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Impacts on the Stakeholders of the Nexus Pipeline

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Honors Project

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In July of 2016, John Harvey, a landowner who owns a horse and cattle farm in Medina County, Ohio, received a letter informing him a survey of his property was needed for a pipeline. Harvey said no sooner had he taken the letter out of the mailbox than a surveyor was at his front door. He said he considered it a “breach of his civil rights” because the pipeline route would cut directly through his property. Like Harvey, other Ohio residents received survey letters from the pipeline company, some as early as August 2014.

The Nexus Gas Transmission is a natural gas pipeline that was previously owned by Spectra Energy in Houston, but was bought by Enbridge, Inc., an energy company based out of Canada. Gas from Nexus is set to be shipped to the Union Gas Dawn Hub storage facility in Ontario, Canada, where it would be converted to liquid form for exportation.

Harvey isn’t alone in his displeasure, not only with the routing but the manner in which the surveyors and other Nexus officials have interacted with property owners.

The Landowners

Some property owners are concerned about property devaluation; others are concerned about their rights as owners of private property. Fear for their safety while living near the pipeline is what most property owners point out first when describing their hesitations about Nexus.

“I wouldn’t want to live next to a high pressure pipeline because if it fails, it’s likely you’re not going to be around,” said Harvey.

At roughly 256 miles long, the Nexus pipeline will begin in Washtenaw County, Michigan, and head southeast ending in Columbiana County, Ohio. It is projected to transport 1.5 billion cubic feet of natural gas per day. According to the “Project Overview & Map” page of

the Nexus website, this pipeline would help “support the growing demand for clean-burning natural gas.”

Harvey said, “I don’t see any benefits for our community ... There’s really not a huge need for gas in our area.”

However, Harvey’s perception of the lack of need for more natural gas-powered energy contrasts with the Federal Energy Regulatory Commission.

In its final Environmental Impact Statement, the energy commission stated Nexus indicated a need for natural gas for home heating, industrial use and electrical generation “coupled with a decrease in imports ... by traditional supply sources from western Canada and the Gulf Coast.”

The Nexus pipeline currently has a 59 percent usage rate with eight contracted shippers. Seven of these shippers are listed as confidential with contracted volumes between 75-200 million cubic feet per day. Columbia Gas, the eighth and smallest shipper at 50 million cubic feet per day, is the only named shipper listed on the environmental impact statement.

Renee Walker, like Harvey, remains unconvinced of the public necessity of the pipeline. Walker and her husband own roughly 300 acres of land in Fulton County, Ohio. She said she fears the lack of stability in the ground as well as the potential compromise the electrical lines on her property cause.

“You can actually take a fluorescent tube ... by our barn and it will light up,” Walker said. “If there’s that much electricity in the air, what happens if there’s a leak on this pipeline?”

Harvey said he faces a threat to his livelihood as well as intimidation and questionable tactics employed by the surveyors.

After Harvey refused to permit the surveyors onto his property, he was taken to court. Two days before his court date, Harvey said 25 unauthorized Nexus surveyors came onto his property, accompanied by two armed sheriff's deputies. The sheriff informed Harvey they had a court order to walk his property, an order that was actually from a previous route ruling.

Walker said she has faced similar situations. She has a gun range on her property and said the surveyors have called the police on her and her family claiming the family tried to shoot at them.

Michael Conley, another property owner from Green, Ohio – a city located between Akron and Canton – said property owners are “not compensated ... for (the) danger” the pipeline poses.

Conley said the blast radius for a pipeline like Nexus is 500 feet, but the energy commission's environmental impact statement stated the potential impact radius would be 1,100 feet; his home and bee farm are well within that range at 200 feet from the pipeline.

Not only does Conley live within the potential impact zone, but he faces reduced property values once the pipeline is installed.

Harvey said he faces property devaluation as well and the pipeline company only wanted to compensate him for the easement that would allow them to use his land.

“They don't compensate me for the value of the loss of my other property. That loses value because I can't really sell it. I can't develop it,” said Harvey.

Property owners are not the only individuals speaking out about property devaluation. Mike Kovack, an auditor from Medina County, Ohio, stated in a letter to the public that the pipeline “will necessarily reduce the usage of those properties to some degree.”

Faced with the probability of having a pipeline on their property, some landowners have turned to activism for support and guidance.

The Activism

Paul Wohlfarth is an activist working in communications for grassroots groups like the Coalition to Reroute Nexus and Neighbors Against Nexus. Wohlfarth became involved with activism when his son received a letter from the company in 2014 alerting him to upcoming property surveys. Wohlfarth expressed his concerns about the company's claim of eminent domain as justification for the pipeline.

"It's just a private company, an international company," Wohlfarth said. "(They) come in here and take your private property for their gain and you don't get anything for it."

In addition to property rights, activists like Leatra Harper and Lisa Kochheiser expressed concerns about the environmental impacts of the pipeline. Harper explained that the process of using pressurized water to extract natural gas from lateral seams in the earth poses a threat to groundwater.

"They have to keep using more and more water to go ... deeper with the longer and longer laterals," Harper said. "These laterals leave like 80 percent of the water ... to marinate with the radioactivity that's down there."

If there are fissures in the laterals from which the natural gas is extracted, the leftover water used to bring the gas up will seep into the ground water, she said.

According to FERC's environmental statement, Nexus is set to cross 16 wellhead protection areas, and there could be decreased water clarity and possible flow alteration of "shallow aquifers" during grading and excavation for the Nexus pipeline. Also in the statement,

Nexus offered pre- and post-construction testing of wells within 150 feet of the pipeline's construction.

Wohlfarth said, "Most people in Fulton County, they get their water from well water, so it could be a huge danger for Fulton County."

Along with groundwater, air quality could be at risk due to the compressor stations used to keep the pipeline running. Kochheiser described the compressor stations as "the size of a small factory." In total, there will be six compressor stations in Ohio, five new stations will be built and modifications will be made to one existing station. According to a 2015 article from *The Mirror* in Maumee, Ohio, a 52,000 horsepower compressor station is set to be built in Waterville, Ohio that would take up 40 acres.

Terry Lodge, an environmental activist and lawyer, explained that the stations run on gas from the pipeline and can require a blowdown.

"The compressors are remote-controlled and they are ordered to shut off and vents open up," Lodge said. "(The gas is) highly flammable. It's got a lot of toxic material because it's fracked gas. It's radioactive, also."

According to Lodge, blowdowns can last a couple of hours.

In the energy commission's impact statement, the commission stated the compressor stations would be a "minor source of air emissions" and would not have a "significant impact on local or regional air quality." However, the report also stated there would still be fossil fuel emissions from the stationary equipment like emergency generators, turbines and heaters that support the compressor stations.

Since the pipeline is set to cross the Bowling Green Fault, the potential for seismic activity has raised concerns with both activists and scientists.

The Science

Robert Vincent, an emeritus professor in the geology department at Bowling Green State University, said the fault begins “almost (in) central Michigan” and comes south on the outskirts of Bowling Green, Ohio. “A fault is a fracture (in the earth) along which some motion has occurred,” Vincent said.

While the fault hasn’t been active for at least 20,000 years according to Charles Onasch, another emeritus professor in the geology department at BGSU, Andrew Kear is not convinced.

Kear is an assistant political science professor specializing in environmental politics and policy. In his article “Missing the MARX,” Kear wrote that he thought the energy commission did not fully consider the threat human activity posed to the fault.

“Nexus and FERC are assuming that the only risk associated with the BG Fault system is a naturally occurring earthquake,” Kear wrote. “However, human triggered seismicity is a real, significant and unaddressed risk for the Nexus Pipeline Maumee River Crossing.”

Kear wrote how human-triggered seismic events have been documented due to quarry activity, fluid injection in faults and reservoir impoundments. All three aspects are present at the Maumee River crossing: the Hanson Quarry, the Bowling Green Water Treatment Plant and the use of horizontal directional drilling.

Kear wrote how the long-term inactivity may increase the likelihood that a human-induced earthquake could occur because the amount of pressure the fault has built up over time. The state of the rock underneath the Maumee River and the limestone and dolomite composition also raise concerns about the stability of the surrounding rock structures once the pipeline is installed.

Limestone and dolomite are calcium carbonate rocks that can dissolve if acid is applied.

“If some oil and gas seeps up along that fault, gets mixed in with water and it becomes acidic, over thousands of years ... it eats away at the carbonate rock,” Vincent said. If enough rock is dissolved, the ground becomes too unstable and caves in causing sinkholes.

Onasch disagreed with the probability of sinkholes in Wood County specifically because of the presence of dolomite.

“(The rocks) are of a certain chemical composition that is not as susceptible to dissolving as, say, farther to the east (of Ohio),” he said. Onasch claims the composition and fractured nature of the rock in Wood County would also help disperse the pressure caused by the pipeline.

Drilling fluids used to cool the drill bit and clear the debris during installation would “leak right through those fractures and you would not be able to build up any significant pressure in the rocks,” he said.

According to Kear, the energy commission’s impact statement indicated Nexus would use about 202,000 gallons of drilling fluids. However, Kear wrote how the impact statement’s geotechnical report stated Nexus would use 210 gallons per minute during construction. After calculating the amount of drilling fluid used 12 hours a day for 81 days, Kear found it took about 12.25 million gallons in drilling fluid to complete the installation. The drilling fluids present a potential threat to groundwater supplies should they leak into the fractures of the rock.

“Obviously, there would be dangers in gas coming out, but not the same level of danger for the water supply if it were liquid petroleum,” Onasch said. “This really comes down to risk ... what level of risk you assign to that and what level of risk you are willing to accept in order to get the benefits.”

The Officials

Richard Edwards, the mayor of Bowling Green, Ohio, said he initially questioned the necessity of another pipeline in Wood County.

“I always keeping asking the question, like a lot of public officials do, how many of these things do you need and why are they needed,” Edwards said.

The pipeline is set to cross a 28-acre section of Wood County owned by the city of Bowling Green, and Edwards said he was frustrated by the belated interactions between Nexus with the Bowling Green City Council.

“They called me up, a (Nexus) representative ... and when the issue was first come up before city council ... I said, well, you should’ve been here a month ago to explain some things, you can’t come in at the eleventh hour and do this,” he said.

Though the pipeline would not be coming directly through Bowling Green, Edwards explained that since Columbia Gas is set to utilize Nexus, the citizens of Bowling Green could benefit from it.

“I know that I’ve looked at the maps and there’s a presumed tap-in for Columbia Gas, which serves the city of Bowling Green,” he said. “We rely heavily on natural gas for this city and (BGSU).”

Cheri Pastula, the communications manager for Columbia Gas’ Toledo and Northwest Ohio sector, wrote in an email that Columbia Gas services 1.4 million customers. Though she declined an interview, she wrote that while Columbia Gas is not an “investor” in the Nexus pipeline, the supply of natural gas it will provide “may allow our customers to benefit from low-priced natural gas.”

Adam Parker, the stakeholder relations contact listed on the Nexus website's "Compressor Stations" page, was also contacted, but did not respond or comment.

The communication problems officials like Edwards faced have caused confusion and frustration between landowners, activists and scientists alike.

"You can argue about how many lives it's worth or how much money it's going to cost and what not, but we (have) got to find some way to equate these," Vincent said. "You have to make some decisions that sound arbitrary at the time, but if they're fair to the people...then you've got that fairness to go on the next time."

Works Cited

- “Compressor Stations.” *Nexus Gas Transmission*, 2016,
<http://www.nexusgastransmission.com/about/compressor-stations>.
- Conley, Michael. Personal interview. 23 February 2017.
- “Final Environmental Impact Statement.” *Nexus Gas Transmission*, vol. 1. November 2016, pp.
1 – 5-26. PDF file.
- Edwards, Richard. Personal interview. 13 April 2017.
- Gerhardinger, Karen. “Waterville Township Prepares for Pipeline, Compressor Station.” *The Mirror Newspaper*, 1 May 2015, <http://www.themirrornewspaper.com/?p=15099>.
Accessed 25 April 2017
- Harper, Leatra. Personal interview. 17 January 2017.
- Harvey, John. Personal interview. 9 February 2017.
- Kear, Andrew. “Missing the MARX: Risks and Threats from the Nexus Pipeline Maumee River Crossing.” 17 March 2017, pp. 3-9. *Microsoft Word* file.
- Kochheiser, Lisa. Personal interview. 24 January 2017.
- Kovack, Mike. “Letter from Medina County Auditor.” Received by Kathie Jones, 23 February 2017.
- Lodge, Terry. Personal interview. 24 January 2017.
- Onasch, Charles. Personal interview. 11 April 2017.
- Pastula, Cheri. “Interview today.” Received by Jessica Speweike, 25 April 2017.
- “Project Overview & Map.” *Nexus Gas Transmission*, 2016,
<http://www.nexusgastransmission.com/content/project-overview-map>.
- Vincent, Robert. Personal interview. 30 March 2017

Walker, Renee. Personal interview. 7 February 2017.

Wohlfarth, Paul. Personal interview. 15 March 2017.