

Plainsandeastern

From: Luis Contreras <docontreras@gmail.com>
Sent: Sunday, June 28, 2015 12:09 PM
To: Plainsandeastern; Colamaria, Angela
Subject: < P&E Clean Line Part 2 - Section 1222 - Please use the updated comment, attached >
Attachments: PnE would be late and over budget - it has 3 percent of easements (revised).pdf

Dear Sirs,

Please post the attached, revised comment, instead of the file with the **same name** I sent yesterday.

Kind regards,

Dr.Luis Contreras

June 28, 2015

P&E Clean Line Part 2, Section 1222

With 3 percent of the 720 miles easements and no allowance for time and money, P&E is a \$3 Billion, 4-year construction project.

Dear Secretary Moniz,

Financial feasibility is about time and money. After years and millions of dollars P&E has 3 percent of easements. Why would DOE trust P&E would get the 97 percent pending easements on time and budget? . The project schedule makes no allowance for land acquisition and there are no reserve funds in the budget. P&E is a \$3 Billion, 4-year project.

P&E wants 200-foot wide easements, double the amount needed! Why?

Arkansas is not for sale. "Acres for dollars" is an insult to farmer's pride, heritage, families, communities and agricultural products. P&E would have to **Buy the Farm** not just pay for a strip of land. P&E has no respect for farmers. Bill Howley said it best, *"if you want to come across me with your big power lines, you have to start by talking about the land. If you don't understand that, you're in for a fight."*

Why would DOE choose to participate on an infeasible project? Offshore wind turbines near eastern markets are the best wind option. The sun shines every day giving life to millions of trees with no poles and wires. Local solar generation is quick, low-cost, green power.

Respectfully,

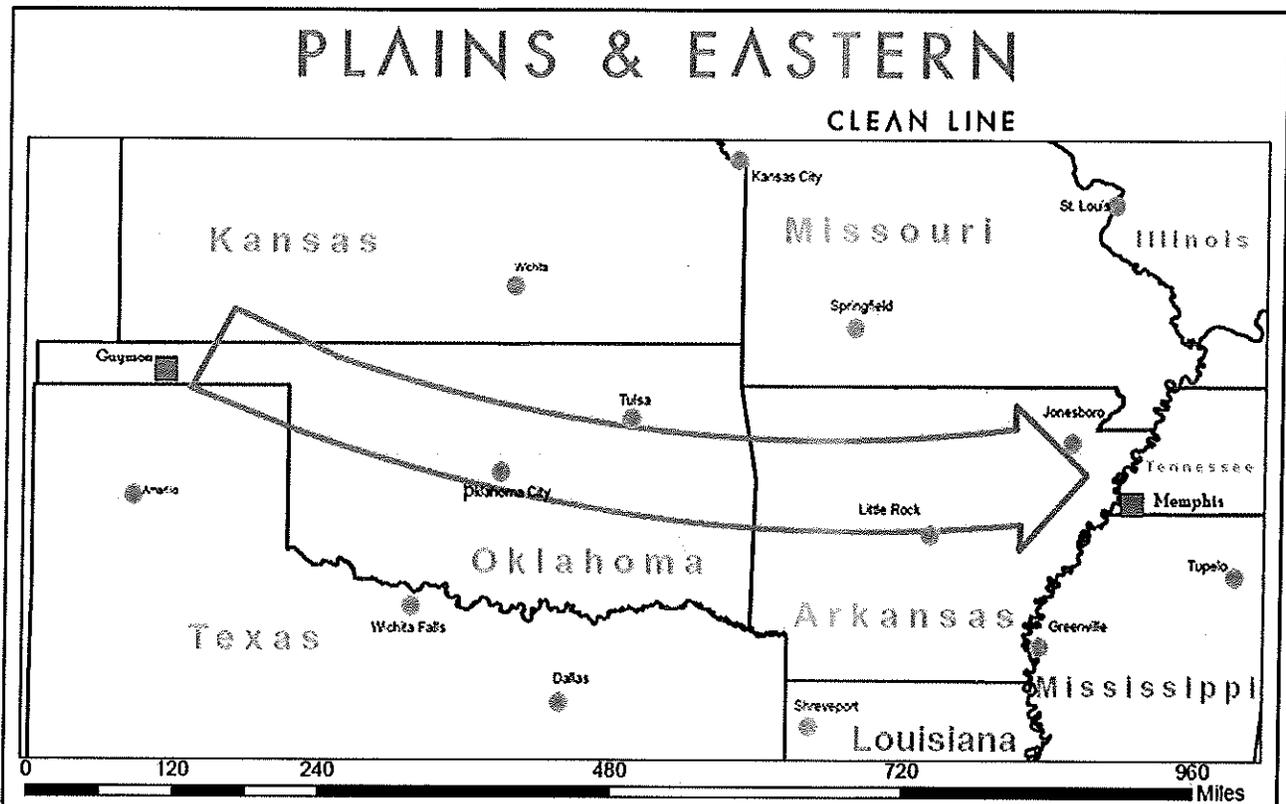
Dr. Luis Contreras

Lack of experience building transmission lines

This is P&E Clean Line's first project. Frankly, we are dealing with highly intelligent, creative, dedicated, greedy amateurs. The leadership team has no experience *building transmission lines*, much less an interstate monster project using OPM and third party contractors. Complex projects fail due to inexperience and lack of coordination. *The construction of the Channel Tunnel between France and Britain was a failure. The project ended up costing more than twice the amount budgeted, years behind schedule.*

Land acquisition for transmission lines takes a long time and money

On a US map, TX, OK, AR, TN and eastern states are high-level abstractions of spatial information. On the ground local issues, labor unions, politics and state legislation are unique. These differences are critical for land acquisition. Below is the 2010 plan.



The original plan to build the line **in six years** was reasonable. The details are in the July 2010 P&E proposal, Page 15, but things happened along the way when the plan changed. Only the 200-foot ROW stayed the same!

**Table 3
Contributed Funds Estimate**

Year	Land Acquisition	Administrative	Contingency	Total
2010	\$0	\$200,000	\$66,667	\$266,667
2011	\$0	\$200,000	\$66,667	\$266,667
2012	\$0	\$200,000	\$66,667	\$266,667
2013	\$2,200,000	\$400,000	\$866,667	\$3,466,667
2014	\$4,400,000	\$400,000	\$1,600,000	\$6,400,000
2015	\$2,200,000	\$400,000	\$866,667	\$3,466,667
Total	\$8,800,000	\$1,800,000	\$3,533,333	\$14,133,333

Source: Clean Line Energy

Clean Line's estimate of land acquisition costs is based on work with Universal Field Services, Inc. ("Universal"). Universal estimated that acquiring two, 200 foot right of way along a possible route for the project would cost \$80 million at fair market value. Clean Line assumed that land values will appreciate 10% by 2013. This equates to an average dollar per acre cost of about \$2,300 per acre. Applying a 10% condemnation rate, total fair market value for acquiring land through the use of eminent domain would be \$8.8 million. Clean Line added a one-third contingency due to the high level of cost uncertainty at this stage.

Condemning Properties using Eminent Domain

Clean Line's selling approach and their Code of Conduct is to pretend to be fair, friendly folks, saving the environment, and making great business deals where landowners, communities, counties and everyone involved wins. It is a good story, but is not the whole truth. Since 2010 P&E had plans to condemn properties and use eminent domain. It was the original game plan as stated above by "Universal." Clean Line has no credibility with the public. **Profits at any cost** justify stretching the truth and making promises of thousands of jobs and economic growth using smoke and mirrors.

Underperformance

P&E failed to get voluntary easements to host the line, despite promises and millions spent on After Hour Meetings, One-on-One deals, media and lobbyists. According to the Application Part 2, page 9-3, P&E has only 3 percent voluntary easements of the 720-mile line:

- c. Describe how many ROWs/leases have been obtained and/or sales agreements have been negotiated from potentially-affected landowners. The description should reflect either the number of miles of proposed line or the percentage of the total proposed line (including alternative routes) that have been negotiated to date.

As described above, the focus of early contact with landowners along the right-of-way in Oklahoma and Arkansas has been to answer questions and to provide information about the Project. The execution of a handful of easements has been a byproduct of those conversations in specific circumstances. With the NEPA review still underway, the final location of the easement necessary for the Project is subject to change based on the outcome of the environmental review process, landowner input, field survey, engineering and other factors. Of the approximately 720 miles of the Project, Clean Line has voluntarily negotiated easement agreements with approximately 20 miles, or 3% of the total mileage. Following DOE's Record of Decision, Clean Line will use reasonable, good faith efforts to acquire voluntarily all of the necessary right-of-way for the Project in Oklahoma, Arkansas and Tennessee.

This is the smoking gun: *"Of the approximately 720 miles of the Project, Clean Line has voluntarily negotiated easement agreements with approximately 20 miles, or 3% of the total mileage. Following DOE's Record of Decision, Clean Line will use reasonable, good faith efforts to acquire voluntarily all of the necessary right-of-way for the Project in Oklahoma, Arkansas and Tennessee."*

- How is DOE going to change the game in Oklahoma and Tennessee?
- Is "reasonable, good faith efforts" another name for eminent domain?
- Why would farmers suddenly volunteer to host a line?

What went wrong?

1. No one wants to host a transmission line.
2. P&E failed to get voluntary easements to host the line, despite promises and millions spent on "Office Hour Meetings", media and lobbyists, because they *don't understand farmers*.
3. Inexperience. When you have meals catered and stay in five star hotels, working 40 hours per week, your worldview is different from people farming 12 hours 7 days a week to care for fields, animals and enjoy nature. Jeans and boots are not enough.
4. It is not for lack of effort, P&E representatives contacted 87 percent of landowners:

Clean Line identified a 200-foot-wide representative right-of-way for DOE's environmental review in the Draft EIS. During 2014, Clean Line representatives actively contacted individual landowners with property in the representative right-of-way and some adjacent properties in Oklahoma and Arkansas that had been identified as potentially affected by the Project. The purpose of that contact was to (i) introduce the Project to the landowners; (ii) request survey permission for environmental, boundary, geotechnical and other surveys; and (iii) gather feedback from landowners on the Project and routing. As of this Part 2 Application, Clean Line representatives have personally contacted the owners of 87% of parcels along the representative right-of-way. Contacts have been made by phone and in person. To date, Clean Line has limited easement acquisition efforts in Arkansas and Oklahoma to a few instances. During the course of the outreach efforts outlined above, Clean Line has acquired easements on 16 parcels in Oklahoma and Arkansas. In advance of a Record of Decision, Clean Line may continue to negotiate and acquire easements, at its sole risk and cost.

P&E ignores the results. Why would people saying **NO**, would suddenly say **YES**? P&E does not understand what it means to **host** a transmission line.

Permanent, unlimited, transferable, assignable easements

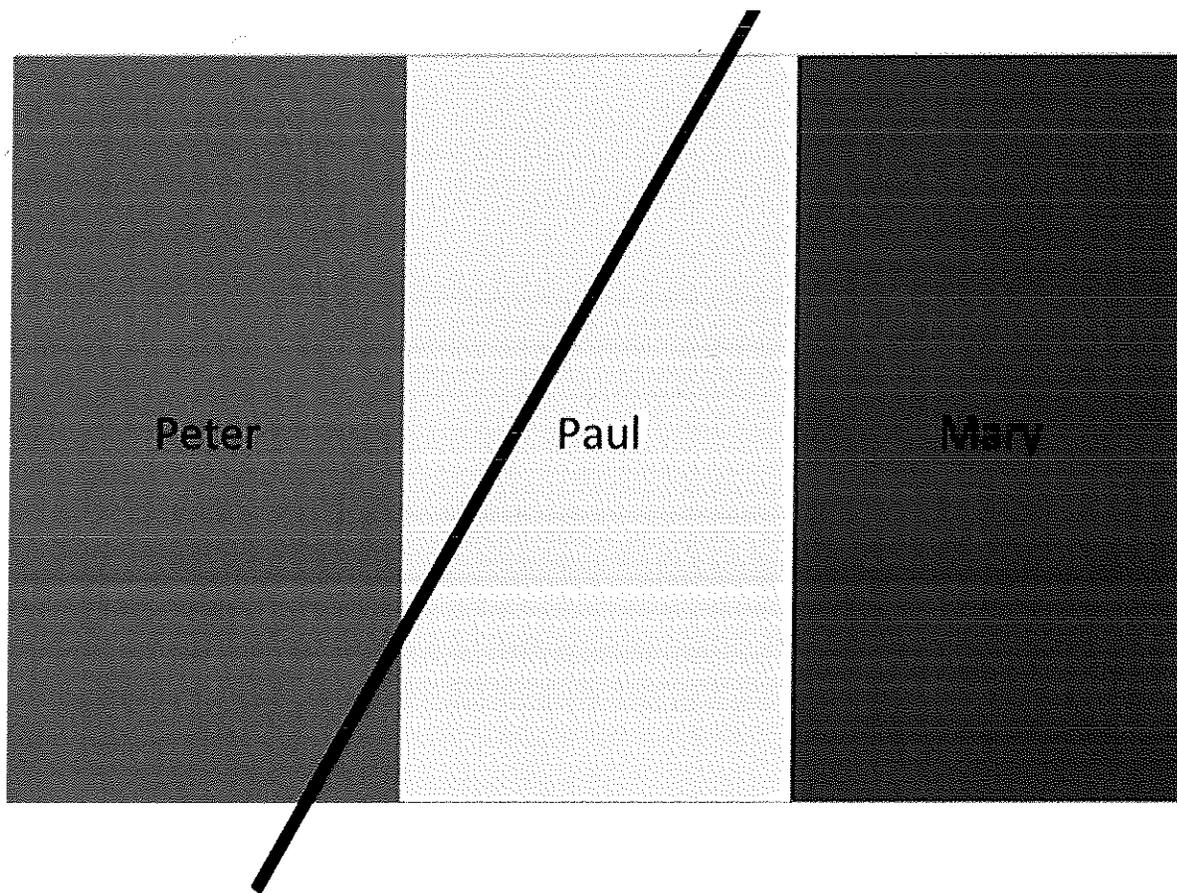
Here is one way to think about hosting a line. Imagine some distant relatives show up at your million dollar home, on their old beat-up truck, broke, and tell you they have no where to go. They have five

kids and one on the way. They take the master bedroom; they need the space. They watch TV all day and invite their friends who come any time, day and night. The neighbors complain and call the cops. Is your home, you are responsible for anything they do. You can't kick them out; they are family. In desperation, after a couple of years, you decide to move. Your relatives don't want to go anywhere they don't have money and say they will stay no matter what. You sell your house at a loss; the master bedroom is **not** included in the sale.

There are two types of people, those who are traversed or near a transmission line, and those who have not had the experience, yet!

What is the right price for an easement?

Here is a simple example. Peter, Paul and Mary have 100 acres each with a 200-foot wide easement traversing two of them:



Which one got the short stick?

Most people say Paul; his 100 acres are worthless. But when you think about it, Paul is going to get the meanest lawyer he can find and is going to make P&E "buy the farm," the entire 100 acres, at whatever price Paul wants. After all, to stop a \$2 Billion line, all it takes is one angry landowner. Paul's family has lived in their farms for the last 300 years, all his ancestors are buried in the family cemetery, and Paul, 75 years old, hates to pack.

It turns out **Mary is the unlucky one**. Mary is going to get zero, nada, zilch, from P&E. Eminent domain lawyers will not return her calls. Mary will have a hard time selling her farm in line of sight of the line. She will have all the nuisance of construction, inspection and maintenance. When helicopters fly by to spray herbicides on the ROW or to hot-wash the line insulators, she may get soaked.

Real transmission companies, like AEP and SWEPCO, don't pretend to be nice. They hire lawyers and land agents to do take your land and do the dirty work. Once they get PSC approval, agents make a low offer for the ROW and ask you to sign a long, complex, Easement Agreement giving them perpetual, unlimited use, unlimited access, transferable rights. The next day, agents install gates at the two ends of the ROW, and lock them with a padlock. They make copies of the key for their contractors in case they need to enter 24/7. You, the owner, do not get a key. Your easement agreement says: you as the landowner have to pay for taxes, insurance and liability for 100 percent of your property, including your ROW. If you refuse their offer, AEP will take you to condemnation court, they have expensive, expert lawyers; ratepayers get the bill.

P&E says the compensation offered to landowner is fair, 100 percent of the appraised value. P&E promises more than other utilities, but paying a few dollars for the towers and damages in exchange of your privacy, security and peace of mind is not enough.

Where are the terms of the P&E Easement Agreement?

There are several references to the P&E Easement Agreement in Appendix 9-A, but the terms of the easement agreement **are not disclosed** in the application. If I had to guess, landowners are not going to like the terms of the *P&E Easement Agreement*. Contrary to what P&E says, there is no room for negotiation. P&E can't grant exceptions to some and not to others.

Is not nice to take private property

False promises are worse than bullying by other utilities. They don't pretend to care for "rate payers" and they are proud of what they do.

Late and over-budget

The 2015 P&E Part 2 Project Schedule Appendix 10-K, makes no allowances for additional time land acquisition.

Plains & Eastern Clean Line Proposed Construction Schedule											Last Updated: Jan 7, 2015			
Activity Description	Duration	2016				2017				2018				
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
1. HVDC Transmission Line	760d													
T-Line construction mobilization	3 mons													
Right-of-way surveys, clearing, erosion control and site prep	18 mons													
Materials delivered to laydown yard	18 mons													
Access road construction	16 mons													
Foundation excavation and installation	16 mons													
Materials delivered to erection site	18 mons													
Structure framing and erection	18 mons													
Conductor and optical ground wire stringing and clipping	20 mons													
Clean up and restoration	12 mons													
2. AC/DC Converter Station	660d													
Converter station construction mobilization	1 mon													
Converter station site preparation	8 mons													
Converter station civil works and building construction	12 mons													
Electrical equipment installation	14 mons													
Control and protection equipment installation	8 mons													
Site finishing	4 mons													
3. AC Transmission Lines	620d													
Right-of-way surveys, clearing, erosion control and site prep	8 mons													
Materials delivered to laydown yard	8 mons													
Access road construction	6 mons													
Foundation excavation and installation	6 mons													
Materials delivered to erection site	8 mons													
Structure framing and erection	8 mons													
Conductor and optical ground wire stringing and clipping	10 mons													
Clean up and restoration	12 mons													
4. General	520d													
Wind generation construction*	24 mons													
Commissioning	5 mons													
Energization	0 days													

The 2015 P&E Part 2 Project Budget Appendix 6-D, has no contingency funds for land acquisition.

Plains & Eastern Clean Line

Project Cost Estimate (\$mm)

<u>LINE CONSTRUCTION</u>	<u>Miles</u>	<u>Cost</u>
Line Segment - OK	427 \$	853
Line Segment - AR	277	553
Line Segment - TN	16	33
<u>HVDC CONVERTERS</u>		
Oklahoma Converter Station		300
Arkansas Converter Station		100
Tennessee Converter Station		300
<u>OTHER</u>		
Development Cost		55
Nonrefundable System Upgrade Cost (SPS)		30
Nonrefundable System Upgrade Cost (TVA)		38
Refundable System Upgrade Cost (TVA)		196
TOTAL (excluding refundable upgrades)		\$ 2,262
TOTAL (including refundable upgrades)		\$ 2,458

The P&E project plan is unfeasible

Lack of proper project planning and past underperformance getting voluntary easements makes this a \$3 Billion 3-year construction project.

3. P&E wants 200-foot wide easements, double the amount needed

The HVDC advantages over AC lines, is a selling point of the P&E line on the current P&E website: More efficient, Lower Cost, Improved Reliability and **Smaller Footprint**: "HVDC transmission lines require narrower right-of-way footprints than equivalent AC lines." However, the standard 345 kV AC line requires 150-foot ROW.

The 2010 plan for **two** HVDC lines to transmit 7,000 MW required a 200-foot wide ROW. For one HVDC line to transmit 3,500 MW the required ROW is 100-foot wide.

An overview of the proposed Project, including the Project location, proposed routing, and minimum transfer capability;

Clean Line is developing and planning to build and operate the Plains & Eastern Clean Line transmission project. The Project will be developed in two phases, with each phase consisting of one bi-pole HVDC transmission line. Together the two lines will be capable of transmitting up to 7,000 MW of power from renewable projects in western Oklahoma, southwestern Kansas and the Texas Panhandle to TVA and other utilities in the Southeast. Each phase will have two DC converters, one at each end of the line. The preliminary converter locations for the first phase are Texas County, Oklahoma and a substation near Memphis, Tennessee.

Why does the 2015 plan for a 3,500 MW line require 200-foot wide ROW?

Is the *doublewide* easement the hidden reason for this project? P&E would make Billions hosting pipelines, gas lines or communications utilities, and landowners would get additional nuisance and no money. P&E wants to take 17,450 Acres, but only 8,725 Acres are required.

Why would DOE choose to participate?

References

Nobody Talks About the Land

Bill Howley

As part of my education about high voltage power lines, I have watched a couple of Webcasts of hearings and panel discussions at the Federal Energy Regulatory Commission and the Department of Energy. I have watched these discussions, and I've heard lots of talk about the environment, green this and green that, "**renewables**" (one of those ugly nouns stolen from an adjective) and lots of other Washington jargon. In all of these discussions, I have not once heard anyone talk about the land. Everyone talks about transmission lines as though they were just wires. They refer to coal as just another fuel without any mention of where coal comes from or what it really costs to mine it.

I live on a farm in Calhoun County, West Virginia. When I talk with my neighbors about deer hunting, building fence or hauling hay, they never refer to my land or my property, they say, "*Those deer ran through you.*" Those of you who live in a city or suburbs may not understand the worldview that this way of thinking reflects. It is, however, very real where I live.

We see our land as part of "us." This is not some kind of modern "eco-awareness." It is a cultural view of the world that connects back through time to the peasant cultures of Europe and the culture of people native to North America. Those cultures still resonate strongly in rural West Virginia, as they do in other parts of our country.

What does this have to do with power lines? The PATH power line will take more than 6000 acres of West Virginia land out of productive use by living, breathing West Virginia families.

Now think of the people who own, live on and work that land. Each of those families has lived with that land, some for all their lives. Living with a piece of land is a privilege. It is a relationship, just like a relationship with a friend or someone in your family.

Living with a piece of land means that you shape that piece of land to meet the needs of your family and perhaps to make a little money. You build fence, perhaps some buildings, maybe a pond. You build and restore your soil with manures, compost, fertilizer and lime. You raise a garden and do a little hunting or trapping. You manage your own animals and their pasture. Much of your life's work and much of your play grows out of this land. It becomes a part of you. As you put more of your energy into the land and it gives back food, your body literally becomes part of the land and the land becomes a part of you.

Living with a piece of land also involves lots of compromises. You make mistakes. Sometimes you do damage. Because our farms are small, and none of us has lots of money, the damage that any of us can do to our land is pretty small. It can almost always be fixed given a little work and time to heal. We know the scale of our compromises, and we take responsibility for them every day.

A 138 KV power line crosses my holler. It is 5 lines suspended from 80-foot wooden towers. The right of way takes up less than 100 feet and the landowner who originally gave Allegheny Power the right of way had the wisdom to ban herbicide spraying on this section of the line.

This power line is big, but it is small enough for us to live with. It is a compromise we all accept. This line runs from a West Virginia power plant to Spencer, the neighboring county's county seat, from which our own power comes. We know that we and our fellow Calhoun Countians benefit from this line, so we live with it.

I didn't hear anyone in Washington at these national energy conferences talking about compromise. Those of us who live with the land understand compromise, because we do that all the time on our farms. All I heard was sneering talk about how landowners were in the way of progress and something called "the national interest."

For the folks at FERC and DOE, money should be enough. Pay them for their rights of way, and they should shut up and go away. And live with power companies controlling a large strip of land right through the middle of their farms. Well, it's a little more complicated than that. *If you want to come across me with your big power lines, you have to start by talking about the land. If you don't understand that, you're in for a fight.*

Buy the Farm: CapX2020 transmission line changed lives, laws

<http://www.sctimes.com/story/news/local/2015/05/09/capx-transmission-line-changed-lives-laws/27072803/>

In many ways, Bradley and Linda Lindberg's life has improved since a high-voltage transmission line project caused them to leave their beloved home and hobby farm near Clearwater. They've relocated to a new place 6 miles to the southwest, in a sprawling farmhouse with a wrap-around front porch and barns for their cattle, goats, horses and chickens. A peaceful spot overlooking rolling pastures and far from major highways, it's unlikely to be on the route of any new power lines. But Brad Lindberg still has trouble driving by their old farm, where he and Linda had planned to stay the rest of their lives. And although things have improved, the Lindbergs look back at the past few years as a stressful time they wouldn't wish on anyone. "It was a lot of being in limbo, not knowing how it was going to end up," Linda Lindberg said. "You just felt like you weren't settled for a long time."

The Lindbergs are one of the last affected landowners along the route of the transmission line known as CapX2020 with an unresolved legal case. They're still waiting to find out if the utility companies will pay their legal bills, which they say total six figures.

The two longest sections of CapX2020, part of one of the biggest public infrastructure projects in Minnesota, are now complete. Last week, supporters of the project gathered at a new substation in St. Cloud for a dedication ceremony of the lines that run from Monticello to Fargo and from Hampton to Brookings, South Dakota, about 500 miles. Both lines were energized within the last two months.

Costing more than \$1 billion – as much as the new Vikings stadium – the two CapX2020 lines involved a partnership of 11 utility companies, including Xcel Energy and Great River Energy.

Electrical transmission towers from the completed CapX2020 transmission line project loom over farmland as cars travel along Stearns County Road 2 between St. Joseph and Cold Spring. The project had to get past the hurdle of getting the towers erected through many area farms.

More capacity?

CapX2020 was born in 2004 when utility leaders began talking about the need for increased reliability and expanding electrical transmission to meet growing demand in Minnesota. "Here we are, *11 years later*, and what we planned actually turned out to be what we needed," Will Kaul, vice president of transmission at Great River Energy, said last week. "It's just in time, when the concern about the grid and the security and resilience of the grid is very high, at a time when the resource mix that is coming into play is in transition and new resources are coming online."

What followed was a lengthy process to get approval from state and local regulators, as well as the necessary agreements from landowners.

There were dozens of public meetings around the state before the state Public Utilities Commission approved the project and settled on final routes.

Buy the Farm

The project tested a 1973 Minnesota law designed to protect farmers whose land was taken for major transmission lines. Known as "Buy the Farm," the law allows landowners to require that the utility company purchase their entire property outright, rather than just buying an easement. However, the law hadn't been used much since its passage, and it left a lot of questions that the CapX utilities and landowners along the lines fought over in court.

In total, CapX2020 dealt with about 2,000 landowners on the project, and about 100 of those requested Buy the Farm, said Tim Carlsgaard, Xcel's spokesman for CapX. About 30 of those were on the Monticello-to-Fargo line, the Lindbergs among them. The total cost of buying right of way for the \$640 million Monticello-to-Fargo line was about \$60 million, *higher than originally anticipated*, Carlsgaard said.

Some landowners accused CapX2020 of stalling and objecting to **Buy the Farm** requests for questionable reasons. Many expressed frustration at the length of time it took to settle their cases. Igor Lenzner, whose St. Cloud law firm, Rinke Noonan, represented dozens of CapX cases, said his office has only one case that hasn't settled. "For some of these people, it's dragged out for years, and it's been stressful," he said. "A lot of it was sitting back and waiting for some of the fights that had to happen."

About a year ago, CapX2020 stopped fighting many of the **Buy the Farm** cases and project backers said they would buy the properties if they could come to a reasonable figure, he said. "At first, nobody knew the

limits of the law," Lenzner said. "They didn't know the scope of how many of these there would be."

After a few years, it became clear there weren't going to be a huge number of Buy the Farm requests, Lenzner said. "I think part of it is time," he said. "They were able to see that it wasn't this giant wave of Buy the Farms that was going to overwhelm the project." Cases also settled more quickly after a Minnesota Supreme Court decisions in favor of landowners with contested Buy the Farm requests.

The legal fights over **Buy the Farm** set a *precedent* for future projects, said Thom Petersen, Government Relations director for the Minnesota Farmers Union. He noted that the courts consistently ruled in favor of the landowners. "It all comes down to there's a cost for public infrastructure, and farmers understand that, but they want to get paid fairly for their land when it gets taken," Petersen said. "I think we ended up getting to that point."

Utility must buy the farm its towers stand on, judge rules

<http://www.startribune.com/utility-must-buy-the-farm-its-towers-stand-on-judge-rules/271405481/>

A coalition of utilities that planted a power line through a small organic dairy farm can be forced to buy the whole property, a judge has ruled. Scott County District Court Judge Caroline Lennon sided with Florence and Dave Minar, who turned to Minnesota's "buy the farm" law when a power line threatened Cedar Summit Farm near New Prague, Minn., billed as the only 100-percent grass-fed organic dairy farm in the region.

State law holds that when utilities want to push through a farm, and would threaten the farm's existence, they must buy the entire tract of

land if the farmer wants out. "It's a way of, to some extent, leveling the playing field," said Paula Maccabee, an attorney for the Minars.

But the companies behind the \$2 billion CapX2020 line, which crosses Cedar Summit Farm, argued that the law didn't apply. Their transmission structure would cover less than an acre, they said, and wouldn't have a major impact.

The Minars said otherwise, worrying that a 345,000-volt line would harm their cows and raise questions in customers' minds.

Lennon wrote: "The presence of the [power line] on one portion of the property necessarily affects the entire property which is farmed together for the purpose of producing 100 percent grass-fed organic milk."

The Minars said they're happy Lennon understood their situation. "People need electricity; we realize this," Florence Minar said. "But it's just a matter of fairness. And if you have to buy a farmer out, give them a fair payment so he can go set up somewhere else without fighting about it, or without telling him he doesn't deserve it."

The CapX2020 firms are currently reviewing the decision and considering next steps, said spokeswoman Lori Buffington. It's not yet clear whether they'll pursue further litigation.

Long process

The Minars, who are both in their 70s, hope the court's decision signals the end of a long fight. Though they agreed the outcome was worth it, they said the lawsuit was a stressful, labor-intensive process. "We'd never even gone to court before," Dave Minar said.

They started pushing against the CapX2020 line in the mid-2000s, testifying in favor of an alternate route — one that wouldn't cut

across their land. The trouble was, Dave Minar said, no one else wanted it on their land, either.

Julie Schwartz, who owns a dairy farm near Arlington, Minn., with her husband, Dale, also testified against the power line. "We wish they would've moved it, but they refused to," she said. "So we're stuck in a situation where we don't feel we can stay here." She said they've been looking for a place to relocate for more than four years. They recently got an offer from the utilities company, but it's not what they were hoping for. "What they offered us doesn't even come close to rebuilding somewhere," she said.

If the Minars now decide to sell the land, which has an estimated price tag of \$1.4 million, the utilities can then resell it to whoever is interested in buying - as with any farm purchased under the law. "That's really up to the market to decide," Maccabee said.

Though the court's decision is a David-and-Goliath win for small farmers, the outcome it offers is bittersweet. "**Buy the farm** will continue to be a last resort," Maccabee said. "But this decision is very important because it vindicates the ability of family farmers to use the protections that the Legislature put into the law."

Thom Petersen, director of government relations for the Minnesota Farmers Union, said the decision is good news for other small farmers currently dealing with utilities building on their land. Relocating a farm - especially with livestock - is tough, he said, but "this at least makes it a little more palatable."

The Minars said their plan had always been to hand the farm down to their children. "It's very sad, but there's always change," Florence Minar said. "The world is constantly changing, so we have to adjust to that."

Is your project late and over-budget? Project Management Disasters

<http://www.forbes.com/sites/iese/2015/03/09/late-and-over-budget-a-method-to-avoid-project-management-disasters/>

From a project management perspective, the construction of the Channel Tunnel between France and Britain is a classic failure. That is the only way to describe a project that ended up costing more than twice the amount budgeted and years behind schedule. The problem that sinks many projects, like this one, is the lack of an efficient project management methodology. Project management allows for taking advantage of what has been learned in similar projects and provides opportunities for improvement in the future. It optimizes **coordination** among units and enhances communication, which facilitates project reviews.

Hot-Washing Transmission Lines with helicopters

<http://www.electrotechnik.net/2010/12/hot-washing-of-insulators.html>

Insulators get dirty due to dust, moisture, bird droppings and chemicals from smoke. These deposits will form a layer over the surface and can contribute to a flashover between the conductor and the grounded frame of the transmission tower. Periodic cleaning the insulators has to be carried out when the lines are live with voltage.

P&E Initial Application, 2010

<http://www.energy.gov/sites/prod/files/Plains%20%26%20Eastern%20Clean%20Line%20Transmission%20Project%20Application.pdf>

Appendix 9-A P&E ROW Acquisition Plan

Right-of-way acquisition plan under the Uniform Act for the Plains & Eastern Clean Line Transmission Line Project