

Plainsandean

From: Amanda Garcia <agarcia@selctn.org>
Sent: Thursday, June 11, 2015 5:51 PM
To: Plainsandean
Subject: Support for the Plains & Eastern Clean Line under Section 1222 of EPAct of 2005 by Southern Environmental Law Center
Attachments: SELC Letter re Clean Line 1222 Application.PDF

Please see the attached comments.

Sincerely,
Amanda

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June 12, 2015

The Honorable Ernest Moniz
Secretary of Energy
U.S. Department of Energy
1000 Independence Avenue, S.W.
Washington, DC 20585

RE: Support for the Plains & Eastern Clean Line 1222 Program Application

Dear Secretary Moniz:

We are writing to express our support for the program application submitted by Plains & Eastern Clean Line pursuant to section 1222 of the EPAct¹ for development of an HVDC transmission line to provide wind power to electric utility markets in the Southeast (the “Project” or “Plains & Eastern Project”). The Southern Environmental Law Center (“SELC”) is a non-profit, regional environmental organization dedicated to the protection of natural resources throughout the Southeast. SELC works extensively on issues concerning energy resources and their impact on the people, culture, environment and economy in six Southeastern states—Tennessee, Virginia, North Carolina, South Carolina, Georgia and Alabama.

This letter addresses two of the factors identified by DOE in its Federal Register notice requesting proposals for the 1222 program.² Specifically, this letter provides our perspective on (1) whether the Project is in the public interest; and (2) the benefits and impacts of the Project in Tennessee and throughout our region, including economic and environmental factors.

I. The Plains & Eastern Project is in the public interest because it would modernize grid infrastructure consistent with goals outlined in the EPAct and current regulatory initiatives at DOE and EPA.

Based on the plain language of the statute, the purpose of section 1222 is to facilitate investment in the efficient and reliable delivery of electricity by upgrading or developing modern grid infrastructure.³ The Plains and Eastern Project advances this public interest purpose of the

¹ 42 U.S.C. § 16421.

² Department of Energy, Request for Proposals for New or Upgraded Transmission Line Projects Under Section 1222 of the Energy Policy Act of 2005, 75 Fed. Reg. 32940, 32941 (June 10, 2010).

³ 42 U.S.C. § 16421(b) (factors to be considered include whether additional transmission capacity is needed and whether the project is consistent with reliable and efficient operation of the transmission grid).

EPA by proposing to modernize grid infrastructure consistent with goals outlined in the interagency Quadrennial Energy Review (“QER”) and EPA’s Clean Power Plan (“CPP”).

The recently-released QER found that over the course of the next twenty years, large investments in transmission and distribution will be made throughout the nation “to replace aging infrastructure; maintain reliability; enable market efficiencies; and aid in meeting policy objectives, such as GHG reduction and state renewable energy goals.”⁴ The QER identified the growth of renewable energy generation, including wind power, as a key factor influencing transmission infrastructure decisions throughout the nation.⁵ The QER further found that transmission can enable connection to high-quality renewables, providing low-carbon electricity, and that even high levels of deployment of low-cost distributed generation would not eliminate the need for transmission infrastructure.⁶ As a result, QER recommended that DOE should coordinate goals across jurisdictions to integrate markets—a strategy that will facilitate greater access to renewable resources.⁷

The CPP is a draft rule that would regulate carbon emissions from existing power plants.⁸ EPA identified increased renewable generation as one of the “building blocks” available to states to reduce their carbon emissions, and it set state targets by taking increased renewable generation into account.⁹ Once the rule is finalized, each state will have to submit a plan detailing how it will reduce carbon emissions to levels established by EPA.¹⁰

The Plains & Eastern Project advances the goals identified in the QER and the CPP. Utilities in the Southeast currently generate little of their own electricity from wind power.¹¹ TVA, for

⁴ US Department of Energy, *Quadrennial Energy Review Transmission, Storage, Infrastructure* S-14 (April 2015), available at http://energy.gov/sites/prod/files/2015/04/f22/QER-ALL%20FINAL_0.pdf.

⁵ *Id.* at 3-6.

⁶ *Id.* at 3-8.

⁷ *Id.* at S-14, S-16, 3-24, 3-26.

⁸ US Environmental Protection Agency, Carbon Pollution Emissions Guidelines for Stationary Sources: Electric Utility Generating Units; Proposed Rule, 79 Fed. Reg. 34830-34958 (June 18, 2014) (“Draft Clean Power Plan”).

⁹ Draft Clean Power Plan, 79 Fed. Reg. at 34866.

¹⁰ Draft Clean Power Plan, 79 Fed. Reg. at 34900.

¹¹ Currently available wind power technology does not sufficiently leverage wind resources available in the Southeast. See Department of Energy, *Enabling Wind Power Nationwide* 16 (May 2015), available at http://energy.gov/sites/prod/files/2015/05/f22/Enabling-Wind-Power-Nationwide_18MAY2015_FINAL.pdf. However, developments in wind power technology are expected to make wind power generation at capacity factors greater than 30 percent technically achievable in the Southeast in the near future. *Id.* at 17-18.

example, owns only one 27 MW wind farm in the Tennessee Valley.¹² By developing modern HVDC grid infrastructure to connect plentiful wind energy resources in Oklahoma with utilities with capacity needs in the Southeast, the Project proposes to integrate these markets and provide greater access to renewable power in our region, furthering the goals of the QER. In turn, increased access to renewable power will facilitate reduction of carbon emissions by states in our region, furthering the goals of the CPP. For these reasons, in our view the Project is in the public interest.

II. By reducing reliance on electricity powered by fossil fuels, the Plains & Eastern Project will provide significant environmental and economic benefits to Tennessee and other states in our region.

The Plains & Eastern Project will deliver 3500 MW of wind power for distribution throughout the Southeast via interconnection with the Tennessee Valley Authority (“TVA”) transmission system.¹³ Clean Line anticipates that the wind-generated electricity wheeled through TVA’s system would be purchased by TVA and other Southeastern utilities,¹⁴ displacing a small but cumulatively significant portion of Tennessee’s, and our region’s, heavy reliance on fossil fuel generation.

Currently, fifty-six percent of Tennessee’s electricity is generated by fossil resources.¹⁵ TVA is the primary generator and transmitter of electricity in Tennessee, and also serves portions of other states in our region, including Alabama, Virginia, North Carolina and Georgia.¹⁶ TVA’s current generation portfolio reflects heavy investment in fossil resources (61% of TVA-owned assets) and little investment in wind and solar energy (>1% of TVA-owned assets).¹⁷

SELC has participated extensively in multiple stakeholder processes convened by TVA in its development of TVA’s draft 2015 Resource Plan (“draft 2015 IRP”), including serving on its Regional Energy Resource Council, Integrated Resource Plan Working Group and Tennessee Valley Renewables Information Exchange. The draft 2015 IRP indicates that the utility anticipates a shift toward investment in renewables.¹⁸ In fact, TVA identifies HVDC wind

¹² See http://www.tva.com/power/wind_purchases.htm. In addition, TVA has entered into long-term power purchase agreements for 1500 megawatts of wind from outside the Valley. *See id.*

¹³ Clean Line Part 2 Application 1-1.

¹⁴ Clean Line Part 2 Application 2-4 to 2-6.

¹⁵ Energy Information Agency, State Profile and Energy Estimates (January 2015), available at <http://www.eia.gov/state/compare/?sid=TN#?selected=US-AL-GA-NC-SC-TN-VA> (last visited April 16, 2015).

¹⁶ TVA, Our Customers, available at http://www.tva.com/power/power_customer.htm (last visited April 12, 2015).

¹⁷ TVA, Draft 2015 Integrated Resource Plan Supplemental Environmental Impact Statement 70 (March 2015) (“TVA Draft IRP SEIS”), available at <http://www.tva.com/environment/reports/irp/pdf/TVA-Draft-irp-EIS.pdf> (last visited April 16, 2015).

¹⁸ TVA, Draft 2015 Integrated Resource Plan 91 (March 2015) (“TVA Draft IRP”), available at <http://www.tva.com/environment/reports/irp/pdf/TVA-Draft-Integrated-Resource-Plan.pdf>

power as a source of energy for the TVA region with the potential to facilitate reductions in TVA's carbon emissions from 2020-2033.¹⁹ The opportunity for the Plains & Eastern Project to reduce carbon emissions from the electric power generation sector in Tennessee and throughout the Southeast is therefore very real.

The impacts associated with an decision *not* to move forward with are actions that facilitate access to renewable energy resources, like the Plains & Eastern Project, are also so very real. There is no question that elevated levels of carbon dioxide (CO₂) in the atmosphere endanger public health and welfare.²⁰ The harms posed by CO₂-induced climate change are pervasive and severe.²¹ Based on the vast weight of scientific evidence, EPA has found that "climate change associated with elevated atmospheric concentrations of carbon dioxide and the other well-mixed greenhouse gases have the potential to affect essentially every aspect of human health, society and the natural environment."²²

The adverse effects of human-induced climate change cut across multiple sectors and geographic areas, adversely affecting "human health, air quality, food production and agriculture, forestry, water resources, sea level rise and coastal areas, the energy sector, infrastructure and settlements, and ecosystems and wildlife."²³ The current and projected future consequences of climate change are dire. The Southeast is exceptionally vulnerable to extreme heat events and decreased water availability.²⁴

Rising global temperatures already are producing more frequent and more intense weather events, such as storms, causing enormous damage to people, the environment, and the economy. The six states in our region, including Tennessee, have already experienced disproportionate damage from such events.²⁵

(last visited April 16, 2015).

¹⁹ *Id.* at 47-48, 98.

²⁰ See U.S. Environmental Protection Agency, Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act, 74 Fed. Reg. 66,496, 66,516 (Dec. 15, 2009). Of the six greenhouse gases identified in EPA's Endangerment Finding, CO₂, along with methane, ranks as the most important directly emitted pollutant. *Id.* at 66,517.

²¹ See 74 Fed. Reg. at 66,523 (linking "human emissions and resulting elevated atmospheric concentrations of . . . greenhouse gases to observed global and regional temperature increases and other climate changes").

²² 74 Fed. Reg. at 66,523.

²³ *Id.*

²⁴ Carter, L.M., et al., 2014: Ch. 17: Southeast and the Caribbean. *Climate Change Impacts in the United States: The Third National Climate Assessment*, Melillo, Jerry M., Terese (T.C.) Richmond, and Gary W. Yoke, Eds., U.S. Global Change Research Program, 396-417, available at <http://nca2014.globalchange.gov/report/regions/southeast> (last visited April 16, 2015).

²⁵ *Id.* at 397.

The amount of rain falling in very heavy precipitation events has increased over recent decades and is projected to increase even further.²⁶ Heavy precipitation induces more floods, causing deaths, injuries, water-borne diseases, and mental health problems, such as post-traumatic stress disorders.²⁷ Higher average temperatures increase the likelihood of extreme heat waves, causing greater numbers of deaths and illnesses.²⁸ Since 1970, average annual temperatures in the Southeast have increased by about 2°F and are predicted to increase another 4 to 9°F by 2080.²⁹ These increased temperatures also will adversely affect air quality, raising ground-level ozone concentrations and associated premature deaths, acute cases of bronchitis, heart attacks, asthma attacks, and other respiratory illnesses.³⁰

In addition, “[l]arge areas of the country are at serious risk of reduced water supplies, increased water pollution, and increased occurrence of extreme events such as floods and droughts.”³¹ In the Southeast, continued urban development and increases in irrigated agriculture continue to increase water demand while higher temperatures increase evaporative losses.³² Large numbers of Southeastern cities, roads, railways, ports, airports, and water supplies are vulnerable to the impacts of sea level rise.³³ In short, “[o]ver the 21st century, climate change will fundamentally rearrange U.S. ecosystems.”³⁴ As with most environmental risks, these harms will disproportionately burden children, the elderly, and the poor.³⁵

Carbon dioxide emissions constitute the largest fraction of total greenhouse gas emissions in the U.S.³⁶ Fossil-fuel fired power plants, like those heavily relied upon by TVA and other Southeastern utilities, “are by far the largest emitters of GHGs, primarily in the form of CO₂, among stationary sources in the U.S.”³⁷ By displacing fossil-fuel generation in the Southeast,

²⁶ *Id.* at 397.

²⁷ U.S. Environmental Protection Agency, Standards of Performance for Greenhouse Gas Emissions for New Stationary Sources: Electric Utility Generating Units, 77 Fed. Reg. 22,393, 22,402 (Apr. 13, 2012).

²⁸ *Id.*

²⁹ *Climate Change Impacts in the United States* at 398.

³⁰ 77 Fed. Reg. 22,402.

³¹ *Id.*

³² *Climate Change Impacts in the United States* at 405.

³³ *Id.* at 400.

³⁴ 77 Fed. Reg. 22,402.

³⁵ 74 Fed. Reg. 66,526.

³⁶ 77 Fed. Reg. at 22,403.

³⁷ *Id.*

the Plains & Eastern Project would incrementally reduce the global CO2 burden, providing environmental and economic benefits to Tennessee and other states in our region.

For all of these reasons, we support the program application submitted by Plains & Eastern Clean Line and urge DOE to move forward with the Project.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Amanda Garcia', followed by a long horizontal line.

Amanda Garcia
Staff Attorney