TGP must prepare a State-listed Species Habitat Assessment. TGP must also create a plan that will avoid impacts to these species to the maximum extent practicable.

### **Temporary Work Area Impacts**

TGP proposes to clear over four and a half acres of forested upland and forested wetland for temporary work areas. TGP should avoid as much tree clearing for temporary use as possible because these impacts are not as “temporary” as portrayed. Also, TGP should be required to plant substantially sized trees to accelerate restoration of these areas, rather than simply planting cover crops. TGP’s suggestion – that “[t]emporary workspace that was identified as forest during the field surveys will be allowed to revert to forest; however, succession back to forested habitat may take up to 50 years to regenerate in the temporary ROW to near pre construction conditions” – is unacceptable. TGP should provide restoration plans with definitions of success and monitoring to assure a more speedy restoration of the areas that would be deforested for temporary use.

### **Invasive species introduction avoidance**

Invasive species problems are widespread along utility easements. Purple loosestrife was noted on the short portion of the Projects seen on the July 27th MEPA Consultation Session. TGP must develop a Project-specific Invasive Species Management Plan to be implemented prior to construction and to continue for a minimum of five years post-construction. TGP should ensure that the plan includes working with abutting landowners to eradicate complete stands of invasives, not restricting its action to the bounds of their permanent and temporary easements. Wide swaths of disturbed soil are an invitation for the introduction and spread of invasive species that will hinder active and passive restoration efforts.

### **Road crossing impacts**

The Company proposes to cross four public roadways with the Looping Project, three of which they propose to cross by boring underneath. In Sandisfield, in the recently completed Connecticut Expansion, TGP proposed road borings and then switched to open cut immediately prior to construction. How will TGP avoid similar additional impacts to traffic?

### **Hydrostatic Test Water**

TGP proposes to store, for eventual hauling, the water used for hydrostatic testing of the Looping Project after construction. During TGP’s previous Massachusetts pipeline project just completed in November 2017, TGP managed to contaminate over half a million gallons of test water in Sandisfield

and over 16,500 gallons in Agawam. The half a million gallons of contaminated test water in Sandisfield was hauled to Maine in 7,000-gallon tankers, resulting in additional project emissions and hazards. The contaminated test water in Agawam was to be trucked to the same Maine facility but was instead illegally discharged when TGP failed to properly secure the holding tanks.<sup>15</sup> This was an astounding outcome, considering that TGP assured U.S. EPA and MassDEP that the water would be safe to discharge onsite at both locations. TGP must explain how it will avoid a similar calamity with the 110,000 gallons of test water proposed for the Looping Project, as that information is not outlined in the EENF. Please also require TGP to disclose the composition and source(s) of the chemicals that were involved in the Connecticut Expansion contaminations and that could lead to a repeat of such contamination.

Thank you for the opportunity to comment on the EENF. If you have any questions related to our comments, please contact us as we would be happy to discuss.

Respectfully submitted,



Kathryn R. Eiseman, President & CEO  
Pipe Line Awareness Network for the Northeast, Inc.  
17 Packard Road  
Cummington, MA 01026  
[eiseman@plan-ne.org](mailto:eiseman@plan-ne.org)  
(413) 320-0747



Cathy Kristofferson, Board Member  
Pipe Line Awareness Network for the Northeast, Inc.  
244 Allen Road  
Ashby, MA 01431  
[kristofferson@plan-ne.org](mailto:kristofferson@plan-ne.org)  
(978) 204-3940

Cc: Lealdon Langley, MassDEP  
Tom French, NHESP

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<sup>15</sup> CT Exp. Biweekly Report (Nov 19-Dec 2) (<https://elibrary.ferc.gov/IDMWS/common/opennat.asp?fileID=14773108>).