

**STATE OF VERMONT
PUBLIC SERVICE BOARD**

Docket No. 7970

Petition of Vermont Gas Systems, Inc. for a)
certificate of public good, pursuant to 30 V.S.A.)
§248, authorizing the construction of the)
“Addison Natural Gas Project” consisting of)
approximately 43 miles of new “natural” gas)
transmission pipeline in Chittenden and)
Addison Counties, approximately 5 miles of)
new distribution mainlines in Addison County,)
together with three new gate stations in)
Williston, New Haven and Middlebury,)
Vermont)

LEGAL BRIEF
OF
NATHAN PALMER
October 9, 2013

INTRODUCTION:

Vermont Gas Systems is seeking approval to install a pipeline through our farm. I, Nathan Palmer, filed as an intervenor, as a landowner who is opposed to the route crossing my land, and also as a “conscientious objector” to the build out of more fossil fuel infrastructure when the world needs to move away from burning fossil fuels and embrace more renewable energy sources in order to curb or avert climate change. During the week of September 16-20, myself and my wife, Jane attended the technical hearings for Docket No. 7970 in Montpelier at the Capitol Hotel and Conference Center.

During that week, we saw much testimony from the Petitioner (VGS) and others supporting, opposing or wishing to have some direction to the project.

Not having funds to hire an attorney, we represented ourselves, pro se. We produced all of our witnesses in person except one, Mr Curt Freedman, who testified in our original filing as to the safety setbacks that should be required for residences in proximity to a pipeline such as the one proposed. Since he lives away, the Board graciously agreed to questioning him via mail. Followup responses will be allowed.

OUR WITNESSES AND TESTIMONY:

We had several witnesses provide testimony in person. In order of their appearance, they were: Mr Jeffery Wolfe, Mr Keith Brunner, Mr Craig Heindel and Dr Heather Darby.

Mr Wolfe testified that alternative energy projects will be directly and adversely affected by this pipeline installation. He also testified that great strides are currently being made toward solar and wind energy as well as air source heat pumps and that this pipeline isn't needed on the course of meeting the Comprehensive Energy Plan as adopted in 2011. He stated that in order to meet the goal of reducing Vermont's reliance of fossil fuels to 10 per cent by 2050, we need to be *reducing*, not expanding fossil fuel infrastructure within the state. He also noted that as more studies about methane and greenhouse gases are done, that the models presented as evidence of the effect of this project be redone to reflect the latest science.

Since the technical hearings on this docket ended, yet another study has emerged from the

Intergovernmental Panel on Climate Change (IPCC)

<http://thinkprogress.org/climate/2013/10/02/2708911/fracking-ipcc-methane/> This new study reports that methane (CH₄) is far more potent a greenhouse gas than we had previously realized. I understand that the Board needs to cut off input into each docket in order to be able to process their decisions in a timely manner, but as I have emphasized before, this is an extremely important decision for the Board to make and it is crucial that the decision to build this pipeline be made using all currently available data. (Not that all of your decisions are not important..it is just that this one has wider implications and perhaps more devastating consequences than other projects you have had before you.) In the 2011 CEP, In The Vision for Vermont's Energy Future, there is this statement. “Oil also presents environmental costs not fully captured in the price of a barrel, and contributes to the challenge of climate change.” According to the latest IPCC study, this statement could just as easily be about “natural” gas as there are many environmental costs that are not fully captured by the price of a cubic foot of gas.

In the foreword of the 2011 CEP, our Governor, Peter Shumlin says: “I believe there is no greater challenge and opportunity for Vermont and our world than the challenge to change the way we use and produce energy. The challenge is not unique to Vermont, but Vermont does have a tremendous opportunity to serve as a leader.” I totally agree with that statement. What I don't agree with is when the CEP suggests that we increase the use of “natural gas and bio-fuels blends where non-renewable fuels remain necessary”. Vermont has one of the lowest rates of “natural” gas usage in the US. That right there sets us apart. If we are to “serve as a leader” in this quest for sustainable energy, why on earth would we want to increase our dependence on another fossil fuel, especially when the usage is dependent on the construction of exorbitantly expensive and environmentally destructive pipelines?

Mr Brunner testified that this project will undermine efforts to curb climate change and that the choices we make now, will affect future generations. At the technical hearing, Ms Hayden tried to bait Mr Brunner by asking him what a person who spoke at the public hearing in Middlebury early in September meant by a defiant statement she made. I had left the room momentarily for a much needed bathroom break, so I was unable to object, but I believe Ms Hayden was attempting to characterize Mr Brunner as a radical or an extremist, of which he is neither. Mr Brunner is a brilliant individual who is determined to have a positive effect on the environment and the process of democracy. He and many

others are attempting to get the uniformed public to listen to the arguments against fracking and building out of more fossil fuel infrastructure. I was glad to hear when I returned to the hearing that Mr Brunner had reacted with respect and tolerance and informed Ms Hayden that he did not know what someone else meant by her statement. I myself might not have been as respectful. (especially when I was 25!)

Mr Craig Heindel, a hydro geologist, testified that the trench that would be dug to install this pipeline will have undue adverse effects to our property by creating additional water flow onto our improved garden area and other parts of our farm. He also testified that the mitigation measures suggested by Mr John Heintz of VGS to curtail this problem will be ineffective in our situation because of the high water table and the nature of our clay soil. He said the water would have to go somewhere and it would end up coming to the surface if it couldn't follow the trench because of the "trench dams" VGS is proposing will mitigate the problem. I am not sure which criteria in Section 248(b)(5) would apply, but it seems like one of those listed would cover it.

Dr Heather Darby, an agronomist with the UVM Extension Service, testified that, contrary to what Mr Jeffrey Nelson, an engineer hired by VGS to determine the impacts of this pipeline on the land said, the soil on our farm will indeed be harmed by the construction of the pipeline through our property. She also dispelled the notion that the harm can be mitigated by simple soil separation techniques suggested by Mr Heintz and Mr Nelson.

In her testimony, Dr Darby referenced a Cornell study to highlight the decrease in organic and active carbon in soils that were disturbed by construction activities. These figures indicate mortality to the microorganisms that are crucial to a healthy organic soil. The soil type in the analysis cited was a silty loam, not a heavy clay soil as is the case on our farm. The Cornell Study that Dr Darby cited was not an organic farm and the restoration methods included adding chemical fertilizer after the construction process to bring the soil element levels closer to those outside the construction right of way. Dr Darby was articulate in describing the difference between a soil in a plastic state and a friable state. She was very specific to say that serious if not permanent damage can be done to soils if they are disturbed or compacted during a plastic state. She also described how clay soil is most often plastic because of its tendency to retain moisture. I wish I had access to a transcript of the hearings so I could quote her

because I remember thinking how easily and well she explained something I have been struggling myself to convey to people that don't understand our concerns about our soil.

Mr Curt Freedman testified that a pipe this size and pressure should have safety setbacks that are not being implemented in the route planning by Vermont Gas. He cited the Rhodes report that calculates the potential impact radius of various sizes of pipeline. Although I do not understand his calculations, I do feel he makes a valid point about safety and setbacks for gas pipelines and hope that the Board does not discount his contribution. The Board asked three questions of Mr Freedman via mail, and he answered them (in several responses). These questions pertained to the method of calculation he used and for an electronic link to the Rhodes report.

OTHER PERTINENT TESTIMONY:

VELCO:

Mr Peter Lind testified on behalf of VELCO. When asked if VELCO had a problem with siting the pipeline on the VELCO right of way in the area of Rotax Road, he replied that VELCO preferred the pipeline avoid the east side of the right of way to avoid future conflicts with expansion plans for VELCO and the transmission lines. He also testified however, that there would be no conflicts with siting the pipeline on the west side of the corridor as it is done along most of the route. He was not sure about siting the pipeline down the middle of the VELCO corridor so he suggested the Board question Mr Thomas Dunn, Chief Operating Officer of VELCO about the possibility.

Mr Thomas Dunn testified both that VELCO does not have any plans to expand their transmission system in the area of Rotax Road within the next 20 years, but then he also said he would not want to construct the pipeline within the existing VELCO right of way for fear it would constrict the ability to service and install an additional transmission line. He also said there might be power interruption if the pipeline was to be constructed within the VELCO corridor. Siting the pipeline in the western most 10 feet of the existing VELCO corridor would keep it over 350 feet from the Bailey and McGuinness residences. Of the two remaining residences that would be within 300 feet of the pipeline if it would be returned to the VELCO right of way, one belongs to Beverly Latreille, who would prefer the pipeline follow the VELCO right of way rather than cross her land (which it does in the 2/28 route plan) With the pipeline on the VELCO right of way, the distance to her home would be approximately 125 feet.

The other landowner who would be closer to the pipeline than 300 feet would be Keith Mayo. Mr Mayo also has no problem with the pipeline being sited on the VELCO right of way and less than 300 feet from his house, but he is concerned about his drilled well. He would also like to receive service to his home should the pipeline be installed.

VGS:

Ms Eileen Simollardes testified that we have been civil in our negotiations with VGS but used her time to answer my questions to expound on what she considers the virtues of this project. She tried to imply that VGS has made every attempt to come to a mutual agreement with landowners regarding our part of the world but this is just not the case. Up until the Sunday before the technical hearings, we had not had contact with anyone from VGS for months. (other than through the 248 process) VGS made no attempt to change the route through our farm, they made no offer of compensation, and they never got back to us about an alternate route we had agreed to let them study back in May and June. Since the technical hearings, we have been contacted by a right of way agent, and Ms Simollardes sent us a map showing a possible alternative route that does not cross our land. However, Ms Simollardes has informed us that using that route will depend on us getting the “newly” impacted landowners to agree to hosting the pipeline on their property. (These landowners all bought their properties with the existing VELCO right of way. In other words, they came to the hazard. They were also on the original route.) This poses quite a dilemma. Nobody *wants* this pipeline on their property and putting us in this position is another attempt to shift the process and destroy our community.

Mr Heintz testified that the siting of the pipeline through our (the Palmer) property would be easier and cheaper on account of “constructability” concerns, namely archaeologically sensitive areas, a gully, an intermittent stream, and close proximity to other dwellings on original route. He was careful to say that it was not impossible to site the pipeline along the VELCO corridor, just that they would prefer to site it through our property. In the prefiled testimony, Exhibit Petitioner JH-15, the cost of directional drilling across the Norris farm was \$604,800. Ms Simollardes said in her most recent email to us that it would be between \$1.2-1.3 million. I am not sure why the price has now doubled. The original impetus for drilling across the Norris farm was an archeological site. The archeologists found artifacts just about everywhere they have dug in our valley, in fact they found a significant site on the Norris farm on the route through our property. Why VGS thinks our property would not be an archeological site as well is

beyond me. We have found numerous artifacts in our garden area throughout the years.

Mr Heintz also confirmed that if this pipeline were to be installed under our garden, we would be obligated to contact Dig Safe every time we did any excavation in our our garden. He did not specify to what degree digging in the garden would be considered “excavation”.

Mr Jeffery Nelson testified that he still maintained that Ms Darby's testimony about the destruction this pipeline installation would inflict on our land was “absurd” and also reiterated the “fact” that it was only a 5 foot wide trench, and the topsoil would not be removed for the entire 75 foot right of way. Mr Heintz confirmed that the latter was indeed the case and that all of the topsoil would be removed within the boundaries of that 75 foot right of way. This soil would be heaped in a pile within the temporary right of way while the construction process is occurring and then it would be spread back over our land. We mowed a swath across our pasture to demonstrate how large an area this would be and how much area would be impacted for the Board's site visit. Recently we took a field trip to Georgia VT, off Polly Hubbard Road where the looping is being installed to see what the actual process looked like. There were no neat piles of topsoil separated from the subsoil. Everything was all mixed up. This was through agricultural land and wetlands. When I asked Mr Heintz why there was no soil separation, he replied that maybe it wasn't agricultural land. Maybe they weren't really hay bales we saw out in the field, but they sure looked like hay bales.

Mr Michael Buscher testified that he did not attend the site visit on September 10th and had spent about 15 minutes at the proposed pipeline crossing of Rotax Road the previous winter. He was not able to explain how we would be able to plant a vegetative screen without impacting our only available future site for our septic system should the one in place now fail. He was also not able to address our concerns about losing the hedgerow between our land and Norma Norris' land that currently works as a sponge for some water run off and also a buffer from non organic (GMO) pollen and other contaminants that might migrate from the Norris farm.

Add to this the testimonies of Mr Bluestein, testifying on behalf of VGS, and Dr Stanton, testifying on behalf of CLF, who battled it out across the cells of the spreadsheets in their reports trying to determine the true life cycle analysis of “natural” gas. Even if Mr Bluestein's best case scenario were true...the

GHG savings would be *very small* compared to the total cost of the project. Maybe I missed it, but I don't think any of the economic gurus figured the cost per ton of GHG saved, did they? And I don't think any of the figures plugged into the spreadsheets included the fugitive gas from the two recent gas well blowouts in the gulf? Or the gas now escaping from the bad well casings in fracked wells throughout the world. That would add to the true "life cycle" cost of the gas pulsing through this proposed pipeline. If the Vermont Public Service Board were to consider these costs in their decision whether or not to grant this project a CPG, this project would not proceed.

DPS:

Mr David Raphael testified that he still believes that siting the pipeline within the VELCO corridor is "a preferred approach when considering aesthetics and land use impacts as it eliminates the need for acquiring and developing new utility corridors. Co-location of utilities is always desirable as it tends to minimize impacts overall."

Mr Walter "TJ" Poor had a very interesting testimony. I am not an economist, I am a mechanic and fabricator by trade and an uneducated engineer by desire. However, I did pay attention to the economic basis for this project as I believe it will affect the future financial climate for alternative fuels in this state as well as the environment of the entire region. In short, I gathered that this project is very expensive. I also gathered that most of the funding will come at first from Gaz Metro, VGS' parent company, but that money will be payed back by the ratepayers of Vermont. (those that will be hooked up to this pipeline) I was dismayed (but not surprised) to learn that the densest populated areas in Phase 1 of the project, (Vergennes and Middlebury) will not carry the project economically for the first 19 years. The cash cow is International Paper. Phase 1 will not stand on it's own unless Phase 2 is approved and that seems to be what's driving this docket along at breakneck speed. According to the CEP the DPS had drafted up, we should be winding down our reliance to fossil fuels just about the time this pipeline will have begun to pay for itself. That will be a bit like paying a huge price for a car and when you finally get it paid off, it's obsolete, an antique...mechanically questionable and ready for scrap yard. Not a good investment.

So basically, Vergennes and Middlebury are not a viable market for this fracked gas pipeline. In his testimony, Mr Poor said the real "economic benefit" will be all the money everyone (well not everyone,

actually..only a small percentage of Addison County residents will be offered distribution) will save being able to heat their homes with cheap, fracked gas. And this money will get poured back into the local economy and that will make everything rosy. Of course that all goes to heck if the price of fracked gas goes up and there are little or no savings to spend. There goes the public good! Installing this pipeline through our precious wetlands and agricultural land with a promise that can't be guaranteed is a bad bet. (that is my take on TJ Poor's testimony)

MONKTON

Mr Steve Pilcher took the stand for the town of Monkton. (our town) At the suggestion of Mr Josh Diamond, the Monkton Select Board drafted and signed an MOU with VGS. The Select Board held a public meeting to discuss the MOU, after which, they voted down the first version. Mr Pilcher did not spell out the main difference that most residents who attended that public meeting insisted upon. That difference, was the removal of the wording that said the town “supported the pipeline” Most people at that meeting did not support the pipeline. Many didn't even want the select board to sign an MOU at all. Some felt that we, as a town, needed some protection from Vermont Gas and an MOU was the only hope for a fair deal.

It has been a common feeling in Monkton that Vermont Gas is a bully and will not make a good neighbor. It has been a common feeling that this pipeline is inevitable and that the PBS will grant a CPG because our governor, Peter Shumlin supports the project so the PSB and the DPS would have to support it as well. Mr Pilcher did not divulge these sentiments..and I, not being a practiced attorney, did not draw it out of him. But I think it is important for the Board to know that many residents in Monkton felt the signing of this MOU with VGS was the best we could hope for in a bad situation.

Mr Joshua Diamond, the attorney the Town of Monkton hired to represent the Town against Vermont Gas, (and who suggested the creation of an MOU in the first place) repeatedly asked questions of various witnesses making it clear that the Town of Monkton had signed an MOU that stated clearly that the Town did not want any changes made to the route as stated at the signing of the MOU. The Monkton Select Board was aware that there were several landowners that were not in agreement with the route as stated when they signed the MOU. We were at the meeting when the Select Board went over the MOU line by line. We were told that the MOU would have no impact on our individual

negotiations with VGS. We did not understand at that time that the Town of Monkton and their attorney would fight against our efforts to move the pipeline off our farm and back onto the VELCO right of way. I don't think any of the other landowners who are contesting the route did. It appeared as though the only mission Mr Diamond had at the technical hearings was to obstruct our efforts to persuade the Board to consider the effects of the pipeline route as stated in the MOU. It still pains me to think that my property taxes will be going towards paying the bill for Mr Diamond sitting there every day at those technical hearings. Days when I lost money by not working at my garage.

SUMMARY

I would like to thank the Board for reading my testimony and coming to our farm for the site visit and asking so many good questions of my witnesses. I hope I have made some headway in convincing you all that putting this pipeline through our farm will cause undue adverse impacts on us as individual landowners. The path VGS has chosen for this pipeline across our land is the path of least resistance (at least they thought it would be.) It is much easier and cheaper to ditch through farmland than to drill, blast or hammer a trench through more difficult areas. But, as you all know, farmland has great value.

The construction of this pipeline through our land will create undue adverse impacts to the aesthetics, soil health, water content of the soil, and the future development of our land as it will eliminate our backup site for a septic system and destroy the soil health for future vegetable growing areas.

Whoever chose to put this pipeline through Monkton should reconsider their decision. Monkton is swamp, marsh, ledge, farmland, residences and a big beautiful pond. A one mile section of loop pipe in Georgia through woodland, wetland and farmland took more than 6 weeks to install. This was not using the high restoration mitigation techniques that Vermont Gas has claimed they use in wetlands and farmland. It did not include any blasting. There were no roads or major stream crossings. VGS has said they will install this pipeline through Monkton (7.5 miles) in 4-6 weeks. Either they are lying or they are being ridiculously optimistic.

I believe VGS is trying to downplay the mess and chaos this project will cause and how long it will take to install. This is indicative of the type of attitude and short pay of information that Vermont Gas has been brandishing in Addison County. People want to believe them. We did. But facts and actions

outweigh claims and promises. The Board saw evidence of this with the reaction of Jeffery Nelson to Dr Darby's testimony. He called her analogy of the damage caused by construction of this pipeline being “the equivalent of an earthquake, hurricane, tornado, and forest fire occurring simultaneously” as “absurd”. Then he contradicted the construction description of John Heintz, VGS' own engineer when he said there would only be topsoil removed from the 5 foot wide trench when the actual width of topsoil removal is 75 feet.. How long has this guy been working on this project? And he only found this out last month? This, along with plenty of other “lacks” has us concerned, not only for our property, but for that of all the other land this pipeline will impact if approved.

After reading all of the testimony (OK..most) and reading the discovery requests and responses, and hearing the testimonies at the technical hearings, I am still adamant that this project is not in the best interest of Vermonters. I believe that if “natural” gas were a good fit for Vermont, a pipeline to all the densely populated areas would already be in place. I also believe that the only reason Vermont Gas is pushing to get this pipeline through at this time is because the price of gas is at an unprecedented low price and that if that price were to rise significantly, which fossil fuel prices are wont to do, this project would not even be considered.

For Vermont Gas to even try to claim that the presence of “natural” gas distribution will create or enhance the job market in any given area is total bunk. The total number of Vermonters Phase 1 will serve is less than 1% of the total population of Vermont. It is a small percentage of the people and residences in Addison County. So it does not serve “Vermont” and saying it will serve Addison County is a stretch as well.

As I have stated before, a few Vermonters want this pipeline so they can possibly save money. The true cost will be more than any of us can afford. Since the gas being moved within this pipe does not come from Vermont, and it's ultimate destination may be outside of Vermont, the big picture needs to be examined. The PSB will need to consider what is happening outside of Vermont when they decide if this in the public good or not.

What I would like to propose to the Board is, if you find that (against my advice) this project is worthy of a CPG, that you stipulate that it stays within or adjacent to the VELCO corridor in the Rotax Road area, and that you make it contingent upon the approval of Phase 2. There is no point in spending 90

plus million dollars to get gas to Vergennes and Middlebury. Without the IP hookup, this is a ratepayer's nightmare and will not “meet the need for present and future demand for service which could not otherwise be provided in a more cost effective manner through energy conservation programs and measures and energy-efficiency and load management measures....”

If, as VGS says, they want to start construction of Phase 1 in February of 2014, we will not yet know whether Phase 2 will be approved or not. As the economic viability of Phase 1 depends on the approval of Phase 2 and the delivery of gas to IP, approving Phase 1 would be premature and reckless. The HDD that VGS wishes to start with can do irreparable harm to marshes and swampland. Recently a pipeline being HDD'd under the Hudson River came up 300 FEET SHORT! This is bad enough news for the Hudson River. It would be devastating to the Monkton Swamp and other wetlands. The slurry of water and “Bentonite” clay (or 'mud' as Mr Heintz referred to it as) used for drilling is not toxic, but, being a fine silty clay, will smother all plant and animal life if it escapes into the environment. These boo boos are not unheard of...quite the contrary...they are common enough that language in agreements with gas companies often stipulate that the pipe will be abandoned in place if drilling goes awry. They wouldn't specify that if it never happens.

I hope that in testifying and participating as a pro se landowner, I have given the Board a glimpse into our lives and how this project is effecting our land and livelihood. The sustainable energy projects I have been planning and working on for the last decade, namely the basket willow trees for biomass and cider apple trees for fuel grade alcohol, will be eliminated if this pipeline is installed as planned by VGS. Perhaps that is indicative of the effect the build out of “natural” gas infrastructure will have to renewable energy in general. It will curtail, upstage, undercut, or at least stunt any attempts to create renewable and sustainable local energy sources just as it would eliminate my willow bushes and apples trees. At the technical hearing, Mr Burke asked me under oath, if this pipeline was horizontally drilled, over 300 feet from my house but still on my land, if I would accept it. My answer is no. I cannot, in good conscience, accept this pipeline on my property.

Respectfully submitted,

Nathan Palmer

cc: Service List