



## Berkshire Environmental Action Team

Protecting the Environment for Wildlife



September 4, 2014

*Via eFiling*

Federal Energy Regulatory Commission  
888 First Street, NE  
Washington, DC 20426

Re: Tennessee Gas Pipeline Company, L.L.C. Application, Docket No. CP14-529

Berkshire Environmental Action Team (BEAT) would like to offer the following comments regarding the proposed Connecticut Expansion Project Docket No. CP14-529 proposed by Tennessee Gas Pipeline Company (TGP).

### **Segmentation**

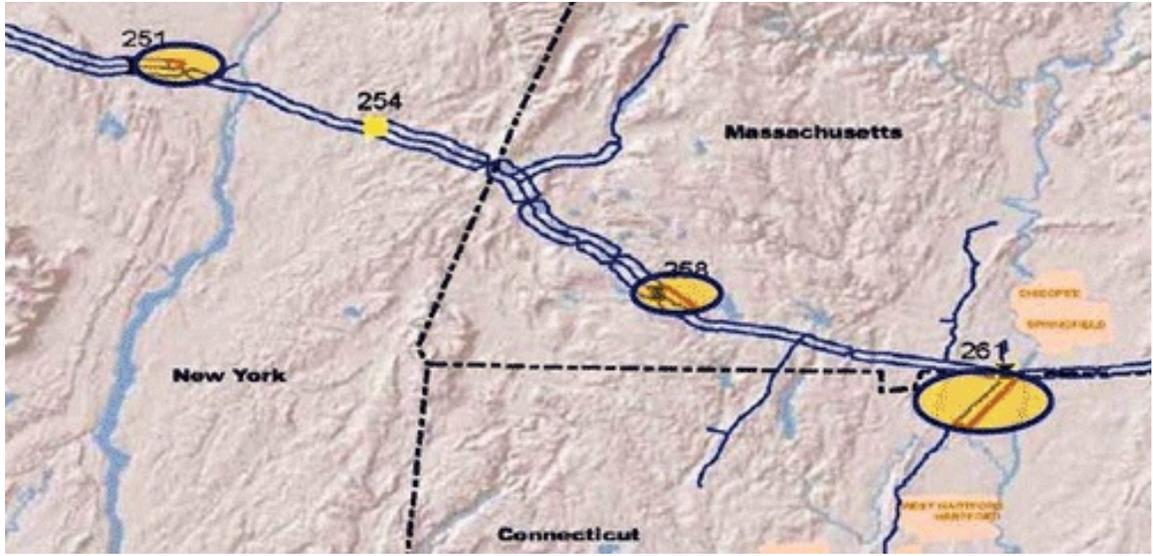
In order to fully assess the cumulative environmental impacts of Tennessee Gas Pipeline's northeast expansion, the two phases: Connecticut Expansion and Northeast Energy Direct must be considered together.

*Please do not allow TGP to impermissibly segment this expansion.*

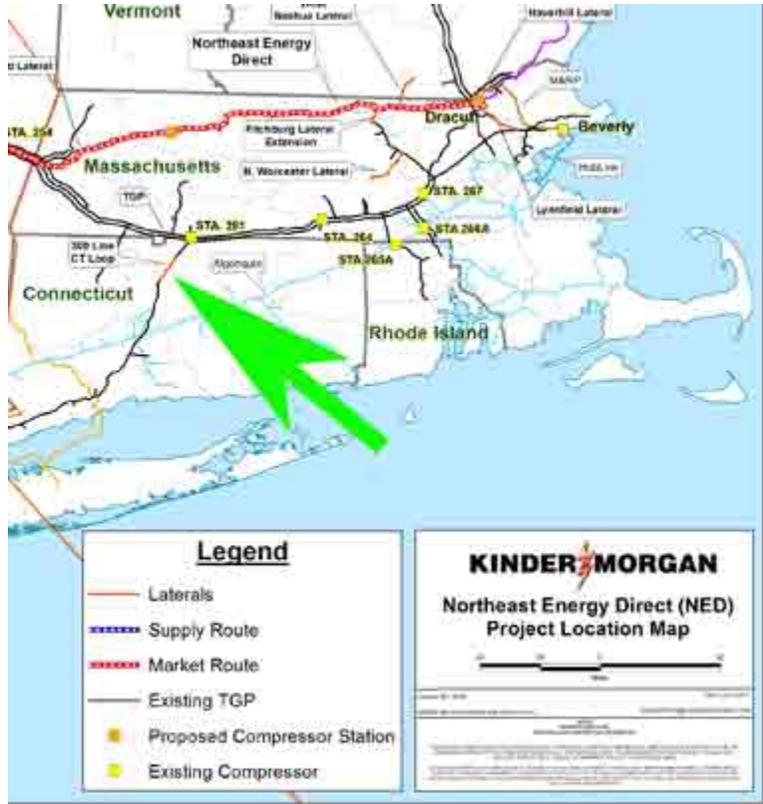
On June 6, 2014, [the U.S. Court of Appeals for the District of Columbia Circuit ruled](#) in Delaware Riverkeepers Network et al. vs. FERC that the Federal Energy Regulatory Commission's (FERC) environmental review of Tennessee Gas Pipeline's reconstruction project was impermissibly segmented and failed to adequately address the cumulative impacts of the project.

- See Applicable Statutory and Regulatory Framework below

The latest maps published by Tennessee Gas Pipeline/Kinder Morgan make very clear that the Connecticut Expansion is only a phase of a larger plan. Please look at the Map 1 for the Connecticut Expansion – especially looking at the pipeline from the number 261 in Agawam, MA south into Connecticut. Then look at the NED map and look in Connecticut immediately south of the Connecticut Expansion pipeline south from Agawam at the section labeled “300 Line Connecticut Loop”. There is the next segment of that pipeline - two segments on the same line, but currently being presented to FERC as two different projects. Berkshire Environmental Action Team (BEAT) believes that this is impermissible segmentation.



Map I – Tennessee Gas Pipeline/Kinder Morgan Connecticut Expansion. Notice the segment from station 261 on the Massachusetts border south into Connecticut.



Map 2 – (east side of a larger Kinder Morgan map of their NED project) Notice south of station 261, the section labeled “300 Line Connecticut Loop”. Map 1 and Map 2 appear to clearly show two segments of an overall planned northeast expansion.

## **Applicable Statutory and Regulatory Framework**

*(from Delaware Riverkeepers Network et al. vs. FERC 2014)*

The Natural Gas Act grants FERC jurisdiction over the transportation and wholesale sale of natural gas in interstate commerce. 15 U.S.C. § 717(b)-(c). Any person seeking to construct or operate a facility for the transportation of natural gas in interstate commerce must first obtain a certificate of public convenience and necessity from the Commission. *Id.* § 717f(c)(1)(A). FERC is authorized to issue such a certificate to any qualified applicant upon finding that the proposed construction and operation of the pipeline facility is required by the public convenience and necessity. *Id.* § 717f(e). NEPA requires that federal agencies fully consider the environmental effects of proposed major actions, including actions that an agency permits, such as pipeline construction. 42 U.S.C. § 4332(2)(C); see also *La. Ass'n of Indep. Producers & Royalty Owners v. FERC*, 958 F.2d 1101 (D.C. Cir. 1992). FERC is therefore responsible for the NEPA review associated with natural gas pipeline construction. *Midcoast Interstate Transmission, Inc. v. FERC*, 198 F.3d 960, 967 (D.C. Cir. 2000).

After determining the scope of the federal action, an agency produces an EA, which is a “concise public document” that “provide[s] sufficient evidence and analysis for determining whether to prepare an environmental impact statement or a finding of no significant impact.” 40 C.F.R. § 1508.9. The scope of an agency’s NEPA review must include both “connected actions” and “similar actions.” *Id.*

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§ 1508.25(a)(1), (3). Actions are “connected” if they trigger other actions, cannot proceed without previous or simultaneous actions, or are “interdependent parts of a larger action and depend on the larger action for their justification.” *Id.* § 1508.25(a)(1). And actions are “similar” if, “when viewed with other reasonably foreseeable or proposed agency actions, [they] have similarities that provide a basis for evaluating their environmental consequences together, such as common timing or geography.” *Id.* § 1508.25(a)(3).

NEPA is “essentially procedural,” designed to ensure “fully informed and well-considered decision[s]” by federal agencies. *Vt. Yankee Nuclear Power Corp. v. NRDC*, 435 U.S. 519, 558 (1978).“

### **General comments**

TGP's environmental filing lacks specificity. They make vague generalizations without specifying what procedures they will use in which locations. This does not give us confidence that there will be any way to control TGP's action in the field. It is not enough to say that if we encounter a resource, we will figure out how to avoid, minimize, or mitigate at that time.

*Please require TGP to actually map out and specify how they will avoid each resource; and if they can't avoid it, how they will minimize the impact to that resource; and if some impact cannot be avoided, how they will mitigate for that impact.*

### **National Environmental Policy Act (NEPA) review**

*Please require a full National Environmental Policy Act (NEPA) review to identify and fully evaluate all the environmental impacts of the proposed action.*

Massachusetts, during their Massachusetts Environmental Policy Act review found that TGP's submission of an Expanded Environmental Notification Form did not provide sufficient information to identify and fully evaluate all the environmental impacts of the proposed action. The Massachusetts Secretary of Energy and Environmental Affairs denied TGP's request for expedited review (see attached Secretary's Certificate) and instead required the submission of a Draft and Final Environmental Impact Report (the Massachusetts counterparts to the federal Draft and Final Environmental Impact Statements). Neither of these state review documents have been submitted to the state as of this date (4-September-2014).

BEAT believes that insufficient information has been submitted to FERC for the preparation of an Environmental Assessment ("EA") that would identify and fully evaluate all the environmental impacts of the proposed action, and that a more comprehensive Environmental Impact Statement ("EIS") must be required to ensure that the agency has adequately considered and disclosed the environmental impact. 40 C.F.R. § 1501.4.

We do not believe that the information thus far would ensure that environmental impacts are avoided, minimized, or mitigated (in that order).

We do not believe that there is sufficient information of alternatives, including ways to minimize the use of natural gas in the northeast, a goal consistent with our greenhouse gas reduction initiatives, which also saves consumers money and keeps that money within our local economy.

### **Applicable Statutory and Regulatory Framework**

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### **Independent monitoring**

*Please require independent monitoring of the proposed Connecticut Expansion Project.*

This monitoring should include an independent monitor for the rare species habitat at the Tyringham pipeyard, an independent environmental monitor for the work on the pipeline, an independent rare species monitor for the water withdrawal from Spectacle Pond in Otis State forest, and an independent monitor for all restoration associated with the project.

BEAT requests that TGP develop a restoration monitoring plan for the entire project area, especially wetlands and waterways, where an independent monitor is hired to determine if pre-construction conditions are restored, ensure that native vegetation is re-established, and ensure that invasive species are eliminated. This monitoring should be maintained for as long as the pipeline is in place.

*Please require TGP to develop a set of monitoring plans that could then be implemented by independent monitors.*

### **Invasive Species**

TGP should be required to develop a plan documenting and mapping the existing areas of invasive species. A plan should then be developed to remove invasive species on the TGP right-of-way and prevent any new incursion of invasive species. All new seeding should be of species native to the southern Berkshires. TGP should develop an operational procedure manual for all equipment and wooden mats to be thoroughly washed between areas of use to prevent the spread of invasive species. This manual would then be required to be on site and instructions followed during any work in Massachusetts. All woody material to be taken off site should be processed locally to prevent the spread of such invasive insects as Emerald Ash Borer.

*Please require TGP to document and map invasive species and develop a set of monitoring plans that could then be implemented by independent monitors.*

### **Stream Crossings**

*Please require TGP to present plans for all proposed stream crossings that meet or exceed the Massachusetts River and Stream Crossing Standards.*

### **Article 97 Land**

At the site visit, representatives from TGP implied they were working with local Representative Pignatelli to file legislation to remove portions of conservation land in Otis State forest from protection under Article 97 of the Massachusetts Constitution. Upon being contacted by constituents, Representative Pignatelli said he will not file any such legislation and he resented having his position misrepresented by TGP. Fossil fuel infrastructure is an inappropriate use for this conservation land.

*Please require TGP to submit alternative plans that do not impact Article 97 lands.*

### **Coating inside the pipes**

At the site visit, attendees requested information on what is used to coat the insides of these pipes. As far as I know, we have not had an answer. The water that will be withdrawn from rare species habitat of Spectacle Pond will be used to test these pipes and then be released into the environment.

*Please require a full list of the chemicals that water will be exposed to and a plan for testing and possibly treating the water as it comes out of the pipe.*

### **Vernal Pools**

TGP should present clear plans showing all vernal pool habitat as well as associated upland habitat where the amphibian species spend 90 percent of their adult lives. (This should include all vernal pools, not just the certified vernal pool – volunteers have not spent time certifying vernal pools on “protected” lands such as the Otis State Forest.)

*TGP should document how these sensitive areas will be avoided, or impact minimized and what mitigation would be provided for any impact that was unavoidable.*

### **Plan to Prohibit Off-Road Vehicles (All Terrain Vehicles or ATVs)**

TGP should be required to develop a plan to keep ATVs from continuing to use the right-of-way. If ATVs do use the right-of-way, TGP should be held responsible for paying for policing of the right-of-way to stop such use. Further, TGP should be required to restore any and all damage from ATV use of the right-of-way.

*Please require TGP to develop a plan to both prohibit ATV's from using the pipeline corridor and a realistic plan to enforce the prohibition.*

### **Greenhouse Gas Emission Estimate**

Please require TGP to estimate the total amount of greenhouse gas emissions that will result from the additional gas the project will be providing. The estimate should include both CO<sub>2</sub> emissions as well as methane emissions not only from burning the increased amount of fuel, but also from leakage from drilling, gathering, compressing, and transporting this fuel. The leakage at drilling and gathering facilities can be enough to make using this gas worse for climate change than using coal. (Howarth 2012 page 4 – Petron et al. 2012 direct landscape scale measurement

showed 4% leakage at drilling and gathering areas) The value for the methane CO2 equivalent emissions should be 86 times greater than CO2 per the International Panel on Climate Change 2013 report.

*Please require a detailed greenhouse gas emission estimate that includes emissions from well head to burner tip.*

### **Incineration zone**

TGP has stated that no residences are located within 50 feet of the construction work.

*Please require TGP to develop a map show in what is within the incineration zone of a pipeline of this size if it ruptures.*

### **Blasting**

TGP should be required to determine where blasting will be necessary on the Sandisfield pipeline. The last time that TGP built a pipeline next to an existing pipeline in this location, the blasting caused a rupture in the existing pipeline and half the town had to be evacuated. At public meetings, TGP representatives have said that ruptures are very uncommon and usually caused by a third party digging in the area. Well, people in Sandisfield have had a different experience. Please require TGP to map the areas where blasting will be required and devise site specific plans for the blasting that would be required. In the Massachusetts Environmental Policy Act documents, TGP claimed “no blasting is anticipated”. BEAT finds that hard to believe seeing the amount of ledge and bedrock at the site and knowing that the last time TGP put a pipeline in this location, not only did they have to do blasting, but it was their own blasting that ruptured the adjacent pipeline so much of the town had to be evacuated.

*Please require TGP to develop a detailed plan showing where blasting is likely to be required, and develop a detailed plan of how it would be implemented.*

*Please also require that a third party would evaluate any damage complaints.*

### **Air quality monitoring**

*Please require TGP to develop an air quality monitoring plan. An independent monitor should implement the monitoring at each compressor station and pigging facility while the facilities are active to determine the amount and composition of the gas released in these locations and the potential harm nearby residents could be exposed to.*

*Please require TGP to develop an air quality monitoring plan.*

## Alternatives

Please consider the 'no build' alternative. Massachusetts is now undertaking a study to determine how we could best meet our energy needs at the lowest cost and risk.

**Berkshire Regional Planning Commission's Sustainable Berkshires – comprehensive, long-range master plan.** The underlying theme of the new master plan for our area is the concept of economic resiliency and environmental sustainability.

In the Climate and Energy section, on page CE-3 it states:

- A. **Shifting energy from an imported product to a local one.** As noted in the *Massachusetts Clean Energy and Climate Plan for 2020*, the state is at the “end of the energy pipeline,” importing almost all of its energy from other parts of North America or the world. We are dependent on producers and market forces. This means that funds spent on importing fuel leave the state and the region, impacting economic stability. The estimated exported economic value of purchasing energy from outside Massachusetts for 2008 was \$22 billion state-wide.
- B. **Job creation through clean energy economy investments.** Massachusetts is in a position to show the way to a clean energy economy and reap direct benefits in economic growth. Between 2007 and 2012 the number of photovoltaic systems installed in Massachusetts increased 20-fold, with jobs in solar manufacturing, installation and services nearly tripling from 1,200 to 3,000. Two-thirds of these jobs are in manufacturing. In total, the Clean Energy Center estimates that at least 11,000 people were employed in the clean energy sector in 2010, up 65% from 2007.

And on page CE-25

- C. **Transitioning the region away from fossil fuels** could help the region stand out. As a standout leader, the region may attract green and clean tech businesses or green friendly businesses to locate here. The costs of inaction are therefore a concern to the future of the region.

*Please require TGP to fully investigate the “no build” alternative.*

## Local experience

Our experiences to date with TGP suggests that they frequently mischaracterize the issues involved with the proposed pipeline. We believe that it is critical to the protection of the environment to have TGP plan out their actions in detail and in writing before being granted any permits, so they may be held accountable for meeting clear performance standards.

Prior to filing with any regulatory agency, TGP has recently (in May) investigated five “anomalies” in the Sandisfield part of their existing pipeline without obtaining the required 401 Water Quality permit from the Army Corps of Engineers through Massachusetts Department of Environmental Protection (personal communication with David Foulis, Western Regional Office). If this was an emergency, was the town notified and were residents notified? How do

we ensure this error never occurs again and that applicable laws are followed?

Additionally, one landowner was not notified before TGP performed excavation of the existing pipeline on their property to investigate one or more of the anomalies.

It also appears that TGP did not wash their equipment after going through stands of invasive species prior to proceeding through other wetlands. The extent of invasive species along the pipeline route is extensive.

### **BEAT's Experience - Massachusetts Environmental Policy Act - Site Visit**

The Environmental Notification Form for the Massachusetts portion of the Connecticut Expansion first appeared in the May 25, 2014 Massachusetts Environmental Monitor. The Environmental Notification Form was in a thick binder, and yet the information it contained about the actual site was minimal. There were no plans showing the extent of existing environmental resource areas with temporary and permanent impacted areas shown in overlay. There were no maps of the extent of bedrock with associated blasting plans. TGP stated that there was only one certified vernal pool, but failed to mention that they had found dozens more.

On June 10, 2014, TGP held a site visit. A staff member from Berkshire Environmental Action Team, who has attended dozens of site visits under the Massachusetts Environmental Policy Act, reported that the TGP site visit was the worst she had ever attended for actually being able to learn about the proposed project.

TGP failed to obtain landowner permission for the participants to go on any of the properties. Luckily, the landowner of the proposed pipeyard did arrive at the start of the site visit, so attendees were able to go on that property. However, TGP had not flagged anything. No wetland resources. No rare species habitat. They were able to give vague descriptions of the extent of each. They gave verbal descriptions of the actions they proposed to take to protect the rare species. They gave verbal assurances that they were working with the Massachusetts Natural Heritage and Endangered Species Program on this issue. We have found that TGP's carefully worded assurances do not necessarily mean what they imply.

Staff from the Massachusetts Department of Conservation and Recreation were on the site visit, and attendees were able to go on part of the pipeline easement through Otis State Forest. Again, no resource areas were flagged. No areas of bedrock where blasting would occur were flagged. No vernal pools were flagged, even though, other than in spring, it can be nearly impossible to identify these fragile habitats. There was no flagging to identify the limits of temporary or permanent impacts.

Attendees were able to visit one stream crossing. It was heavily impacted by TGP's use of pipes laid in the stream in multiple layers and left there to rot. (see photo below) This not only introduces foreign substances to the stream, but also prevents fish and other aquatic organism passage. This should be remediated as soon as possible.

When it was suggested that the use of sandbags to divert stream water was not a good idea

because the sandbags invariably leak into the stream, the TGP reaction was to completely disregard the statement and insist that sandbagging was the best method.



*TGP Stream Crossing, Otis State Forest, Sandisfield*

Thank you for considering our comments.

Sincerely,

Handwritten signature of Jane Winn in blue ink.

Jane Winn, Executive Director



*The Commonwealth of Massachusetts*  
*Executive Office of Energy and Environmental Affairs*  
*100 Cambridge Street, Suite 900*  
*Boston, MA 02114*

Deval L. Patrick  
GOVERNOR

Maeve Vallely Bartlett  
SECRETARY

Tel: (617) 626-1000  
Fax: (617) 626-1181  
<http://www.mass.gov/envir>

July 11, 2014

CERTIFICATE OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS  
ON THE  
EXPANDED ENVIRONMENTAL NOTIFICATION FORM

PROJECT NAME : Connecticut Expansion Project  
PROJECT MUNICIPALITY : Agawam, Sandisfield, and Tyringham  
PROJECT WATERSHED : Farmington River and Connecticut River  
EEA NUMBER : 15205  
PROJECT PROPONENT : Tennessee Gas Pipeline Company, L.L.C.  
DATE NOTICED IN MONITOR : May 21, 2014

Pursuant to the Massachusetts Environmental Policy Act (G. L. c. 30, ss. 61-62I) and Section 11.06 of the MEPA regulations (301 CMR 11.00), I hereby determine that this project **requires** the preparation of a Draft Environmental Impact Report (DEIR).

Project Description

As described in the Expanded Environmental Notification Form (EENF), the project consists of the construction of 3.8 miles of new 36-inch outside diameter (OD) pipeline within or adjacent to the existing Tennessee Gas right-of-way (ROW) in Sandisfield and 0.11 miles of new 24-inch OD pipeline within or adjacent to the Tennessee Gas ROW in Agawam. The project will also construct appurtenant facilities, to be located within the existing ROW, including one pig launcher at the western end of the project in Sandisfield; one pig receiver and one mainline valve at the eastern end of the project in Sandisfield; and one pig receiver associated with the 24-inch

OD pipeline at the existing Agawam Compressor Station.<sup>1</sup> An area of two acres in a field in Tyringham will be used as a staging area/pipeyard. The project will require withdrawal of more than one million gallons of water from Lower Spectacle Pond in Sandisfield for a hydrostatic test of the assembled pipeline. Construction of the pipeline loops is expected to last for three to four months.

The new pipeline in Sandisfield will create a pipeline loop (the "Massachusetts Loop") along the existing Tennessee Gas 200 Line Mainline. The pipeline in Agawam will be part of an 8.1-mile long pipeline loop extending into Connecticut (the "Connecticut Loop") along the Tennessee Gas 300 Line Mainline. A third loop will be constructed in New York. The purpose of a loop is to increase the volume of gas that can be transported along an existing section of pipeline. It is an alternative to constructing a new pipeline to increase supply within a service area. The location of the loop is dependent on the destination of the gas and flow dynamics of the pipeline system. The project is designed to increase gas flow by 72,100 dekatherms (72,100,000 cubic feet) per day. It will serve three natural gas utility companies in Connecticut.

I note that this project is separate and distinct from the Tennessee Gas Pipeline Northeast Energy Direct project to extend gas supply through the northeast. The Northeast Energy Direct project would consist of construction of a new pipeline in Massachusetts that would extend from existing infrastructure in Wright, New York, enter Massachusetts in Richmond and extend across the state to Dracut. Based on the scope and scale of the project, it will be subject to a transparent and rigorous review including the filing of a mandatory EIR with the MEPA Office which will include opportunities for public review and comment at each stage of the process.

### Project Site

The project will occur in three distinct areas. The pipeyard and staging area for the work in Sandisfield will be located in a field off Main Road in Tyringham. The site was used approximately 25 years ago to provide access for the construction of a pipeline through the site. The project pipeyard will occupy an area of approximately two acres that is accessible by an existing unpaved access road. South and west of the pipeyard area, the field consists of an emergent marsh associated with a perennial stream. The field surrounds the remainder of the pipeyard area, with Hopp Brook located approximately 600 feet to the north. The area is located within mapped Priority Habitat and Estimated Habitat for the Sedge Wren (*Cistothorus platensis*), American Bittern (*Botaurus lentiginosus*), and Wood Turtle (*Glyptemys insculpta*). The pipeyard is located approximately four miles from the start of the proposed pipeline loop in Sandisfield.

The Massachusetts Loop will begin at an existing valve site, designated as Milepost (MP) 0.0, off Town Hill Road in Sandisfield. It will be located within or adjacent to the ROW of the existing Tennessee Gas 200 Line Mainline that runs from New York to Boston. The 200 line includes a 24-inch diameter pipeline and a 30-inch diameter pipeline within the generally 75-foot wide ROW. Except for an approximately quarter-mile long segment between MP 0.32 and MP

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<sup>1</sup> "Pigs" are devices inserted into the pipeline that clean and help maintain the inside of the pipe. "Pig launchers" and "pig receivers" are above-ground connections to the pipeline in which the pigs are inserted and removed, respectively, from the pipeline.

0.59, the first 2.26 miles of the ROW are located within the Otis State Forest which is owned and managed by the Department of Conservation and Recreation (DCR). The remainder of the ROW passes through privately owned land, with the exception of crossings of Cold Spring Road, Hammertown Road, South Beech Plain Road, which are public roads owned by the Town of Sandisfield. The project will withdraw water for hydrostatic testing from Lower Spectacle Pond, a 70 acre pond located within the Otis State Forest on the east side of Cold Spring Road. Lower Spectacle Pond includes mapped Priority Habitat and Estimated Habitat of the Umber Shadowdragon dragonfly (*Neurocordulia obsoleta*).

The Connecticut Loop includes 0.1 miles of pipeline in Agawam. The loop will begin at the existing Tennessee Gas compressor station on Suffield Street. The pipeline loop will be located within or adjacent to the ROW of the existing Tennessee Gas 300 Line Mainline that originates in Pennsylvania and extends to Boston. The 300 line includes a 16-inch diameter pipeline within the generally 75-foot wide ROW. The entire ROW for the portion of the Connecticut Loop in Massachusetts is located on land owned by Tennessee Gas.

### Environmental Impacts

According to the EENF, the project will impact an area of 58.8 acres. Of the 58.8 acres of construction workspace, 11.85 acres will be maintained as a new permanent ROW that will extend 25 feet from the pipeline loop. Approximately two miles of the pipeline will pass through Otis State Forest and will impact a total of 30.23 acres; approximately six acres is associated with new ROW that will be permanently impacted, 7.2 acres is located within the existing maintained ROW, and 17 acres will be cleared and regraded during construction.

Construction activities will impact wetlands resource areas, including 9.43 acres of Bordering Vegetated Wetlands (BVW), 0.42 acres of Isolated Vegetated Wetlands (IVW), and 2.2 acres of Riverfront Area. Pipeline construction will impact approximately 39 lf of Bank and Land Under Water (LUW) in connection with four stream crossings. The EENF did not quantify impacts to LUW. The project will withdraw 1,025,100 gallons of water from Lower Spectacle Pond for use in a hydrostatic test of the pipeline.

Maintenance of the new ROW will occur within six acres of the Otis State Forest. Maintenance of the ROW will result in the conversion of 2.2 acres of BVW from forested wetland to herbaceous/scrub-shrub wetland types, and permanent impacts to 0.57 acres of Riverfront Area. Maintenance of the 11.85-acre ROW will convert 8.02 acres of forested land to low-growing herbaceous and shrub vegetation.

### Jurisdiction and Permitting

This project is subject to MEPA review and requires the preparation of a mandatory EIR pursuant to 301 CMR 11.03(1)(a)(1) and 301 CMR 11.03(3)(a)(1)(a) because it requires State Agency Permits and, respectively, involves the direct alteration of 50 or more acres of land and alteration of one or more acres of BVW. The project also meets or exceeds several ENF thresholds, including: conversion of land held for natural resources purposes in accordance with Article 97 of the Articles of Amendment to the Constitution of the Commonwealth to any

purpose not in accordance with Article 97 (301 CMR 11.03(1)(b)(3)); release of an interest in land held for conservation, preservation, agricultural or watershed preservation purposes (301 CMR 11.03(1)(b)(5)); and alteration of one-half or more acres of any other wetlands (301 CMR 11.03(3)(b)(1)(f)). The project will require a 401 Water Quality Certification (WQC) from the Massachusetts Department of Environmental Protection (MassDEP). The project requires a Construction and Access Permit and a new easement from the Massachusetts Department of Conservation and Recreation (DCR). In addition, the project must demonstrate compliance with the EEA Article 97 Land Disposition Policy.

The project will require Orders of Conditions (OC) from the Tyringham, Agawam and Sandisfield Conservation Commissions (or in the case of an appeal, a Superseding Order of Conditions from MassDEP). This project is subject to review under the Massachusetts Endangered Species Act (MESA) and will require consultation with the Massachusetts Historical Commission (MHC) in accordance with Section 106 of the National Historic Preservation Act. The project will require a National Pollutant Discharge Elimination System (NPDES) Construction General Permit (CGP) from the United States Environmental Protection Agency (EPA), an Individual Permit from the Army Corps of Engineers (ACOE) under Section 404 of the Clean Water Act, and a Certificate of Public Convenience and Necessity from the Federal Energy Regulatory Commission (FERC). The project is subject to the MEPA Greenhouse Gas (GHG) Emissions Policy and Protocol.

The project requires a Land Transfer from DCR along approximately two miles of the pipeline in Sandisfield. In accordance with 301 CMR 11.01(2)(a)(1), MEPA jurisdiction is broad in scope within the area of the Land Transfer. Within the remainder of the project area, MEPA jurisdiction extends to those aspects of the project that are within the subject matter of required or potentially required State Agency Actions and that may cause Damage to the Environment as defined in the MEPA regulations. In this case, MEPA jurisdiction extends to wetlands, stormwater, water quality, rare species, and GHG emissions.

### Single EIR Request

In accordance with Section 11.05(7) of the MEPA regulations, the Proponent has submitted an EENF with a request that I allow the Proponent to fulfill its EIR obligations under MEPA with a Single EIR, rather than the usual process of a Draft and Final EIR. According to 301 CMR 11.06(8), I may allow a Single EIR provided that the EENF:

- Describes and analyzes all aspects of the project and all feasible alternatives, regardless of any jurisdictional or other limitation that may apply to the Scope;
- Provides a detailed baseline in relation to which potential environmental impacts and mitigation measures can be assessed; and
- Demonstrates that the planning and design of the project use all feasible measures to avoid potential environmental impacts.

Two EIR thresholds are applicable to the project: direct alteration of 50 or more acres of land (301 CMR 11.03(1)(a)(1)) and alteration of one or more acres of BVW (301 CMR 11.03(3)(a)(1)(a)). In support of the waiver request, the EENF notes that of the 58.8 acres of

land disturbance, 12.5 acres are located within the existing ROW and are already disturbed. With respect to the BVW alteration threshold, the EENF states that most of the BVW impacts are temporary and all wetlands impacts will be mitigated through a wetlands mitigation plan. The 2.2 acres of permanent impacts do not involve a loss of wetlands but rather the conversion of BVW from forested to herbaceous/shrub scrub wetlands types. The EENF provided an alternatives analysis, provided a baseline of potential impacts and proposed mitigation related to wetlands, water quality, and stormwater. The EENF does not provide any specific information regarding compliance with the EEA Article 97 Policy or identify mitigation associated with the easement. At the Proponent's request, the review period was extended to 51 days, including a public comment period of 43 days. The Proponent's request for a Single EIR was discussed at the consultation session held on June 10, 2014.

### Review of the Expanded ENF

The EENF provided information about the existing conditions along the length of the project route, including soils, geology, vegetation, wildlife, land use, and cultural resources. The EENF included an inventory of wetlands and watercourses along the project route and a report describing the wetlands delineated in the project area. The EENF described and illustrated the pipeline construction process, identified potential environmental impacts and mitigation measures, and reviewed alternatives to the project. The EENF also included a document describing standard construction mitigation measures required by FERC.

### *Alternatives Analysis*

The purpose of the project is to meet market demand for natural gas. The EENF included an analysis of alternatives within the context of this project purpose including energy conservation, use of other energy sources, and system alternatives. Energy conservation measures could potentially meet the project goal by reducing demand for gas. According to the EENF, the Proponent has programs in place to encourage conservation, but these programs have not sufficiently reduced demand. The EENF also reviewed the use of renewable and other energy sources to meet the demand, but these alternatives were deemed infeasible, unreliable, or unacceptable due to greater environmental impacts (such as the use of coal and oil as fuel).

The Proponent considered a number of system alternatives that involve greater efficiencies of the existing pipeline system, different configuration of looping or compression facilities, and expanded pipeline facilities. The Greenfield Pipeline alternative would involve the construction of a 100-mile long pipeline from New York to Connecticut along a new ROW. This option was rejected because it would have greater impacts than a loop, take longer to permit and construct, and would have a much greater cost. The EENF also reviewed an alternative loop design using a 42-inch OD pipeline. The use of a larger diameter pipe would shorten the length of the loop by 0.3 miles. This alternative was rejected due to the need for transition pipes between the existing 36-inch pipeline that terminates at MP 0.0, a wider ROW, and additional above-ground structures such as pig launchers and receivers, as well as its higher cost.

The EENF also identified alternative routes for the loops. Major route deviations from the existing pipeline corridor were rejected as these options have the same drawbacks as the

Greenfield alternative. The EENF described minor route variations adjacent to the existing corridor which were incorporated into the Preferred Alternative. The Massachusetts Loop will start on the south side of the ROW, where it will essentially extend the 36-inch pipe that terminates at MP 0.0. At MP 1.5, the route of the loop will switch to the north side of the corridor to avoid an area of open water on the south side. Another route change will occur at MP 2.9, where the loop will switch back to the south side of the corridor to minimize impacts to a stream and to utilize more advantageous grades. DCR's comments suggest that additional route variations of this sort may reduce impacts by using the existing ROW to a greater extent.

#### *Land Alteration/Construction Process*

At MP 0.0 in Sandisfield, the 36-inch loop pipeline will be connected to the existing 36-inch pipeline that terminates at the valve site. The pig receiver currently at the terminus of the existing 36-inch pipeline will be removed and relocated to the terminus of the 36-inch loop pipeline at MP 3.8. Also at MP 3.8, the 36-inch loop pipeline will be connected, through underground tie-in piping, to the existing 30-inch and 24-inch pipelines that continue east. The connection for the Agawam section will be made through an existing valve at the compressor station.

An area of 58.8 acres, including 11.85 acres of new permanent ROW, will be impacted by the construction of the project. Pipeline construction activities will take place within a construction workspace extending away from the centerline of the existing pipeline closest to the location of the proposed loop pipeline. In upland areas, the construction workspace will be 100 feet wide for the 24-inch pipeline loop in Agawam and 125 feet wide for the 36-inch pipeline loop in Sandisfield. For the 36-inch pipeline, the construction workspace will include 25 feet within the existing permanent ROW, 25 feet within an area of new permanent pipeline ROW, and a temporary workspace (TWS) of 75 feet. The width of these zones may be slightly reduced for the 24-inch pipeline loop in Agawam. A typical workspace in an upland area will include a 25-foot wide zone between the centerlines of the existing pipeline and the trench for the loop pipeline. This side of the loop pipeline trench is called the "spoils side" of the workspace because the trench spoils will be deposited and stored within this area. The other side of the 15-foot wide trench is called the "working side" of the workspace and will total approximately 100 feet from the trench. The working side will include space parallel to the trench for welding together pipe joints; a zone for operating the side boom, excavator and other equipment; space for vehicular and construction equipment access; and an area for topsoil to be stored. Along some sections of the pipeline, additional workspace ("Additional Temporary Workspace" or ATWS) will be required adjacent to the construction ROW.

An Environmental Inspector will be employed to ensure that mitigation measures will be installed and maintained. The EENF describes sedimentation and erosion control, soil stabilization and revegetation measures, and work practices that will be employed to minimize impacts during pipeline construction. Specialized clearing equipment will be used to limit the amount of time required for clearing activities. Woody vegetation will be cut as close to the ground as possible or removed, then chipped and either hauled off-site and composted or left in the ROW in a manner that does not inhibit re-growth. Non-woody vegetation will be mowed to

ground level. In wetlands, no rubber tire equipment will be used in areas where damage to root systems or compaction may occur; in these areas, clearing will be done by hand.

Construction along the pipeline will proceed in an assembly-line fashion, with site preparation, trenching, pipeline installation, and backfilling operations moving along the pipeline route as they are completed, rather than each activity taking place sequentially from one end of the pipeline to the other. Construction activities will proceed in the following sequence:

1. Clearing and grading of the new workspace
2. Trenching
3. Delivery and assembly of pipe joints
4. Inspection and repair of pipeline welding and coating
5. Lowering of the pipeline into the trench
6. Backfilling
7. Hydrostatic testing

Clearing and grading will be done within the construction workspace. In addition to removing trees within this zone, the workspace will be regraded if necessary to provide a level grade for construction activities. Where the pipeline crosses a steep side slope, a side slope construction procedure will be used. It involves cutting into the hillside to provide a level surface for construction equipment and a shallower trench on the downhill side. Excavated material will then be used to cover the pipeline to the desired grade. Where the ROW climbs a steep hill with slopes greater than 30 percent, winches at the top of the hill may be used to pull the construction equipment up the hill or lower it down the hill.

An excavator will be used to dig an approximately six-to-seven foot deep trench. The trench will be 14-15 feet wide at ground surface and six feet wide at the bottom. The trench will be dug 25 feet away from the nearest existing pipeline in the ROW and trench spoils will be deposited within this 25-foot spoils side zone. Topsoil will be stored separately within the workspace so that it can be reused for backfilling.

According to the EENF, blasting is not expected to be required for the project because the U.S. Department of Agriculture-Natural Resources Conservation Service (USDA-NRCS) Web Soil Survey did not identify areas of shallow depth to bedrock along the project route. However, the EENF states that the need for blasting can only be confirmed based on actual field conditions encountered during construction. The EENF notes that if blasting is required, it will be conducted in accordance with the regulations concerning the use of explosives at 527 CMR 13, and will be conducted by a person who holds a Massachusetts Blasters License issued by the State Fire Marshall. The Proponent will develop a Blasting Plan to be implemented if bedrock is encountered. The Blasting Plan will outline safety and impact minimization measures, including installing blasting mats in sensitive locations to prevent impacts from flying rock, posting warning signals, following procedures for safe handling and use of explosives, having emergency response measures in place, and controlling excessive vibration by planning the size and timing of explosive charges. DCR and others note the presence of bedrock throughout the area and suggest that blasting will be necessary.

The project includes four crossings of public roads and one crossing of an unnamed access road within Otis State Forest. The crossings of Hammertown Road and the access road will use the open-cut method, in which a trench for the pipeline will be dug across the road. The project will minimize traffic disruptions by keeping half of the road open to traffic and using steel plates to cover the trench in case of an emergency. The crossings of Cold Spring Road and South Beech Plain Road will be constructed using a conventional bore method that will install the pipeline under the roadway without disturbing the road surface. Traffic will be allowed to travel on the road during construction.

For the Sandisfield loop, access to the ROW for pipe delivery and construction vehicles will occur at four temporary access roads. Additional access roads are not necessary in Agawam, where access can be provided from the existing compressor station and other land owned by the Proponent. Pipe joints, either 40 or 80 feet in length, will be laid end to end along the trench and welded together. The welds will be wrapped in a rubberized material and inspected, then the pipe will be lowered into the trench with a side boom. The trench will then be backfilled with at least three feet of soil covering the pipe. Topsoil will be replaced over the trench. Any remaining soil will be spread evenly over the construction workspace. Upon completion of construction, disturbed areas and drainage patterns will be restored to preconstruction contours and elevations.

Once the pipeline is in place, it will be hydrostatically tested for leaks. According to the EENF, approximately 1,025,100 gallons of water will be withdrawn from Lower Spectacle Pond to be used for this purpose. The water will be withdrawn at a rate of 2,000 gallons per minute (gpm). The water will be stored in the pipe for 24 hours at 1.5 times the normal pressure, then discharged into an upland area through an energy dissipating device.

The project will use an approximately two-acre site within a field on Main Road in Tyringham as a staging area and pipeyard. Trucks will deliver 40-foot or 80-foot long pipe joints to the site, where they will be stored until needed at the construction site in Sandisfield.

Once installed, the pipeline and ROW will be subject to regular maintenance. Pipeline maintenance will include the use of a cathodic protection system to prevent corrosion of the pipeline. The ROW maintenance will include periodic seasonal mowing, periodic inspections of waterway crossings, and backfill replacement. According to the ENF, herbicides or pesticides will not be used within 100 feet of a wetland or waterbody unless approved by state and local agencies.

#### *Wetlands*

The project will directly impact 9.85 acres of vegetated wetlands, including 9.43 acres of BVW and 0.42 acres of IVW located in 17 distinct wetlands areas. Of this total, all but 2.2 acres of BVW, including areas within the footprint of the pipeline trench, will be temporarily impacted by construction activities and allowed to revert to natural conditions after construction. The 2.2 acres of permanently impacted BVW will be located within the new permanent ROW. This BVW will be converted from forested wetlands to emergent or scrub shrub wetland types due to vegetation management within the permanent ROW. As noted by MassDEP, IVW is not

regulated by the Wetlands Protection Act, but activities in IVW are subject to the WQC regulations. Wetlands in the Agawam section of the project account for 0.58 acres of these impacts, including approximately 0.2 acres of permanent impact resulting from ROW maintenance practices. The remaining wetlands impacts are located along the pipeline route in Sandisfield. The EENF also identifies one certified vernal pool near the existing pipeline ROW that will not be impacted by the project. The pipe-yard/staging area in Tyringham is located within the Buffer Zone of BVW associated with Hopp Brook, but the EENF does not identify direct impacts to wetlands in Tyringham. According to MassDEP, the limited project provisions may apply to the project. In addition, portions of the work in the Riverfront Area currently within the pipeline ROW may be subject to the redevelopment standards of the Riverfront Area regulations.

The project will employ mitigation measures to reduce wetlands impacts during construction. In wetlands areas, the construction workspace will be limited to 75 feet extending from the centerline of the adjacent existing pipeline, including 25 feet on the spoils side and 50 feet on the working side. A 12-inch layer of wetlands topsoil will be removed, stored directly adjacent to the trench and reused as the top layer of backfill over the trench. The remainder of the trench spoil will be stored in the spoil side of the workspace and used to backfill the trench. The standard pipeline construction method described above will be used where wetlands soils are non-saturated and able to support construction equipment. In saturated conditions, timber mats will be used to provide a stable surface for construction equipment. The spoils pile will be managed to allow for natural circulation or drainage of water. The pipeline will be assembled in an adjacent upland area and lowered into the trench, then backfilled with trench spoils and a top layer of wetlands topsoil.

In order to promote recovery of wetlands impacted during construction, all wetland areas will be restored to pre-construction grades, contours, and drainage patterns. These areas will then be reseeded or replanted with native wetlands plant species. According to the EENF, a detailed wetlands mitigation plan describing additional measures to avoid, minimize, and mitigate temporary and permanent wetlands impacts will be developed in consultation with federal and state agencies during permitting. Mitigation for permanent impacts to wetlands will include off-site wetlands restoration and conservation of existing wetland areas. The Proponent will also develop an Invasive Species Management Plan to prevent colonization of disturbed wetland areas by invasive species. Wetlands within the permanent ROW will be subject to ROW maintenance practices. Within an area of 10 feet centered on the pipelines, wetlands will be maintained as low-growing emergent or scrub-shrub wetlands types. Woody wetlands vegetation will be allowed to become reestablished in the remainder of the ROW, except that trees within 15 feet of a pipeline that are taller than 15 feet high may be cut and removed from the ROW.

The EENF also identifies impacts to streams and associated Riverfront Areas in Sandisfield. The project includes four stream crossings, totaling 39 lf, and approximately 2.8 acres of Riverfront Area that will be directly impacted by construction, including approximately 0.57 acres of permanent impacts associated with active vegetation management in the ROW. The project includes two intermittent stream crossings of three lf and 5.5 lf, and two perennial stream crossings of approximately 10 lf and 20 lf. The project will use either the dam-and-pump

system or flume pipes to cross the streams with a perceptible flow at the time of construction. These methods will maintain downstream flow during construction. A flumed crossing redirects flow through one or more pipes to allow trenching to occur in dry conditions and allows for passage of aquatic organisms. This technique will be used where stream bank soils will remain stable during trenching and where the flow volume can be accommodated by pipes. The dam-and-pump method will be employed where pumps and hoses can transfer stream flow from the upstream area to the downstream side but do not provide for passage of aquatic organisms. This technique involves the construction of a cofferdam to prevent material from entering the waterbody. To minimize the duration of impact to streams, the stream crossings will be avoided during high flow and spawning periods, will be constructed separately from the rest of the pipeline by a separate crew, and will be restored immediately upon installation of the pipeline across the stream. Upon completion of construction, the stream channels and bottoms will be restored to their original configurations and contours and stream banks will be stabilized.

The pipeyard in Tyringham will be located within the Buffer Zone of BVW associated with Hopp Brook. The EENF does not provide a detailed description of the activities planned in this area or the potential impacts of the activities.

#### *Water Quality*

The project includes a withdrawal of 1,025,100 gallons of water from Lower Spectacle Pond for hydrostatic testing of the Massachusetts Loop pipeline. I recommend that the Proponent consult MassDEP as to whether Lower Spectacle Pond is a Great Pond and whether a Chapter 91 authorization is required for the withdrawal. The hydrostatic test will involve filling the pipe with water to 1.5 times its normal operating pressure for a period of 24 hours to detect leaks. The test water will not be chemically treated. Pond water will be withdrawn at a rate of 2,000 gallons per minute (gpm) for eight hours. The water will be withdrawn at an easily accessible part of the pond where it is located close to Cold Spring Road, and carried through a hose along Temporary Access Road #3 to the ROW. After the test, water will be discharged to a vegetated upland area at a rate of 2,000 gpm. The water will be discharged through a dewatering structure that will filter the water and dissipate the energy of the discharge to prevent erosion and water quality impacts. According to the EENF, the discharge will be monitored and the rate of discharge slowed if any impacts are observed. The water is expected to infiltrate into the ground before reaching any downstream surface waters.

Lower Spectacle Pond includes mapped Priority Habitat and Estimated Habitat for the UMBER Shadowdragon, a species of Special Concern. According to the EENF, water will be withdrawn from the surface of the pond to avoid impacts to bottom sediments where the larval form of the dragonfly may live. The Proponent will also consult with NHESP as to any additional measures necessary to prevent impacts, such as the timing of the withdrawal.

#### *Conservation Land/Article 97*

The Commonwealth purchased approximately 904 acres of land around Lower Spectacle Pond in 2007. Prior to the purchase, the land had long been identified as a priority for protection due its important ecological habitat for native and rare species, old growth forests, historic mill

sites, frontage along Clam River, and Lower Spectacle Pond itself. The property is a key link connecting the Otis State Forest to the Clam River Flood Control Area and over 8,500 acres of protected open space. The property includes Spectacle Pond Farm, contains a variety of unique and important natural features such as mature forests, wetlands, bedrock outcrops, seeps, and springs. The land also has high recreational value for hiking, canoeing, kayaking, snowmobiling, cross-country skiing, fishing, and hunting. Historical resources within Otis State Forest in the vicinity of the pipeline ROW include the G. Dunham Foundation Site and the site of the discovery of an Archaic Period projectile point.

Approximately two miles of the existing pipeline and the proposed loop pass through Otis State Forest. The project will require the use of approximately 30.23 acres during construction, including three temporary access roads. Approximately 7.2 acres of this area will be located within the existing ROW and 17 acres will be located within a temporary ROW that will be allowed to revegetate naturally and will remain under DCR control and management after construction. The remaining six acres consists of an additional permanent 25-foot wide ROW easement. Within DCR property, the Project will impact approximately 0.4 acres of IVW and 3.7 acres of BVW, including approximately one acre of BVW that will be maintained within the new permanent BVW. The project will impact 1.13 acres of Riverfront Area and three stream crossings will be located on DCR property. In addition, the project proposes a one-time withdrawal of over one million gallons of water for hydrostatic testing of the pipeline loop.

Disposition of state land within the Otis State Forest through a permanent easement requires a 2/3 vote of the legislature, pursuant to Article 97 of the Articles of Amendment to the Massachusetts Constitution. The EEA Article 97 Land Disposition Policy (the Policy) was established to ensure no net loss of Article 97 lands. It states that EEA agencies should, as a general rule, not dispose of Article 97 land. The Policy establishes six criteria for determining when "exceptional circumstances" exist such that a disposition of Article 97 land may be appropriate:

- The Proponent of the disposition must conduct an analysis of alternatives, commensurate with the type and size of the proposed disposition, that achieve the purpose of the disposition without the use of Article 97 land, such as the use of other land available within the appropriate market area;
- The disposition of the subject parcel and its proposed use may not destroy or threaten a unique or significant resource (e.g., significant habitat, rare or unusual terrain, or areas of significant public recreation);
- Real estate of equal or greater value, and of significantly greater resource value is granted to the disposing agency;
- The minimum necessary area of Article 97 should be included in the disposition and the existing resources continue to be protected to the maximum extent possible;
- The disposition serves an Article 97 purpose or another public purpose without detracting from the mission, plans, policies and mandates of EEA and its appropriate department or division; and
- The disposition is not contrary to the express wishes of the person(s) who donated or sold the parcel or interests to the Commonwealth.

The EENF does not specifically address the project's consistency with the Article 97 policy or address the requirement to provide compensatory land. With respect to the last criteria, I note that according to MassAudubon, it transferred its interests in this land to the Commonwealth with the understanding that the property would be permanently protected under Article 97. MassAudubon's letter states that it objects to the proposed land disposition.

#### *Rare Species and Fisheries*

Portions of the project are located within Priority Habitat of Rare Species and Estimated Habitat of Rare Wildlife as indicated in the 13<sup>th</sup> Edition of the *MA Natural Heritage Atlas*. The pipeyard includes habitat associated with the Sedge Wren and American Bittern, bird species that are listed as "Endangered," and the Wood Turtle, a species of "Special Concern." According to NHESP, it appears that the proposed activities at the pipe yard could be conditioned through the MESA review process to avoid a prohibited "take" of the species.

In addition, Lower Spectacle Pond includes mapped Priority Habitat and Estimated Habitat for the UMBER Shadowdragon, a species of Special Concern. According to the EENF, water will be withdrawn from the surface of the pond to avoid impacts to bottom sediments where the larval form of the dragonfly may live. The project will also consult with NHESP as to any additional measures necessary to prevent impacts, such as the timing of the withdrawal.

The pipeline loop in Sandisfield will cross four streams that are tributary to the Clam River. Surveys of the river conducted by the Division of Fisheries and Wildlife (DFW) have documented 14 species of fish, and the river is stocked annually with Brook Trout (*Salvelinus fontinalis*), Brown Trout (*Salmo trutta*), Rainbow Trout (*Oncorhynchus mykiss*), and/or Tiger Trout (*Salmo trutta x Salvelinus fontinalis*). According to DFW, the Clam River is a coldwater fisheries resource that is highly susceptible to impacts associated with siltation, water level fluctuations, loss of riparian habitat, stream fragmentation, and temperature changes.

#### *Greenhouse Gas (GHG) Emissions*

According to the EENF, the project is not expected to generate significant levels of GHG emissions after its completion. The EENF indicates that a small amount of gas may be released into the atmosphere in an emergency situation and for non-routine required maintenance. It does not identify how the project will be designed and constructed to avoid leakage nor does it address long-term inspection and maintenance procedures to identify and address leaks.

#### *Cultural and Historical Resources*

The EENF includes the results of an archaeological survey conducted on the project area. The survey identified two archaeological sites and 38 stone walls that are likely the remnants of historical property boundaries. According to the EENF, the project alignment was adjusted during the planning phase to avoid the archaeological sites, and any unavoidable impacts to the stone walls will be mitigated by rebuilding the walls after construction.

According to the Board of Underwater Archaeological Resources (BUAR), no record exists of underwater cultural resources exists within the project area. If any heretofore unknown resources are detected during construction, the Proponent should take appropriate measures to prevent impacts to the resources and contact BUAR.

### *Public Comments*

Comments from State Agencies, including MassDEP and DCR, indicated the need to further review alternatives that avoid or minimize impacts, and to provide additional characterization of wetlands, upland habitats, wildlife, and historic resources such as stone walls. Comments were provided by BRPC, the Sandisfield Board of Selectmen, MassAudubon, the Berkshire Environmental Action Team (BEAT) and residents. These comments focused on the impacts of the project on public land and natural resources in the area; the potential need for blasting; maintenance practices along the existing pipeline impacts associated with the water withdrawal for hydrostatic testing; and GHG emissions. Comments from the Board of Selectmen and residents expressed strong opposition to the project due to concerns about its impacts on the environmental resources and natural beauty of the area and on public use of Otis State Forest. In addition, I note that the Sandisfield Annual Town Meeting held in May, 2014 unanimously adopted a non-binding resolution banning the expansion of the pipeline.

### Conclusion

Based on review of the EENF, consultation with public agencies and consideration of public comments, I hereby require the Proponent to file a Draft EIR and Final EIR. I acknowledge that the EENF provides a detailed project description, identifies baseline environmental conditions and supports public understanding of the project and its potential impacts. In addition, I appreciate the Proponent's willingness to provide additional review of this document in response to requests from municipalities and the public. However, significant issues have not been addressed to a level commensurate with the request for a Single EIR. In particular, the EENF does not include any substantive discussion of the impacts to public lands in the Otis State Forest that are protected under Article 97. The EENF does not specifically address these impacts or address the Proponent's obligation to comply with the requirements of the EEA Article 97 Policy. In addition, I note the significant concerns expressed by the BRPC, municipalities and residents. The Proponent and the public will be well-served through the development of a Draft and a Final EIR that will provide a transparent public process and meaningful opportunities for public comment and response by the Proponent.

The Scope below identifies additional analysis and information that should be provided in the DEIR. The primary emphasis of this Scope is to identify how the project will be proposed consistent with the EEA Article 97 process and to demonstrate that impacts to wetlands and parkland have been avoided and mitigated to the maximum extent feasible. In addition, review of the project will be facilitated by a more detailed description of the project need, regional demand for natural gas capacity and supply and how this project would contribute to these needs.

## SCOPE

The DEIR should follow Section 11.07 of the MEPA regulations for outline and content, as modified by this scope.

### Project Description and Permitting

The DEIR should include a detailed description of the proposed project and describe any changes to the project since the filing of the EENF. The DEIR should provide additional information about the project need and purpose, quantify the regional benefits of the project in terms of increasing natural gas capacity and supply, and describe why and how the location of the Massachusetts Loop was selected with respect to regional infrastructure. It should provide additional information regarding commissioning and gasification of the pipeline and operation and maintenance procedures including leak detection and repair. The DEIR should include updated site plans at a legible scale. To facilitate its review, the DEIR should provide additional narrative to explain and support the analysis of the project's impacts and mitigation, and extract relevant documentation and tables from the appendices to supplement the narrative. The DEIR should include large-scale maps of the pipeline construction corridor and temporary workspaces that depict construction activities in relation to DCR property, rare species habitat, geological features such as bedrock or other subsurface conditions that may require blasting, wetlands resource areas, vernal pools, floodplains, topographic features, and historic resources, including stone walls on DCR property.

The DEIR should provide a brief description and analysis of applicable State statutory and regulatory standards and requirements, and a description of how the project will meet those standards. The DEIR should identify required State permits, Financial Assistance, or other State approvals and provide an update on the status of each of these pending actions, including the filing of legislation relative to the disposition of Article 97 land. It should specifically address how the project will be developed consistent with the EEA Article 97 Policy and associated criteria. The DEIR should review the status of the FERC filing, describe data showing need for the project, and describe the criteria FERC may use to issue a Certificate of Public Convenience and Necessity. The BRPC notes that the EENF reviewed the Comprehensive Economic Plan for Berkshire County and requested that the DEIR include an assessment of consistency with the Sustainable Berkshires Plan as well.

### Alternatives Analysis

The DEIR should include an evaluation of all feasible alternatives, including a review of alternative loop locations and alignments that were considered, and describe how the Preferred Alternative will avoid, minimize and mitigate the use of Article 97 land. The DEIR should clearly demonstrate that the Proponent has sought to avoid, minimize and mitigate Damage to the Environment to the maximum extent feasible, including an alternative that complies with the EEA Article 97 Land Disposition Policy and Wetlands Protection Act performance standards. The alternatives analysis should include a clear comparison, quantified to the extent possible, of the impacts of each alternative in a tabular format with supporting narrative and conceptual site plans. The DEIR should provide a rationale to explain why certain alternatives were selected and

others ruled out for further consideration. The DEIR should assess the impacts of the project and its alternatives, pursuant to 301 CMR 11.07(6)(h). At a minimum, the DEIR should evaluate the following alternatives for avoiding or minimizing temporary and permanent impacts to Article 97 land and wetlands:

- Routes that avoid or minimize the use of DCR property;
- Use of a narrower construction cross-section, such as that employed in wetlands areas;
- Maximize the siting of the pipeline loop within the existing easement; and
- The use of Horizontal Directional Drilling (HDD).

#### Wetlands and Water Quality

MassDEP recommends that an Abbreviated Notice of Resource Area Delineation (ANRAD) be filed to confirm the location and area of wetlands to be impacted. Based on any changes or refinements to the project or the delineation of wetlands, the DEIR should identify and quantify impacts to all wetlands resource areas, including BVW, Bank, Riverfront Area, Land Under Water (LUW), Bordering Land Subject to Flooding (BLSF), and Isolated Land Subject to Flooding, as well as IVW and vernal pools. For any wetlands mitigation or replication that will be required through local, state, and federal permitting requirements, the DEIR should describe the general standards, possible locations of wetlands mitigation and replication, and typical monitoring requirements that may be required.

The DEIR should provide additional details about the location of the water withdrawal in Lower Spectacle Pond and the pond conditions in the area of the withdrawal. The DEIR should identify any measures to be implemented to reduce impingement and entrainment of larval or juvenile organisms, including the proposed depth of the withdrawal. I recommend that the Proponent consult with DCR, NHESP, and the Division of Fisheries and Wildlife.

#### Conservation Land/Article 97

The DEIR should review the project's consistency with the EEA Article 97 Land Disposition Policy. The DEIR should specifically address each criteria listed in the Policy, including an alternatives analysis and identification of mitigation for impacts to Article 97 land, including land of equal or greater resource value. The DEIR should specifically address the comments from MassAudubon regarding the land disposition. The DEIR should include a map showing land to be affected by this project that was transferred to the Commonwealth by MassAudubon.

The DEIR should provide more detail regarding the construction impacts to DCR property located within temporary workspace areas and describe measures to minimize these impacts. As discussed below, the DEIR should also provide more information regarding potential blasting and associated impacts to DCR property.

#### Greenhouse Gas Emissions

This project is subject to review under the May 5, 2010 MEPA Greenhouse Gas Emission Policy and Protocol (GHG Policy). The GHG Policy is one element of a comprehensive effort to

meet the Commonwealth's obligations under the Global Warming Solutions Act (GWSA) which include reducing carbon emissions by between 10% and 25% below 1990 emissions levels by the year 2020, and by 80% below 1990 emissions levels by the year 2050. Consistent with MEPA's overall purpose to evaluate alternatives that avoid, minimize and mitigate environmental impacts to the maximum extent practicable (301 CMR 11.01), the Policy requires that GHG impacts of projects have been carefully considered and that all feasible means and measures to reduce those impacts are adopted. The Policy requires that all projects that are subject to preparation of an EIR quantify GHG emissions, evaluate measures that could reduce GHG emissions and quantify potential reductions of mitigation measures. This is a case-by-case inquiry that allows project proponents to select mitigation measures that are determined to be feasible for the particular project being proposed, thereby providing project proponents with maximum flexibility to design their projects.

The Policy includes a *de minimis* exception for projects that have little or no GHG emissions. The EENF indicates that his project should be exempt from the GHG analysis and indicates that the pipeline will not produce GHG emissions; however, it does not address methane emissions associated with transmission facilities and infrastructure, including natural gas leaks from pipelines. Natural gas is composed of methane which is a potent GHG. Although these emission sources may be relatively small compared to lifecycle emissions associated with the production and transmission of natural gas, they may be significant when considered in the context of Massachusetts GHG inventory.

The DEIR should include a GHG analysis that quantifies potential emissions, identifies measures to avoid, minimize and mitigate emissions and quantifies potential reductions. The DEIR should identify how the project is designed to avoid and minimize natural gas leakage during transmission and evaluate reductions associated with proposed measures. It should identify sources of GHG emissions associated with commissioning, operation and maintenance of the pipeline, including leaks, describe measures to be implemented to minimize or eliminate emissions from these sources and, to the extent feasible, quantify potential reductions. In addition, it should consider measures to reduce emissions during the construction period, such as reducing idling of construction equipment or using alternative fuels to power construction vehicles.

The DEIR should indicate whether the Proponent participates or will participate in the EPA Natural Gas STAR Program and identify which measures identified through this program may be applicable to the transmission lines. In addition, I note that legislation (H. 4164, An Act Relative to Natural Gas Leaks) was recently passed that establishes a natural gas leak classification standard and requirements for repair and reporting. The DEIR should include a discussion of the applicability of this legislation to the project and how the project will comply with it.

The Proponent should refer to the GHG Policy for general guidance; however, because this project is distinct from those typically reviewed under the Policy (e.g. residential or commercial buildings), I encourage the Proponent to consult with the MEPA Office and the Department of Energy Resources regarding the development of the GHG analysis prior to submission of the DEIR.

Construction

The DEIR should include additional information regarding construction activities and impacts, including blasting and gasification of the system. It should describe the gasification process and identify any associated impacts, including fugitive emissions and odor. The EENF states that blasting is not expected to be necessary during construction; however, comments from DCR and others suggest that bedrock is widespread in the project area. In addition, review of the USDA-NRCS Web Soil Survey rates portions of the area in or near the pipeline route as “very limited” for shallow excavations due in part to unfavorable depth to hard bedrock. The EENF documents the presence of Lyman-Tunbridge association (map unit 904E) and Tunbridge-Lyman association (map unit 909C), which are both characterized by a depth to bedrock within the six-foot depth of the pipeline trench. The DEIR should review existing data on bedrock and other subsurface conditions that may require blasting to confirm whether these conditions are found where pipeline trenching is to occur. Field verification of bedrock conditions should be performed to help interpret the USDA-NRCS Web Soil Survey results so that potential blasting impacts to residences, DCR land and wetlands can be assessed. The DEIR should describe the nature of blasting impacts in general as compared to typical pipeline construction impacts documented in the EENF. If possible, the DEIR should identify areas of DCR property, wetlands, and water bodies that may be affected by blasting and quantify these impacts based on field verification of the location of hard subsurface conditions.

The use of perchlorate-containing explosives should be avoided to prevent potential contamination of surface water or groundwater. The DEIR should describe how groundwater and surface water will be protected from potential contaminants. MassDEP has developed recommendations for the use of explosives. The document titled “Potential Environmental Contamination from the Use of Perchlorate-Containing Explosive Products” may be found at: <http://www.mass.gov/eea/agencies/massdep/cleanup/regulations/contamination-perchlorate-containing-explosive-products.html>.

The DEIR should provide additional detail regarding construction activities at the Tyringham staging area, including measures to avoid impacts to wetlands and rare species habitat, and the installation of appurtenances. The DEIR should identify any special measures that may be necessary to transport pipe joints, such as road widening or clearing of trees or structures adjacent to roads.

The project must comply with MassDEP’s Solid Waste and Air Pollution Control regulations, pursuant to M.G.L. c.40, s.54. I strongly encourage the Proponent to incorporate construction and demolition (C&D) recycling activities as a sustainable measure for the project. The DEIR should provide more information regarding the project’s generation, handling, recycling, and disposal of construction and demolition debris. The DEIR should quantify and characterize the material to be generated and define waste management goals to be implemented by the contractors constructing the project. The DEIR should discuss how these materials are to be managed during building demolition and how and where they may be reused. The DEIR should discuss the solid waste and air quality regulatory requirements raised in MassDEP’s comment letter. As recommended by MassDEP, the DEIR should also discuss the project’s

waste management and diversion goals that will be specified to contractors engaged on this project.

The DEIR should describe the project's commitment to MassDEP's Clean Air Construction initiative. The DEIR should confirm that the project will require its construction contractors to use Ultra Low Sulfur Diesel fuel, and should include this as a mitigation measure in the Section 61 findings. The DEIR should address how the project will ensure compliance with the Massachusetts Idling regulation at 310 CMR 7.11.

### Mitigation

The DEIR should include a separate chapter summarizing proposed mitigation measures. This chapter should also include draft Section 61 Findings for each State Agency that will issue permits or transfer land for the project. The DEIR should contain clear commitments to implement mitigation measures, estimate the individual costs of each proposed measure, identify the parties responsible for implementation, and contain a schedule for implementation.

In order to ensure that all GHG emissions reduction measures adopted by the Proponent as the Preferred Alternative are actually constructed or performed by the Proponent, the Secretary requires proponents to provide a self-certification to the MEPA Office indicating that all of the required mitigation measures, or their equivalent, have been completed. The commitment to provide this self-certification in the manner outlined above should be incorporated into the draft Section 61 Findings included in the DEIR.

### Responses to Comments/Circulation

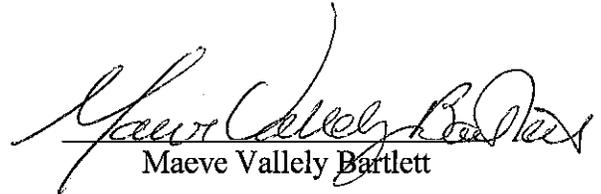
The DEIR should contain a copy of this Certificate and a copy of each comment letter received. In order to ensure that the issues raised by commenters are addressed, the DEIR should include direct responses to comments to the extent that they are within MEPA jurisdiction. This directive is not intended to, and shall not be construed to, enlarge the scope of the DEIR beyond what has been expressly identified in this certificate. I recommend that the Proponent use either an indexed response to comments format, or a direct narrative response.

In accordance with Section 11.16 of the MEPA Regulations and as modified by this Certificate, the Proponent should circulate a hard copy of the DEIR to each State and Town Agency from which the Proponent will seek permits. The Proponent must circulate a copy of the DEIR to all other parties that submitted individual written comments. Per 301 CMR 11.16(5), the Proponent may circulate copies of the DEIR to these other parties in CD-ROM format or by directing commenters to a project website address. However, the Proponent should make available a reasonable number of hard copies to accommodate those without convenient access to a computer and distribute these upon request on a first-come, first-served basis. The Proponent should send correspondence accompanying the CD-ROM or website address indicating that hard copies are available upon request, noting relevant comment deadlines, and

appropriate addresses for submission of comments. A CD-ROM copy of the filing should also be provided to the MEPA Office. Copies of the DEIR should be made available for review at the Agawam, Sandisfield, and Tyringham Public Libraries.

July 11, 2014

Date

  
Maeve Valley Bartlett

Comments received:

06/26/2014	Board of Underwater Archaeological Resources (BUAR)
06/26/2014	Berkshire Regional Planning Commission
06/26/2014	Massachusetts Department of Environmental Protection (MassDEP)/Western Regional Office (WERO)
06/26/2014	Massachusetts Department of Fish and Game (DFG)/Natural Heritage and Endangered Species Program (NHESP) and Division of Fisheries & Wildlife (DFW)
07/01/2014	Sandisfield Board of Selectmen
07/01/2014	Sandisfield Taxpayers Opposing the Pipeline (S.T.O.P.) and 101 co-signers
07/01/2014	MassAudubon
07/02/2014	Berkshire Environmental Action Team
07/02/2014	Thelma Esteves
07/02/2014	Pioneer Valley Planning Commission
07/03/2014	Department of Conservation and Recreation (DCR)

MVB/AJS/ajs

