

Plainsandeastern

From: Luis Contreras <docontreras@gmail.com>
Sent: Sunday, June 28, 2015 11:03 AM
To: Plainsandeastern
Subject: P&E Part 2 - 1222: Not a Green Line
Attachments: PnE is Not a Green Line.pdf

June 28, 2015

P&E Clean Line Part 2, Section 1222

"P&E is Not a Green Line"

Dear Secretary Moniz,

The increase of carbon dioxide in the atmosphere, the main cause of global warming and climate change was ignored for decades. Today, the evidence is impossible to deny, and the damage may be irreversible.

We need fast, effective *solutions* to stop fossil-fuel CO₂ pollution. Please consider the comments in the attached newspaper article "Not a Green Line." The 10-year construction lead-time makes P&E irrelevant. *Offshore wind turbines* near East Coast cities, and local and community distributed solar generation are our best hope to survive.

The P&E Clean Line project is unaffordable, with a huge carbon footprint, taking 17,600 acres of land for the 720-mile easements, and 250,000 acres for the wind farms, plus the emissions created by the manufacture of wind turbines, poles and wires.

Why would DOE choose to participate?

Respectfully,

Dr. Luis Contreras

Not a Green Line

Eureka Springs Independent, June 24, 2015

Dr. Luis Contreras

http://www.eurekaspringsindependent.com/single_story.asp?StoryID=9615

Desperate measures are needed to stop the increasing levels of carbon dioxide and other greenhouse gases threatening our survival. Severe drought, flooding, and insect infestation are now common events worldwide. The rate of climate change is alarming.

Taking care and respecting Mother Earth is no longer optional. Time is of the essence. Simple, local, effective conservation measures by everyone in every community, and the Environmental Protection Agency climate change initiatives are our best hope.

The Clean Line Plains and Eastern Project (P&E), keeps moving along and the news are disturbing. The deadline for public comments for the revised Application is July 13. This is not just a transmission line, and is not green energy. With an in-service date around 2026, and a total cost of over \$20 Billion, including wind farms, P&E is irrelevant.

P&E is a financial venture using other people's money to get perpetual, transferable, assignable, and unlimited use land easements. Taking by force 200-foot wide easements is not only a violation of private property rights, but it is an abusive land-grab. 100-foot wide easements are sufficient for this HVDC line.

With the Southwest Power Pool (SPP) interconnection in Oklahoma, coal electrons would get on the line 14 hours per day. SPP and fossil fuel utilities love transmission lines, they can't wait to have one more.

The US Department of Energy (DOE) is shamelessly endorsing the P&E transmission project with the option to own the transmission line traversing 1,000 private properties in Arkansas, using federal eminent domain. One more line for the DOE Southwestern Power Administration, and the beginning of a new wave of federal transmission.

Remote, bulk wind power is renewable but no one wants it. The Tennessee Valley Authority (TVA) wants reliable, low-cost, dispatchable sources of energy to meet variable customer demand. Variable energy supply generated when the wind blows, has to be balanced with other dispatchable resources. The sine wave voltage power frequency from variable wind power must match the shape and frequency of the grid at 60 Hertz to avoid cascading power failures.

The TVA 2015 Draft Integrated Resource Plan excludes buying wind power from P&E. The TVA Board knows what it is doing. Appendix 2-C confirms the decision of the TVA Board. Clean Line does not understand power transmission and distribution.

The TVA Interconnection System Study, shown on Clean Line Part 2 Appendix 10-C, clearly states it would take at least eight years to approve the P&E interconnection with the TVA system. Most of the Interconnection study is "redacted," but the facts presented by TVA are undeniable.

Not surprisingly, the TVA conclusions are simply ignored in the P&E Application Part 2 Appendix 10-K Project Schedule, to pretend the in-service date would be 2018. DOE should not allow deception by Clean Line. The lead-time required for the TVA interconnection approval determines the in-service date of the project, sometime in 2026.

Looking at the total P&E line from end to end explains the hidden costs of the project. The \$2 Billion estimate used by P&E ignores the cost of TVA system upgrades and other grid facilities.

To generate 3,500 MW for the proposed P&E line, 5,000 2-MW turbines would be required, using 250,000 acres of land, at an installed cost of \$3.6 Million per unit. The total cost of the turbines would be \$18 Billion.

The 500 MW for Arkansas are not included in the revised P&E application or the TVA Interconnection System Study. The mythical Arkansas Converter Station, an off-ramp to deliver power to Arkansas is not in the plan. Intermediate converters are more complex than standard end of the line converters. SPP grid operators would need to dispatch power to match the demand for Arkansas and dispatch power to TVA. The Arkansas Converter Station would increase grid complexity and the potential to create cascading power failures.

There is a 30 percent chance P&E will have minor success, and a 70 percent chance this project will cause cascading power failures.

Why would DOE choose to participate?