

# PLAINS & EASTERN

## CLEAN LINE

UPDATE TO PLAINS & EASTERN CLEAN LINE PROPOSAL  
FOR NEW OR UPGRADED TRANSMISSION LINE PROJECTS  
UNDER SECTION 1222 OF THE ENERGY POLICY ACT OF 2005

AUGUST 2011

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## 1. Executive Summary

“Our grid right now cannot handle when renewable energy gets to be the same price as fossil energy without subsidies – which will happen...We need to concurrently develop this grid...”  
–Secretary of Energy Steven Chu, Renew Grid July 2011

In July 2010, Clean Line Energy Partners LLC (“Clean Line”) submitted a proposal (“Clean Line Proposal”) to the U.S. Department of Energy (“DOE”) and the Southwestern Power Administration (“Southwestern”) in response to the DOE’s Federal Register *Request for Proposals for New or Upgraded Transmission Line Projects Under Section 1222 of the Energy Policy Act of 2005*, 75 Fed. Reg. 32940 (June 10, 2010.) In September 2010, Clean Line submitted a second proposal for a partnership with DOE and Southwestern pertaining to the Grain Belt Express Clean Line (“Grain Belt”) from western Kansas to eastern Missouri. Clean Line continues to pursue development of the Grain Belt project and remains interested in the partnership. However, this Update will deal exclusively with the Plains & Eastern Clean Line project as outlined below.

The Clean Line Proposal for the Plains & Eastern Clean Line (the “Project”) requested a partnership with DOE and Southwestern to develop, construct, and operate two new overhead high voltage direct current (“HVDC”) transmission lines that will be capable of moving more than 7,000 MW of power from renewable projects in western Oklahoma, southwestern Kansas, and the Texas Panhandle to the service area of the Tennessee Valley Authority (“TVA”) and the southeastern United States. Development of these new lines will increase electric reliability and provide much needed transmission capacity to wind generators that will construct thousands of megawatts of new, cost-effective renewable electric generation capacity. This new generation capacity will create new jobs, stimulate domestic manufacturing, and lead to cleaner air and water.

Clean Line believes that we have a stronger case for a 1222 partnership today than we did when we submitted our proposal to DOE and Southwestern in July 2010. Since our submission, Clean Line has continued to develop the Plains & Eastern Clean Line and has achieved several development milestones. The Plains & Eastern Clean Line has cemented strong relationships throughout the project area. Hundreds of local leaders, companies, organizations, and individuals signed letters of support for the Plains & Eastern Clean Line. These stakeholders are eager to realize the economic and environmental benefits to their region and the additional funding for their local schools and hospitals. We have also made substantial progress on:

- state certifications in Oklahoma and Arkansas;
- interconnection and electric reliability studies with TVA and Southwest Power Pool (“SPP”);
- routing and permitting activities with state, federal, and local agencies and stakeholders.

In the course of conversations with Southwestern, Clean Line has sought to verify the eligibility of the Plains & Eastern Clean Line under two of the criteria established in Section 1222: 1) That it “is necessary to accommodate an actual or projected increase in demand for electric transmission capacity,” and 2) that it “is consistent with needs identified in a transmission expansion plan or otherwise by the appropriate transmission organization.”

This Update provides additional information since the date of the Clean Line Proposal that supporting the conclusion that the project meets these criteria.

The continued growth in demand for renewable power in the South and the transition away from higher polluting sources of generation attest to the logic for a project like the Plains & Eastern Clean Line. As we state in the Proposal, both the Joint Coordinated System Plan (“JCSP”) published in 2008 and the DOE-sponsored Eastern Wind Integration and Transmission Study (“EWITS”) completed in January 2010 identify the need for HVDC lines to accommodate the transfer of wind power from the Great Plains to eastern utilities. The limitations of the current planning process that FERC recognizes in its recent Order 1000 highlight the barriers for an inter-regional project to be explicitly included in current regional plans—in turn, strengthening the case for a federal role. In spite of this, we feel strongly that the Plains & Eastern Clean Line is consistent with needs identified in numerous transmission plans at the national level and regionally.

Transmission projects take 5-7 years, or longer, to complete the planning, permitting, and siting processes. If wind farms are to develop in the strongest wind areas and provide economical renewable energy to millions of Americans, DOE and Southwestern must be ready and willing to begin work with projects like the Plains & Eastern Clean Line. The critical transition to a cleaner energy economy is occurring today throughout the country and calls for a proactive approach. As the Governors’ Wind Energy Coalition notes in its July 2011 letter to President Obama, stalled transmission development imperils the significant strides made in renewable energy and risks declines in clean energy manufacturing. The letter specifically notes the critical role for Power Marketing Administrations, including the Western Area Power Administration and Southwestern. The July letter from the Governors’ Wind Energy Coalition is included as Appendix I.

As we discuss in detail in the Proposal, the Plains & Eastern Clean Line will enable the following benefits:

- 8,000 megawatts of new wind facilities that will not be built without new transmission;
- More than \$14 billion of investment in Oklahoma, Arkansas, Tennessee, Texas and Kansas;
- 10,000 direct construction jobs;
- More than 1,000 direct permanent jobs;
- Substantial orders for the wind energy and transmission manufacturing supply chain the United States;
- Reduction of 15 million tons of CO<sub>2</sub>; and
- Significant reductions in emissions of SO<sub>2</sub>, NO<sub>x</sub>, mercury and lore water usage.

As requested by DOE, Clean Line presented DOE and Southwestern with a draft Joint Evaluation and Development Agreement (“JEDA”) for the Plains & Eastern Clean Line in September 2010. The draft JEDA details the responsibilities and expectations of each party for the next 2-3 years of development. Clean Line will work with DOE and Southwestern to phase in the level of commitment required for the timely development of the project. The logical first task will be to start the long NEPA process, which is essential to the implementation of the project and in most scenarios the critical path schedule item. The draft JEDA addresses all development milestones and statutory requirements for a final 1222 partnership agreement. Clean Line is not requesting that any right-of-way acquisition or construction activities take place until the NEPA Record of Decision is complete and the Secretary of Energy approves the final partnership agreement. Clean Line intends to pay the costs of all parties to ensure there is no impact on taxpayers or Southwestern customer rates. Clean Line is eager to begin discussions on how to best

proceed on the draft JEDA and minimize risk to Southwestern and DOE. The draft JEDA is attached as Appendix 4.

## 2. Project Update

### a. Jobs and Economic Development

The Plains & Eastern Clean Line has completed the first of many agreements that will ensure hundreds of jobs will remain in the project area and will further the clean energy economy in Oklahoma and Arkansas.

In March 2011, Clean Line Energy and General Cable (<http://www.generalcable.com/>) signed an agreement to source all bare overhead transmission conductor for the Plains & Eastern Clean Line from General Cable's facility in Malvern, Arkansas. General Cable is a worldwide leader in electrical wire and cable.



The order is expected to require approximately 25 million feet of high voltage aluminum, steel-supported conductor whose value could exceed \$100 million and would take approximately two years to produce. The Malvern plant currently employs 152 associates, represented by the United Steel Workers of America.

Maria Haley, Executive Director of the Arkansas Economic Development Commission, said of the agreement between Clean Line and General Cable: "The Plains & Eastern Clean Line brings economic growth and new jobs for Arkansans. I am pleased to see Clean Line and General Cable partnering to stimulate the manufacturing industry in Arkansas through new opportunities for wind energy in the region."

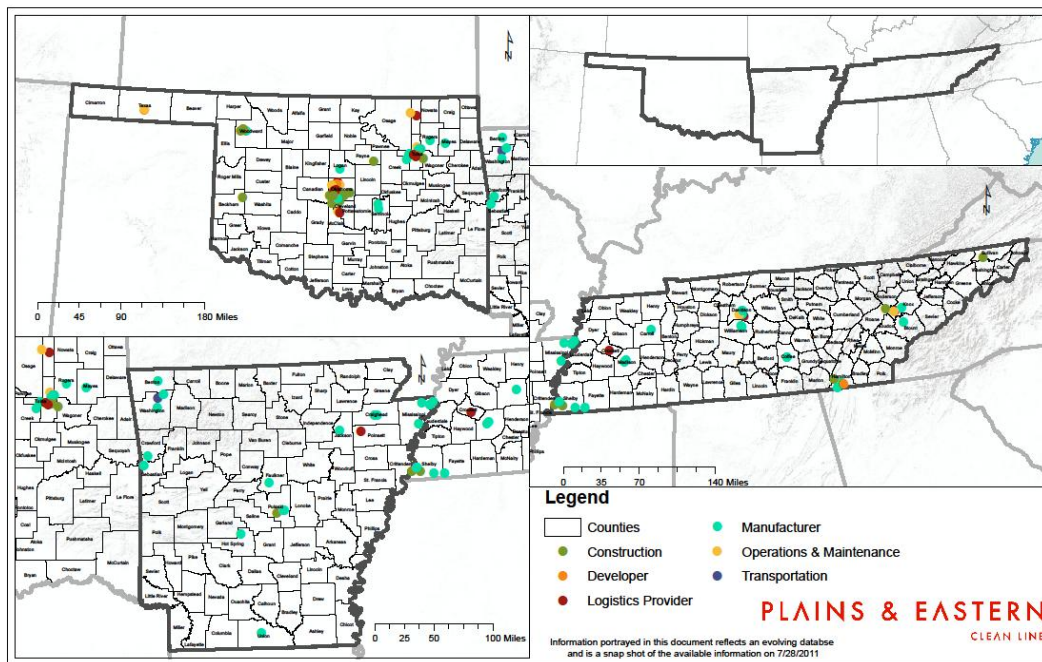
In June 2011, Clean Line signed a Memorandum of Understanding (MOU) with Pelco Structural (Pelco) (<http://www.pelcostructural.com/>) of Claremore, Oklahoma. Pelco has over 40 years of experience in the marketing, designing, and manufacturing of tubular steel transmission structures and will be a preferred supplier for the Plains & Eastern Clean Line. Under the MOU, Pelco will supply structures from its Claremore facility that employs approximately 100 Oklahomans and has 192,000 square feet of manufacturing and warehouse space. This supply order could be worth \$300 million or more depending on commodity prices and the number of structures purchased.



Oklahoma Secretary of Commerce, Dave Lopez, lauded the agreement saying, "...We applaud Clean Line's efforts to ensure local benefits and for its commitment to local suppliers."

By providing jobs, opportunities to local firms, and significant tax revenues, the Plains & Eastern Clean Line will provide broad economic growth throughout the states in the project area and beyond. In keeping with our commitment to local sourcing, Clean Line recently identified over 100 businesses involved in the wind energy and transmission supply chain located in Oklahoma, Arkansas, and Tennessee alone. We will reach out to these businesses as we procure materials and labor for our project. Clean Line consulted national databases, as well as state and local information sources, to compile our wind energy and transmission supply chain database, summarized below in Figure 1.

Figure 1: Wind Energy and Transmission Supply Chain Map in Oklahoma, Arkansas, and Tennessee



Source: Clean Line Energy Partners, as of August 15, 2011

#### b. Interconnection Studies

The Tennessee Valley Authority (“TVA”) and Entergy Services Inc. (“Entergy”) completed feasibility studies for the Plains & Eastern Clean Line before the submission of the Proposal. Currently, TVA is performing a System Impact Study for Clean Line’s generation requests at two alternative points of interconnection. The thermal reliability analysis is complete and fault and stability studies are expected to be completed in September. The analysis TVA is conducting will result in the identification of system upgrade requirements necessary to reliably interconnect Plains & Eastern Clean Line to the TVA 500kV system. These studies are precursors to an eventual Interconnection Agreement with TVA.

As part of the TVA System Impact Study, Memphis, Light, Gas and Water (“MLGW”) and Entergy are also performing affected system studies. The affected system studies are required due to the electrical proximity of the interconnection of Plains & Eastern Clean Line to these systems. The results of these studies will verify whether there are transmission upgrades needed due to the interconnection of Plains & Eastern Clean Line into the TVA system and estimates on cost and schedule to build these upgrades. Scoping for these studies is expected in the coming months.

In consultation with SPP and its members, Clean Line is conducting studies under SPP’s Criteria 3.5. On April 13, 2011, Clean Line, and SPP executed a Transmission System Study Agreement for these studies. The SPP study work is being conducted in order to ensure that the Plains & Eastern Clean Line can reliably interconnect to the SPP system near the Project’s western terminal. Included in these analyses will be the study of major contingencies and their steady state and stability impacts to SPP and the surrounding region. The study was scoped out with affected parties including SPP, the SPP Transmission

Working Group, TVA, Midwest ISO staff, as well as Oklahoma Gas & Electric (“OGE”), Xcel Southwestern Power Service, and Westar.

Clean Line continues to meet with TVA, SPP, and other companies that are affected to ensure that the proposed line will be reliable and will comply with NERC and regional mandatory reliability rules and will be operated in accordance with good utility practices.

### C. Routing and Public Outreach

Clean Line is committed to a transparent and proactive public outreach program as an integral component of the development process. The Plains & Eastern Clean Line team continues to engage multiple organizations, individuals, and leaders throughout the project area and has been an active supporter of community programs in several areas in Oklahoma and Arkansas. A summary of recent activities can be found in the May project newsletter which is posted on line [here](#). In addition to detailed information on the project purpose, schedule and benefits, the project website (<http://www.plainsandeasterncleanline.com>) invites comments from all interested stakeholders. Clean Line personally responds to all comments made via the website and through our toll-free phone line and keeps a record of comments for inclusion in considerations on routing and other critical decisions.

Clean Line continues to do substantial work to designate a primary study corridor, leading to a preferred potential route. Earlier this year, we held a series of Pre-Design workshops with state and federal agencies in the project area, as well as with non-governmental organizations focused on conservation and wildlife management. Summaries of these workshops are attached as Appendix 2.



Inter-Agency Pre-Design Workshop  
Little Rock, February 2011

Clean Line held one-on-one meetings with county officials in more than 30 counties in Oklahoma, Arkansas and Tennessee where the transmission line is likely to be sited. Clean Line representatives met with state and regional organizations throughout the project area to educate stakeholders and gather input. Local needs and plans, agency preferences, NGO programs, and other significant data points are being incorporated into our selection of a primary study corridor. This corridor will be approximately five miles wide and will provide opportunities to designate several potential routes.

Clean Line has an ongoing dialogue about the project with multiple conservation organizations. In addition to working directly under contract with The Nature Conservancy in Arkansas and Oklahoma, Clean Line met with Sierra Club of Central

Arkansas, Land Legacy of Oklahoma, Audubon Arkansas, Wildlife Federation, the Southern Alliance for Clean Energy, and others to gather feedback about the development and siting process. Many of these organizations are very supportive of Clean Line’s efforts to provide access to substantial wind energy to the southeastern US. Several supported Clean Line’s applications in Arkansas and Oklahoma. In a letter dated June 10, 2011 to the Secretary of Energy, The Natural Resources Defense Council and the Wilderness Society requested that the DOE utilize its existing authority under section 1222 to “advance

needed new lines that primarily service new renewable energy generation and are sited in a manner that protects our wildlife and wild lands.” The letter is attached as Appendix 3.

Clean Line continues to meet with state legislators, members of the governors’ teams, and federal congressional delegations from Oklahoma, Tennessee and Arkansas regularly to provide consistent updates on the Project. The prospect for jobs, cleaner air, and increased domestic energy production are consistent topics of concern to these stakeholders.

The next step in our outreach and routing work will include county-by-county workshops with community leaders. These forums will allow for discussion of the primary study corridor with local leaders in a constructive and interactive atmosphere. After the workshops, Clean Line will host public open houses to gather feedback on the preferred and alternative routes from landowners and other affected parties.

These outreach efforts are designed to assure that relevant stakeholders have early and multiple opportunities to provide feedback and that Clean Line is able to identify significant routing issues before formal permitting begins. This process will be on-going and will ensure a substantive and complete NEPA public scoping process.

d. State Regulatory Update

Since 2010, Clean Line has actively pursued state siting authority in Oklahoma and Arkansas. Clean Line also expects to make a filing in Tennessee in the future.

i. Oklahoma Corporation Commission

Plains & Eastern Clean Line applied to become a public utility in Oklahoma in June 2010. In February 2011, a hearing on the application was held before Judge Jacqueline Miller, the Administrative Law Judge (ALJ,) and the Oklahoma Corporation Commission (OCC.)

Clean Line’s case originally had 10 interveners, including the Oklahoma Independent Petroleum Association, the Coalition of Surface and Mineral Owners, and SPP. After much hard work and negotiation, Clean Line reached a stipulation agreement with all the interveners except OGE. The Attorney General and the Public Utility Department staff of the OCC both supported Clean Line’s application. Clean Line and two parties representing property owners reached an agreement in a private settlement in which Clean Line committed to specific actions in order to address property rights concerns. Clean Line also provided the OCC with a Code of Conduct that dictates that Clean Line employees and contractors must treat landowners in a fair and respectful manner. You can read the Code of Conduct [here](#).

During the four days of public comment at the OCC hearings, more than 40 Oklahomans voiced their support for the Plains & Eastern Clean Line, many of whom traveled hundreds of miles to do so. State Representative Gus Blackwell, who represents District 61 and all of the three counties in the Oklahoma Panhandle, presented public comment in favor of the project. County commissioners, superintendents, wind developers, mayors, town administrators, and local ranchers and business owners submitted over 750 pages of letters, emails, phone calls, and faxes to the OCC in support of Plains & Eastern Clean Line’s application. These are available [here](#) (Case # 201000075, Case Type: PUD).

On June 30, 2011, Judge Miller made her legal recommendation that Plains and Eastern Clean Line Oklahoma LLC be granted public utility status in the State of Oklahoma to build, own, and operate electric transmission services. Judge Miller recommends that the OCC approve the Stipulation Agreement and grant Clean Line authority to operate as an electric transmission-only public utility providing wholesale bulk electricity transmission services within the State of Oklahoma.

The Judge's full report and recommendation can be reviewed [here](#). The full Commission is expected to issue a ruling later this year.

ii. Arkansas Public Service Commission

Plains & Eastern Clean Line's application for a Certificate of Public Convenience and Necessity (CPCN) to the Arkansas Public Service Commission (PSC) is a prime example of why we are pursuing federal siting authority through the DOE's Section 1222 authority in order to make the Plains & Eastern Clean Line a reality.

An application for a CPCN to consider Plains and Eastern Clean Line LLC a public utility in Arkansas was submitted in May 2010, with the hearing before the Arkansas PSC held in December 2010. While support for Clean Line came from a variety of sources ranging from county judges and state leaders to Arkansas manufacturers, the Arkansas PSC did not approve Plains and Eastern Clean Line's application for a CPCN. The request for the CPCN dealt with the question of whether the applicant should be considered a public utility in Arkansas. Under Arkansas law, a separate process for a Certificate of Environmental Compliance and Public Need (CECPN) is required for the siting of any major utility facilities, including high voltage electric transmission lines.

The Arkansas PSC order denied the Plains & Eastern Clean Line application without prejudice. The Order states:

The difficulty the Commission now faces is that the law governing public utilities was not drafted to comprehend changes in the utility industry such as this one—where a non-utility, private enterprise endeavors to fill a void in the transmission of renewable power that is much needed but for which the Commission is unable to afford any regulatory oversight... [T]he Commission's decision is based on that fact that it cannot grant public utility status to Clean Line based on the information about its current business plan and present lack of plans to serve customers in Arkansas.

In addition, the Arkansas PSC noted, in agreement with Clean Line's position, that, "there is some circularity involved in the fact that Clean Line cannot own or operate regulated major utility facilities pursuant to Arkansas law in this state without first being declared a public utility." The Order and the other documents in the filing can be read [here](#).

Subsequent to the PSC order, Clean Line sought guidance from the Commission members and staff as to how it might fulfill the statutory requirements. We are working to address the requirements in order to return to the Arkansas PSC in the future for utility status and eventually a CECPN.

Although it is preferable to work at the state level for regulatory approval when developing long distance, high voltage transmission lines, state laws and administrative codes can present barriers to development due to the inability to "fit" interregional projects like the Plains & Eastern Clean Line into the existing regulatory framework. Section 1222 has a strong role to play in remedying such situations.

### 3. Project Need and Demand

As we stated in the Proposal, the SERC region will grow by 1.69% per annum over the next 10 years. Economic and manufacturing growth in this region is projected to outpace the national average. The Southeast's current mix of electric generation is heavily weighted toward coal-fired generation sources. However, many of these existing and aging units are being considered for retirement due to new EPA regulations. Realistically, there are three viable, scalable options for these load-serving entities when considering new generation resources: nuclear, natural gas, and wind power. Nuclear presents very high financial requirements and daunting construction challenges, among other risks. Natural gas technology exposes utilities and their customers to appreciable commodity price volatility. Economical wind energy is an essential part of the mix to offset these risks, but due to local conditions it cannot be a major contributor to the SERC region without transmission solutions that address deliverability.

Since our application, the trend toward lower wind energy prices continued. Wind power generators of the Great Plains, including western Oklahoma and western Kansas, executed contracts or sold assets with energy prices equivalent to \$28-35 per MWh. These prices are lower than any other renewable energy resource in the United States and are substantially below the avoided costs of TVA and utilities in the southeastern United States. Due to competitive pressures and confidentiality, the prices for many recent wind PPAs are not publicly available. However, the DOE 2010 Wind Technologies Market Report (published in July 2011) contains references to contracts in the \$20-40 range, mostly in Texas and the Heartland regions. OGE completed their purchase of a 227 MW wind farm located in Dewey County, Oklahoma from RES Americas in 2010. In their filing with the OCC, OGE calculates a levelized cost of energy from the facility of \$37.50 per MWh.<sup>1</sup> As we note below, Alabama Power negotiated a long term PPA with a project in western Oklahoma with an all-in cost over the life of the contract below the utility's avoided cost.

Due to declining costs of wind power in western SPP and our preliminary construction cost estimates, Clean Line estimates that the Plains & Eastern Clean Line could deliver wind energy to TVA for an all-in, fixed cost of \$50-60 per MWh. This cost places imported wind energy in a competitive position vis-à-vis other renewable *and* fossil fuel resources.

The Clean Line Proposal contains information on the tremendous wind resources under development in the area centered near Texas County, Oklahoma. Multiple companies continue to invest development resources to prove the strength of the wind resource, gather rights for the construction of new wind turbines, and establish the ability to transmit wind-generated power to wholesale customers. To date, none of these companies have commenced construction on projects in the Oklahoma Panhandle. Based on the SPP Large Generator Interconnection Agreement queue, there were more than 11,000 MW of wind projects in the generation interconnection queue within 120 miles of the Hitchland substation, just a few miles southwest of Guymon as of August 11, 2011. In September 2010, Clean Line hosted a seminar for wind generation developers interested in the Plains & Eastern Clean Line. More than 15 companies with development activities in the panhandle region attended.

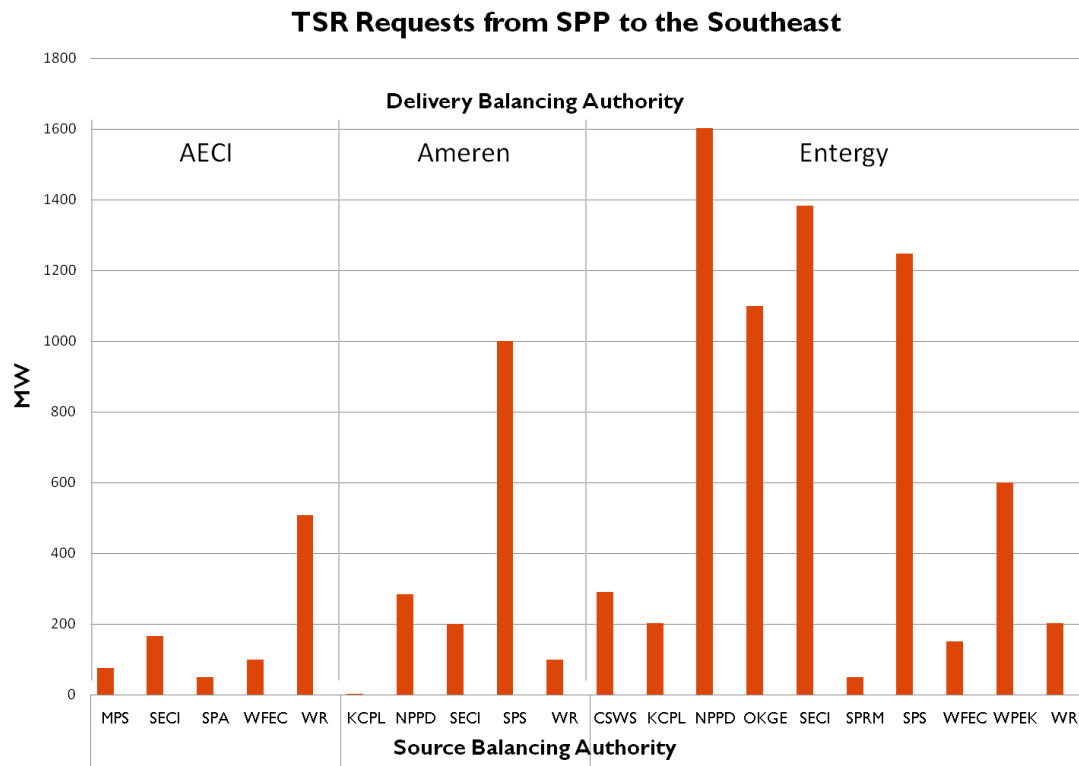
Transmission Service Requests ("TSRs") in SPP also evidence a significant demand to transmit power generated in western SPP to regions east of SPP. Since the great majority of new generation in SPP is wind power, a significant portion of these requests likely come from wind generation projects which are

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<sup>1</sup>Application of Oklahoma Gas & Electric CO., Docket No. PUD 20100037 (April 8, 2010).

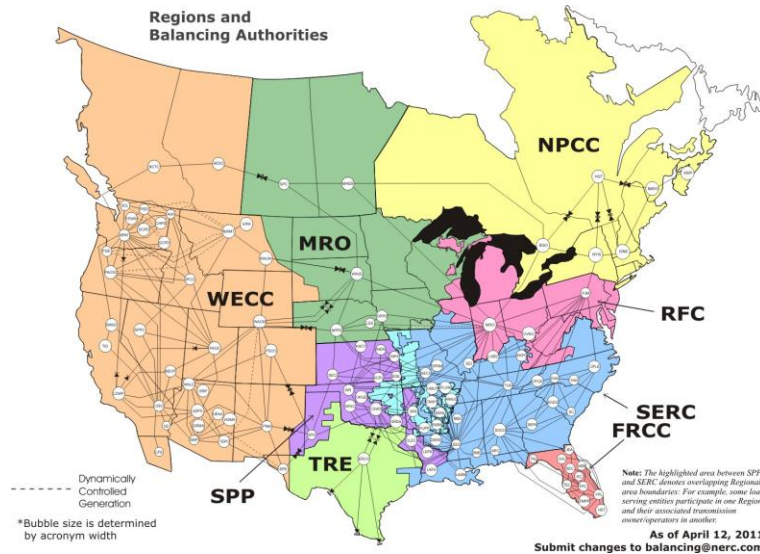
searching for a way to reach markets east of SPP. Figure 2 below illustrates that as of August 12 there are more than 9300 MW of TSRs from western SPP regions to balancing authorities east of the SPP footprint. More specifically, there are more than 4,600 MW of TSRs from balancing authorities in proximity to the Plains & Eastern Clean Line’s western terminal to the Entergy Services Inc. balancing authority.

Figure 2: Transmission Service Requests from SPP to “the Southeast”



Source: SPP Large Generator Interconnection Queue

Figure 3: NERC Regions and Balancing Authorities



Source: NERC

Multiple rules proposed by the EPA on air pollution, including those covering SO<sub>2</sub>, NO<sub>x</sub>, mercury and other contaminants, will have far reaching impacts on the operation of the electric generating fleet in the South. The Cross-State Air Pollution Rule (“CSAPR”) was finalized by the EPA on July 6, 2011. It will require 27 states to regulate and reduce power plant emissions contributing to ozone and fine particle pollution in other states. The Maximum Achievable Control Technology (“MACT”) rule was proposed by the EPA on March 16, 2011 to regulate emissions of hazardous air pollutants for plants emitting certain particulates and to prescribe a technological solution for offending power plants. In 2010, 40% of total electric energy generation in SERC was produced from coal. TVA generated 74,600 MWh from coal in 2010, equivalent to 51% of its total generation. Partly in anticipation of the new EPA rules, and in order to satisfy certain agreements with state governments and other parties, TVA announced in August 2010 that it would shut down units comprising 1000 MW of coal-fired generation. In a recent statement, Southern Company stated that proposed EPA rules would impact 60% of its coal-fired generation fleet<sup>2</sup>. As utilities retire existing coal-fired generation units, there will be an increasing need to replace these sources with clean and economical new sources.

In June, Alabama Power filed a request for a CCN with the Alabama Public Service Commission (“Alabama PSC”) to purchase energy from Chisholm View, a 202 MW project proposed in Garfield and Grant Counties, Oklahoma. Alabama Power states in its request that it is a prudent and reasonable step to procure renewable power in order to increase the portion of their generation from renewable sources in a cost effective way. In testimony filed on behalf of Alabama Power, the Director of Forecasting and Resource Planning states: “...the price for capacity and energy under the PPA is below the Company's projected avoided costs.....and thus the contract can be expected to place downward

<sup>2</sup> SNL, *Southern Co.: EPA rules will lead to coal plant closures, threaten reliability* (August 5, 2011), available at <http://www.snl.com/interactivex/article.aspx?ID=13134254&KPLT=2> (last visited Aug 17, 2011).

pressure on customer rates.”<sup>3</sup> In its application, Alabama Power emphasizes that the Chisholm View project “requires the procurement of transmission to effectuate energy delivery of the project’s output through Entergy and SPP balancing authority areas. Accordingly, the actual guaranteed energy deliveries ultimately are a function of the amount of transmission service procured.”

In December 2008, TVA issued a Request for Proposals for renewable energy. TVA received strong interest in this process and ultimately contracted 1265 MW of installed capacity from wind generation located in areas west of TVA’s service territory. As is the case with the Alabama Power PPA from Chisholm View, the TVA wind procurement relies on obtaining transmission rights on the current transmission system for delivery. At the Tennessee Valley Authority Board of Directors Meeting in February 2010, TVA President and Chief Executive Officer Tom Kilgore said that deliverability was a key concern in both present and future wind contracts. He elaborated that “[w]e have to go through both environmental and contract considerations to determine how we can best deliver wind generation to the valley... So we have to have the contract path lined up and we have to know that that will get to the valley.”

The February 2010 Board presentation classifies deliverability of wind generation as a “hard spot” for TVA. Limitations of the existing AC grid are affecting deliverability under TVA’s existing wind PPAs and will be a major concern in future wind purchases.

TVA’s Board of Directors approved the Integrated Resource Plan in April 2011 that included new renewable purchases. In the IRP’s analysis of scenarios, it notes that “Improvements in transmission system devices to manage power flows and advancement in dc line technologies will be needed to facilitate power transfers and the import of additional wind-sourced power”.<sup>4</sup> The IRP further states that, “[r]enewable generation above existing wind contracts plays a key role in future resource portfolios.”<sup>5</sup>

#### **4. Transmission Planning**

Section 1222 of the 2005 Energy Policy Act requires that projects be consistent with “transmission needs identified, in a transmission expansion plan or otherwise, by the appropriate Transmission Organization.”<sup>6</sup> The Plains & Eastern Clean Line addresses needs that are identified in several plans and is consistent with existing Regional Transmission Organization (“RTO”) and inter-regional plans.

The Clean Line Proposal presents the results of the 2008 Joint Coordinated System Plan (JCSP) and how the Plains & Eastern Clean Line is consistent with that plan. In particular, the plan included HVDC lines to relieve congestion from wind generation in western SPP and to transmit that power to SERC. The JCSP arose out of the mandated FERC Order 890 requirements and was approved by all participants.

In addition, other regional planning efforts including the SPP EHV Overlay Study, June 2007, the SPP 2008 Strategic Plan, and the 2010/11 Southeast Inter-Regional Participation Process (“SIRPP”) evaluate the capabilities of the transmission system to accommodate large transfers of power from the SPP into the SERC region. The Proposal also discusses the EWITS study, a DOE backed initiative in which

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<sup>3</sup> Application of Alabama Power Co., Docket No. 31653 (June 10, 2011).

<sup>4</sup> Tennessee Valley Authority Integrated Resource Plan, March 2010, at page 140.

<sup>5</sup> *Id.* at 151.

<sup>6</sup> Energy Policy Act of 2005, (a)(2)(A) § 1222 (2005).

several transmission organizations participated, and how Plains & Eastern Clean Line is consistent with that planning effort that specifically identified HVDC lines to transmit large volumes of wind energy from the western part of the Eastern Interconnection to the East.

Clean Line and TVA have worked under an MOU for the Plains & Eastern Clean Line dated October 2009 to ensure that the Project meets needs identified by TVA and regional planning entities. Clean Line and TVA are in discussions to extend the MOU that calls for further cooperation on studying the Project and ensuring compliance with TVA's requirements.

Given that RTOs create and execute transmission plans for their footprint area only, it is virtually impossible for an inter-regional, non-incumbent sponsored project like the Plains & Eastern Clean Line to be explicitly included in such a plan. This is especially true for an HVDC line with only one point of interconnection in an RTO footprint. In the case of SPP, the RTO's regional transmission plans do not identify any projects going outside the SPP footprint. SPP's plans do, however, identify particular needs—relieving interconnection queue congestion, providing reliable transfer out of SPP West, and facilitating wind exports to the Southeast—that Plains & Eastern does address.

In January 2011, SPP's Board of Directors approved its first twenty-year Integrated Transmission Plan (ITP20). SPP's goals as stated in the ITP20 are to “better position SPP to proactively prepare for and respond to national priorities,”<sup>7</sup> integrate west to east transfers, and support the Generation Interconnection queue. The Plains & Eastern Clean Line helps SPP meet these goals by providing an efficient link from the wind rich regions of the Oklahoma panhandle within the SPP footprint to regions in the eastern U.S. that do not have access to such high quality wind resources.

In ITP20, SPP also acknowledges that, in addition to positive Adjusted Production Cost savings, qualitative improvements are also part of this plan including many aspects that are germane to the Plains and Eastern Clean Line. Some of these qualitative improvements are listed below along with how the Plains and Eastern Clean Line also meets the spirit of these improvements.

**Increase System Reliability** – Plains & Eastern allows the direct transfer of 7,000 MW of wind energy that would otherwise not be able to be transmitted without very significant AC infrastructure. The Project also provides an opportunity for SPP to request power from TVA in cases of emergencies (e.g. forced outages and supply shortages).

**Anticipate Export Opportunities** – Plains & Eastern is, by design, an export project designed to transmit newly developed wind energy from SPP to utilities in the eastern U.S.

**Broaden Resource Siting Options** – Plains & Eastern supports the development of new wind energy sources in parts of the SPP footprint that do not have access to high-voltage transmission infrastructure.

**Value Cleaner Air** – Plains & Eastern helps displace older, less environmentally friendly thermal resources, and helps obviate the need for continued reliance on fossil-fuel fired generation for future needs.

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<sup>7</sup> Southwest Power Pool Integrated Transmission Plan 20-Year Assessment, January 26, 2011, at page 7, available at [http://www.spp.org/publications/ITP20\\_Report\\_01-26-11.pdf](http://www.spp.org/publications/ITP20_Report_01-26-11.pdf) (last viewed Aug 17, 2011).

**Reduce Risk through Responsible Land Usage** – Plains & Eastern is being developed as a HVDC line which has narrower right-of-way requirements than AC lines that are sized to transmit an equivalent amount of power.

**Increase Efficiency with Reduced Transmission Losses** – HVDC lines have 50 to 70% less losses than equivalently sized AC lines.

SPP's analysis indicates that a wind resource penetration beyond 12GW in the SPP footprint requires technical capabilities that cannot be met with a 345 kV line network. In the ITP20, SPP recommends a more robust transmission solution for wind levels beyond 12GW.

SPP's current Generation Interconnection Queue includes over twice the 12GW threshold that SPP cites as a technical threshold. Plains & Eastern Clean Line can assist SPP with increasing development of wind resources and relieve the backlog in the interconnection queue.

In Order No. 1000, FERC recognizes that the regional nature of cost allocation itself tends to work against the inclusion of inter-regional projects. At present, the benefits of proposed transmission projects are calculated over a specific, regional geographic area. Areas within regional grids at the edges or near the seams of an RTO tend to be neglected and weak.

Projects like the Plains & Eastern Clean Line figure prominently in the major eastern interconnection studies to date: the JCSP and EWITS. Plains & Eastern Clean Line also is consistent with needs identified in multiple SPP transmission plans, as well as other planning efforts like the SIRPP, and a high renewables scenario for TVA in their IRP.

## **5. Conclusion**

Since April 2009, Clean Line has developed the Plains & Eastern Clean Line. During that time, through hundreds of meetings and multiple studies and agreements, our development team has confirmed that the project's rationale—to efficiently transport thousands of megawatts of competitively priced clean energy from rich resource areas in the Great Plains to the Southeast—makes fundamental economic sense. The project enjoys substantial public support across a broad geographic area and diverse stakeholders.

The Plains & Eastern Clean Line at this time faces a critical juncture. A partnership under Section 1222 will provide vital support and allow the timely development of a project that will deliver tremendous positive impacts.