StopNED Coalition

- TGP Northeast Energy Direct Project Update

December 11, 2014

Agenda

Overview

- Pipeline project overview
- Pipeline route and impacts
- Where are now in the process

Is it needed?

Dispelling the energy crisis myths

The FERC Process

- The key milestones
- How the public can participate

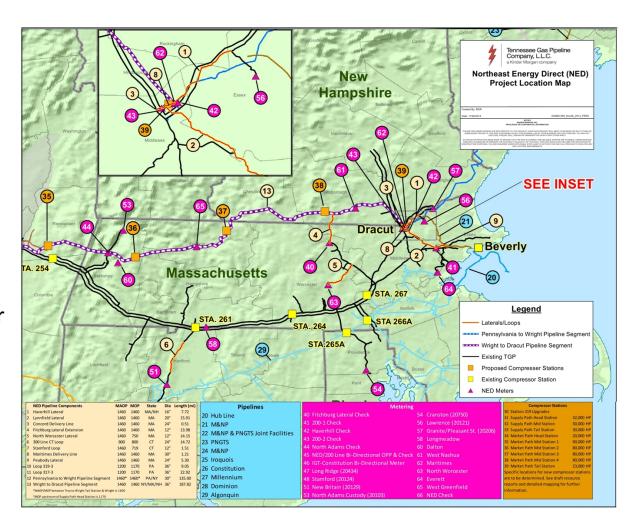
Taking Action

- What StopNED is doing
- What you can do

Pipeline project overview

Proposed Pipeline Route – Mass./N.H.

- 7 laterals
- 4 new compressor stations
- 15 new meter stations
- Modifications to existing compressor and meter stations, extensions of laterals
- Up to 2.2bcf/d capacity



Kinder Morgan Project Timetable

- > On September 15 Kinder Morgan pre-filed with FERC for a Certificate of Public Need and Necessity.
- > On December 8, Kinder Morgan amended their pre-file. Two routes that were previously identified as alternative routs are now "preferred routes" with new accompanying laterals.
 - Kinder Morgan has precedent agreements signed with Local Distribution Companies (LDCs)
 - Kinder Morgan plans to provide between .5Million and 1Million Dht/d

Proposed project timeline:

- Open Houses TBD Jan 2015?
- Scoping TBD
- Construction Date Jan 2017
- In Service Date Nov 2018

The Pipeline Impact

Rights of Way Impact

Permanent & Construction use of existing rights of way/ utility easements:

- Buried gas pipeline needs to be 100-150' from transmission wires
- KM anticipates using ZERO feet of existing ROW for operation
- KM anticipates using 15' of existing ROW for construction



Colocation Reality Check video – by Stephen Wicks of Plainfield, MA

Vimeo access: https://vimeo.com/113839620

YouTube access: https://www.youtube.com/watch?v=SAT7X38hC6o

Width of Existing ROW To Be Used During Operation

TABLE 1.1-2
AREAS OF PIPELINE LOOPING AND CO-LOCATION FOR THE PIPELINE FACILITIES

Facility ID	Co-Location Type	Owner/Operator	Milepost ¹ Le		Length (miles)	Township	County	Width of Existing ROW (ft) ³	Width of Existing ROW To Be Used During	Width of Existing ROW To Be Used During Operation
		4.	Begin	End		2		ROW (II)	Construction (ft) ⁴	(ft) ⁵
						Massachusetts	_			
Wright to Dracut Pipeline Segment (Massachusetts Portion)	Powerline	Western Mass Electric	53.43	72.87	19.44	Hancock, Lanesborough, Cheshire, Dalton, Hinsdale, Peru, Windsor	Berkshire	TBD	15	0
	Powerline	Western Mass Electric	73.19	85.79	12.60	Windsor, Plainfield, Ashfield	Berkshire, Hampshire, Franklin	TBD	15	0
	Powerline	Western Mass Electric	86.89	94.22	7.33	Ashfield, Conway, Shelburne, Deerfield	Franklin	TBD	15	0
	Powerline	Western Mass Electric	95.93	100.15	4.22	Deerfield, Montague	Franklin	TBD	15	0
	Powerline	Western Mass Electric	100.51	104.65	4.14	Montague, Erving, Northfield	Franklin	TBD	15	0
	Powerline	Western Mass Electric	105.51	114.41	8.90	Northfield, Erving, Warwick	Franklin	TBD	15	0
	Powerline	Massachusetts Electric	185.01	186.77	1.76	Dracut	Middlesex	TBD	15	0
Fitchburg Lateral Extension	Powerline	Fitchburg Gas & Electric	7.47	10.85	3.38	Townsend, Lunenburg	Middlesex, Worcester	TBD	15	0
	Powerline	Fitchburg Gas & Electric	13.51	13.98	0.47	Lunenburg	Worcester	TBD	15	0
North Worcester Lateral	Powerline	New England Power	12.63	12.68	0.05	Boylston	Worcester	TBD	15	0
Lynnfield Lateral	Powerline	New England Power	0.00	3.66	3.66	Dracut, Andover	Middlesex, Essex	TBD	15	0
	Powerline	New England Power	9.98	10.23	0.25	Wilmington	Middlesex	TBD	15	0
	Powerline	New England Power	12.29	13.86	1.57	North Reading	Middlesex	TBD	15	0
	Powerline	New England Power	14.58	15.75	1.17	North Reading , Reading, Lynnfield	Middlesex, Essex	TBD	15	0
Haverhill Lateral	Powerline	Massachusetts Electric	0.00	3.22	3.22	Dracut, Methuen	Middlesex, Essex	TBD	15	0
	Pipeline	TGP	3.22	5.41	2.19	Methuen	Essex	30 - 50	40	25
	Pipeline	TGP	7.43	7.72	0.29	Methuen	Essex	30 - 50	40	25

Permanently altered land





Dracut pipeline construction and easement

Eminent Domain

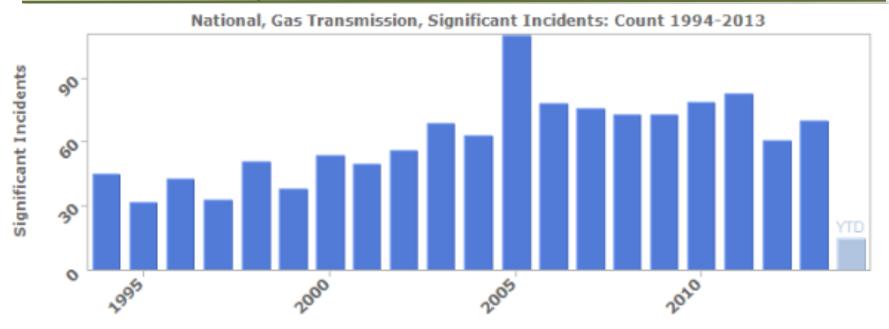
Section 7(h) of the Natural Gas Act (NGA) grants the right of eminent domain when a certificate of public convenience and necessity is issued by the Commission under section 7(c) of the NGA.

Thus, when the Commission finds that a proposed project is in the public convenience and necessity, the pipeline company has the right to acquire the property for that project by eminent domain if the pipeline cannot acquire the necessary land through a negotiated easement or where the landowner and the pipeline cannot agree on the compensation to be paid for the land.

- FERC

Federal law regarding natural gas pipelines usurps state and local laws regarding land use and protection

Potential safety issues



Source: PHMSA Significant Incidents Files, Apr 01, 2014

Since 1995:

- 1247 incidents
- 41 fatalities
- 195 injuries
- \$1.7 Billion in property damage

An "incident" is recorded when:

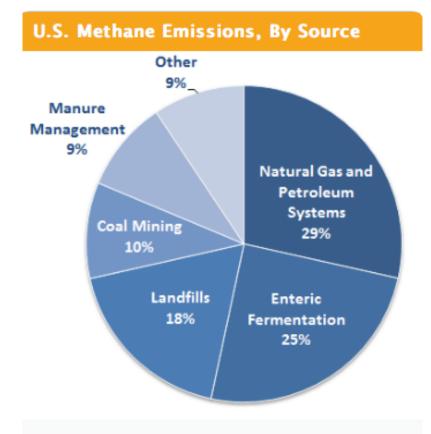
- fatality or injury requiring in-patient hospitalization
- \$50,000 or more in total costs, measured in 1984 dollars
- highly volatile liquid releases of 5 barrels or more or other liquid releases of 50 barrels or more
- liquid releases resulting in an unintentional fire or explosion

Greenhouse gas emissions

"Methane is a strong GHS with global warming potential 86 times great than CO2 in a 20 year time frame" - Intergovernmental Panel on Climate Change

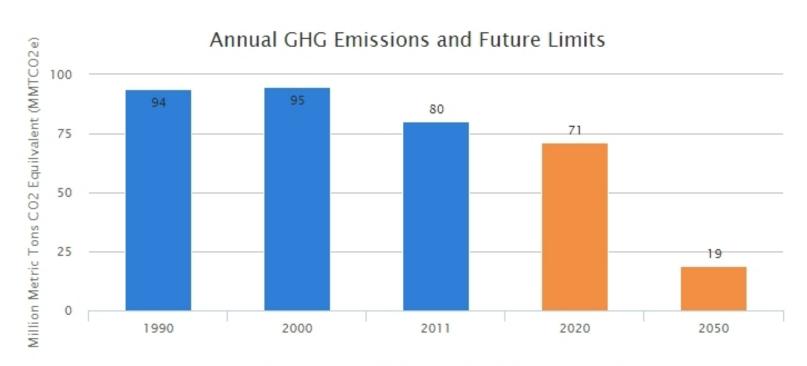
"The proposed Kinder Morgan project... is also contrary to the state's commitment to meet the green house gas (GHG) emission reduction targets of the *Global Warming Solutions Act.*"

- Henry Tepper, President, MassAudubon



Note: All emission estimates from the *Inventory of U.S.*Greenhouse Gas Emissions and Sinks: 1990-2012.

The Global Warming Solutions Act (GWSA)



GHG Emissions (blue) and Future GHG Emission Limits (orange)

It requires reductions from all sectors of the economy to reach a target of a 25% reduction of Greenhouse Gas (GHG) emissions by 2020 and an 80% reduction by 2050.

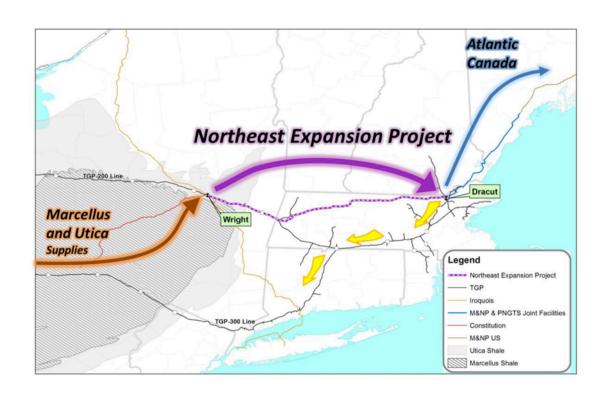
Residents' concerns

Pipeline's Quality of Life Impact	Homeowner Perspective		
Homeowners rights/eminent domain	-		
Rate increases to pay for pipeline	•		
Natural resources and habitats	-		
Town and regional character	-		
Safety issues	-		
Insurance costs	↑		
Property values	-		
Pipeline expansion	₽		
Electricity rates	?		
Positive impact Potential positive impact Potential negative impact	Negative impact		

Most gas planned for export benefitting Kinder Morgan

"In response to significant interest from local distribution companies, electric generators, industrial end users and developers of liquefied natural gas projects in New England and Atlantic Canada, Tennessee is holding an open season to solicit requests for service on new capacity which can be sized from approximately 600,000 Mcf per day ("Mcf/d") up to 2.2 Bcf per day ("Bcf/d")"

Kinder Morgan Northeast
 Expansion Open Season notice



Kinder Morgan – not New England - benefits the most from this project

We need how much additional gas capacity?

NESCOE reported we need an additional 600 million cubic feet per day of natural gas capacity.

Then why do we have a total of 4.5bcf (Billion cubic feet) of pipeline capacity currently proposed by 5 different projects? Over NINE times the need

The Kinder Morgan Northeast **Energy Direct Pipeline alone** accounts for almost FOUR times the need coming in at 2.2bcf.

Current Pipeline Proposals

Total more than 4.5 Billion cubic feet a day

AIM 342,000 MMcf/d projected Nov. 2016

Constitution Pipeline 650 MMcf/d projected Nov. 2015 or 2016

Atlantic Bridge 100-600 MMcf/d projected Nov. 2017

Northeast Direct 600 MMcf to 2 Bcf/d projected Nov. 2018

Access Northeast 200 MMcf to 1 Bcf/d projected Nov. 2018



For a thriving New England 13

For-profit corporations – not New England - benefits the most from this project

Is the pipeline needed?

Is the pipeline needed?

Kinder Morgan claims we need to increase New England's gas supply to:

- Alleviate supply constraints during peak demand periods
- Secure New England's long term energy needs as older facilities are retired.

We're saying:

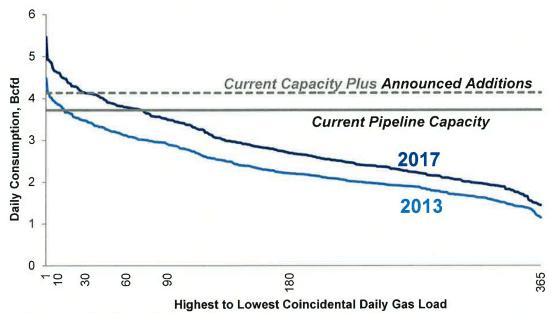
 There's less costly, less invasive and more eco friendly alternatives to new fossil fuel infrastructure

Addressing near term peak usage

- Peak demand and capacity management

Per energy consultants ICF, NE has sufficient pipeline capacity to meet current needs except during peak usage periods – about 30 days per year

So how do we meet short term needs?



Source: ICF estimate for 2013; 2017 projection assuming 20-year average temperatures

Addressing near term peak usage

- Applying available energy resources

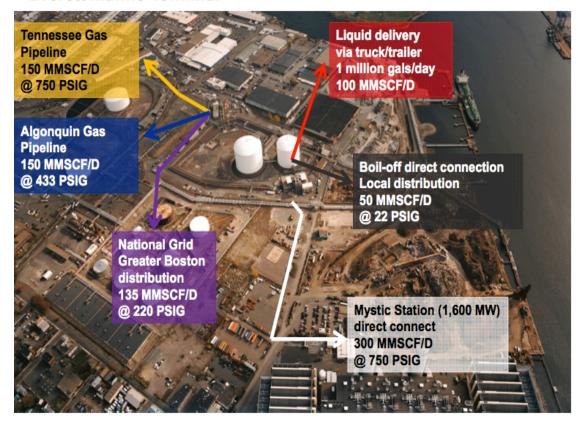
The energy industry speaks:

"The subcommittee concluded that LNG imports would continue to be a key winter marginal supply source for the electric industry for the foreseeable future"
- New England Gas-Electric Focus Group, Final Report

"Existing LNG import facilities that service the Northeast markets should be utilized like conventional gas storage to mitigate supply shortfalls during periods of peak demand."

- Repsol

Everett Marine Terminal





Addressing long term needs

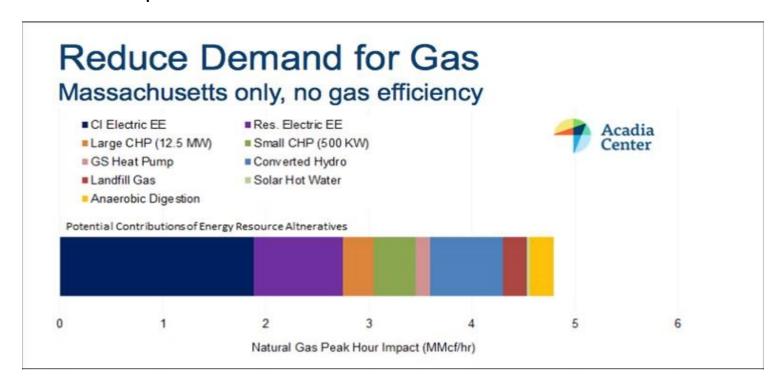
Although a number of coal, oil and nuclear generators will be decommissioned in the next decade, New England's long term energy needs can be met using a combination of:

- Improved gas-electric market coordination
- Repairs to existing pipelines
 - MA: Signed 6/26/14 An Act relative to natural gas leaks
 - US: "A <u>federal study</u> commissioned by Senator Edward J. Markey, a Malden Democrat, shows that in Massachusetts alone, natural gas consumers paid up to \$1.5 billion from 2000 to 2011 for gas that never made it to them because of leaks."
 - Markey has introduced two Bills
- Renewable energy
- Energy efficiency

Addressing long term needs

- increase efficiency and lower the demand for gas

There is a potential of ~5MMcf/hr from these alternative sources:

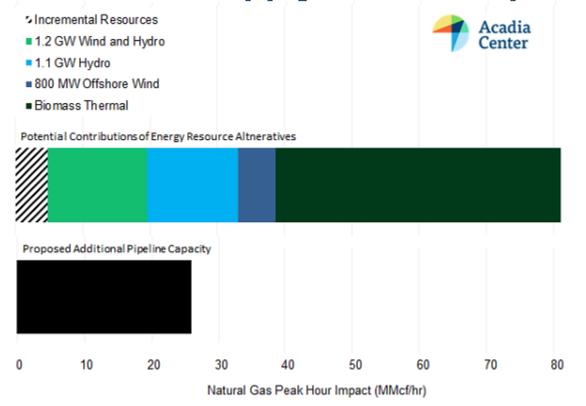


- CI EE = Commercial/Industrial Energy Efficiency
- •CHP = Combined Heat and Power (Electricity plus thermal energy)
- •GS = Ground Source
- •Anaerobic Digestion = biogas recovery typically 60-70% methane, 30-40 % carbon dioxide

Addressing long term needs – *increase alternatives*

There is a potential of ~80MMcf/hr from these alternative sources versus, the potential of ~24MMcf/hr from proposed pipeline capacity increase.

Alternative Supply – MA + imports



Addressing long term needs

meeting energy targets with clean energy*

Comparison of Renewable Resources in Massachusetts and New England, June 2014

	MA	All New England	All New England with goals	Capacity factor	Do the math		
Solar	500 MW (plus 1,100 MW to reach 1,600 MW goal for 2020)	650 MW (plus 1,100 MW for MA goal)	2,250 MW (added 500 MW for rest of NE for good measure)	15 %	340 MW		
Large hydro		1200 MW, aiming for 4,400 MW	4,400 MW	90 %	3,960 MW		
Onshore wind	140 MW	840 MW, possibly about 2300 MW more under development	3,140 MW	30 %	942 MW		
Offshore wind	468 MW in development		4,000 GW (4 million MW) US technical potential; 6.2 GW in BOEM's process in MA and RI; plus 468 MW in development=6,668 MW	40 %	2,667 MW (2.667 GW)		

Current and potential renewable energy sources for NE close much of the expected 2020 energy gap due to coal, nuclear and outdated power plant closings

^{*}Presentation by DPU Chair Ann Berwick at NEEP's 2014 Power Summit

The FERC Process and Public Participation

FERC Process Overview

FERC "will approve an application for a certificate only if the public benefits from the project outweigh any adverse effects"

Public Benefits include:

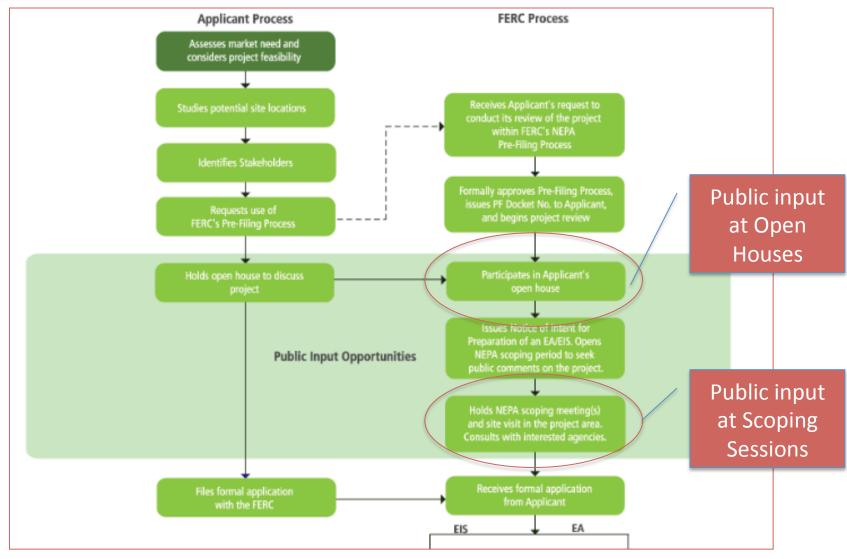
- Meeting unserved demand
- Eliminating bottlenecks
- Accessing to new supplies
- Lowering costs to consumers
- Increasing electric reliability
- Advancing clean air objectives

Adverse Impacts include:

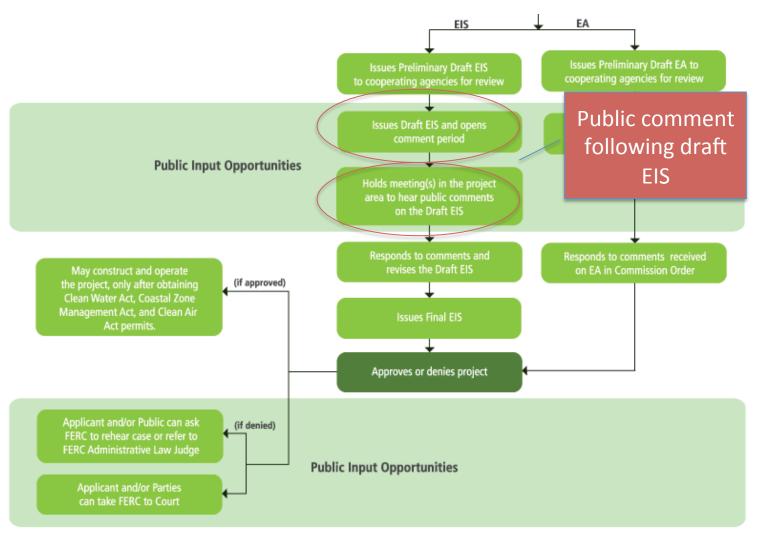
- Unnecessary disruptions of the environment
- Unneeded exercise of eminent domain
- Residual adverse impacts on landowners and communities

Public input to FERC is essential to determining the impacts and their significance

Ferc Process – Overview



Ferc Process – Overview



Ferc Pre Filing Process – Public Participation

Open House



- Kinder Morgan meets community in "trade show" format
- FERC may participate
- Public can ask questions/express concerns

Scoping



- Sponsored by FERC "to identify relevant issues" for scoping the EIS
- Affected property owners and stakeholders can provide detailed comments and concerns to focus the EIS

Draft EIS



Public can comment in writing on FERC web site

Public can "informally" comment in writing on FERC web site now

Commenting at FERC

Who should comment?

- Any person or organization that has a concern with or opposes the project
- Encourage other TU chapters and members to comment
- Encourage your town boards to comment

Why should I comment?

- Establishes a record of opposition at FERC
- Counters Kinder Morgan's claim of public support for project

What should I say/submit?

- State your concerns
- Include copies of denial to survey letters, or a comment that you denied access to survey
- Read other comments for ideas!!

How do I register at FERC to comment?

Step by step instructions at <u>www.nofrackedgasinmass.org</u>

Getting Involved - Do's and Don'ts

Do

- Comment to FERC
- Write to elected and appointed officials
- Pass a resolution opposing the pipeline
- Explore BOH banning of pipeline
- Start a community based antipipeline organization
- Join a statewide anti-pipeline group e.g. StopNED
- Participate in FERC scoping sessions
- File to intervene at FERC

Don't

- Give permission to survey your property
- Make your problem someone else's by proposing a re-route
- Be fooled by "existing ROW" options as the can be equally or more harmful to environment

Actions Taken and Progress to Date

The Tariff – Background

In December 2013, the New England States Committee on Electricity (NESCOE) proposed:

"a tariff for the recovery of the cost of firm natural gas pipeline capacity...to achieve the construction of new, or expansion of existing, pipelines."

NESCOE's goal was to increase the region's gas capacity to

- Mitigate peak season electricity rate spikes
- Ensure grid reliability during peak season usage
- Ensure region is not competitively disadvantaged

The proposed TGP Northeast Energy Direct is one potential solution to addressing this concern

The Study

As a direct result of grass roots efforts, the Administration is conducting a new study on the need for additional gas infrastructure:

"The goal of DOER's study is to determine, given updated supply and demand assumptions, whether or not new infrastructure is required" - DOER RFP issued Sep 6

The DOER has hired Synapse Energy to conduct the study. The timeline is:

- Oct 15, Oct 30 and Dec ? stakeholder meetings
- Dec 23 report issues

What this means to us:

The results may aid our case before FERC that the Kinder Morgan pipeline is not required

The Tariff – Current Status

Due, in part, to the massive grass roots efforts across the state:

"...any activity on moving a tariff forward by the states has been suspended."

- Meg Lusardi, Acting Commissioner, DOER

What this means to us:

Kinder Morgan cannot use the NESCOE initiative as evidence of "need" for additional gas to power generators

Next Steps

NCT, StopNED Coalition and MassPLAN are working together to:

- Prepare affected homeowners, affected residents and concerned citizens for the open houses and scoping session
 - Open houses to commence November
 - Scoping sessions dates TBD
- Secure expert and legal advisors in preparation for scoping sessons and FERC intervention
- Help our friends and neighbors in New Hampshire!



Thank you!
For more information please visit

www.nashobatrust.org

and

www.stopned.org