

LANDOWNER ALLIANCES FOR TRANSMISSION CORRIDORS

A NEW WAY TO SITE TRANSMISSION LINES

Prepared by the
RMFU Renewable Energy Center

SUMMARY

Renewable energy benefits rural America economies, national energy security, and the environment. The nation is developing renewable energy, but renewable energy from rural areas will require transmission corridor development to deliver it to cities. The Center for Rural Affairs report on transmission development and rural communities, *Connect the Dots*, offers eight statistics in support of transmission development, including the following: “At least 100,000 MW of additional wind generation is needed to satisfy existing state Renewable Portfolio Standards. An additional 90,000 MW would be needed to meet a 20 percent federal Renewable Portfolio Standard. Approximately \$210 billion to \$400 billion will be needed in order to install the wind capacity necessary to meet these standards, creating 2.6 million to 5 million full-time equivalent years of employment.”¹

Siting of new transmission lines is often contentious. In addition to aesthetic and health concerns about nearby power lines, they present the problem that continuous stretches of land, public and private, must be secured through purchase or easement. The traditional method of siting, where public utilities offer one-time payments to landowners, backed with the threat of eminent domain, causes additional controversy.

We offer a new method of siting transmission lines, based on lessons learned from siting wind farms in the West – the landowner association. A landowner association brings together landowners along a corridor to negotiate cooperatively with prospective line developers, to lower the barriers to siting, and to enjoy an equitable compensation negotiated through mutual consent.

Regardless of whether landowners negotiate singly or collectively, we propose to replace single payments for easement in virtual perpetuity with annual payments to landowners. While these payments are modest compared to construction costs and the value of the power flowing over the wires, they will pay dividends in terms of public acceptance.

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INTRODUCTION

Demand for electricity presents consumers with a problem. On the one hand, we consume significant amounts of electricity (and the advent of electric cars will increase that demand), on the other, very few of us want a coal-fired power plant in our neighborhoods. Coal-fired plants located “out of sight” require transmission lines to deliver electricity. Mass production of renewable energy is even more dependent on transmission, because generation of solar or wind power is location-specific. Wind farms and solar farms must be located where the wind and sunshine are, since the best resources produce the most power for the capital costs required. Typically, the best wind and solar resources are found in locations that are inconveniently not the areas of greatest demand.

To bring rural resources to urban consumers, utilities and private developers who supply power to utilities must secure the right to build on public and private lands. To develop renewable resources quickly, they must also secure the cooperation and support of the rural landowners whose property they need access to. Too often, utilities that have the right of eminent domain resort to force, using condemnation to require the landowner to accept a one-time payment for perpetual access. The resulting conflicts are time-consuming, costly, and acrimonious. Two changes can help smooth the way for renewable energy development. The first is a fair and reasonable model for landowner compensation. The second is forming landowner cooperative associations that can pool their resources and strength and ensure that landowners play an active role in the vital development of transmission corridors.

THE PROBLEM: BARRIERS TO CORRIDOR DEVELOPMENT

Innovations in the ways we generate electricity, such as solar and wind development, are changing, but that change cannot impact electricity usage unless the electricity produced by these new technologies can be delivered to the population centers that want and need energy. The grid — the network of power lines and infrastructure that delivers electricity from where it’s created to where it’s wanted — is not positioned to serve the transactions of our new energy economy. In the western states, we have vast resources for generation of renewable energy, but the transmission network to move that energy has not been significantly improved in more than a generation.

Providing and increasing transmission has always been a challenge, because population centers and energy generation

Transmission Is Key To Renewable Development

are not good neighbors. Nobody wants a coal plant across the street or large-scale transmission lines draped above their barbecue grill. With the new sources of energy, generated in new and rural locations, this is an emerging challenge for all forms of energy, not only wind and solar but fossil fuel and any other energy source. Without transmission corridors to wind farms and solar energy facilities, we won’t see the build-out of renewable generation that can drive local economies and address our national energy needs. Without further build-out of transmission corridors, renewable energy is only a solution to local needs.

To deliver renewable energy from the best resources in remote areas to urban markets, new transmission lines must be built, and they must cross public and private lands. Traditionally, when utilities locate electricity transmission lines on private lands, the landowner is not one of the primary beneficiaries of this business enterprise. Typically, private landowners are not even included in the decision-making process. The developer and the consumer may be active participants, because project planning usually mandates public information meetings. But the property owner is not usually invited to the table. Typically, the landowner is presented with a “done deal.” That is, the utility has selected a route, reviewed any impacts and constraints, and effectively decided where the corridor is going to go. If that means across land the owner does not want crossed, the owner will get a swift education in a legal concept called “eminent domain.”

WHAT IS EMINENT DOMAIN?

Most property owners are familiar with the concept of “eminent domain” or, more loosely, “the right to condemn.” The right of the government, as sovereign representative of its people, to seize private property is so fundamental to common law that the U.S. Constitution takes it for granted. The right is only mentioned in the Fifth Amendment, to describe the limits of the state’s power to condemn. The key limits are that the state must establish a public necessity (“public use”) for the taking and the property owner must receive “just compensation.” Defining “public use” and “just compensation” have kept American lawyers, judges, and legislators busy for two hundred years.

In practice, eminent domain has been used to permit



development of infrastructure that benefits the public at-large, such as railroads, highways, and power lines. Inevitably, the larger public good may not be in the best interests of the individual property owner. Few property owners, regardless of the benefits, want a freeway in their back yard, compensated or not.

In theory, “just compensation” is clear and straightforward. In practice, the problem is thorny. If your home is condemned, what is “just compensation”? What you paid for it? Its taxable value? What it will cost you to replace it? Or even, perhaps, a share of the benefit a third party will get by developing the property? It’s a question courts generally must decide. It works like selling your home, with one huge difference. The utility or developer makes you an offer and the court decides whether you take it.

To support their valuation of the easement for a power line, utilities engage a real estate appraiser. The appraiser will develop two lists of similar properties that have sold recently, some with and some without a transmission line. The appraiser will work out the difference in values between the two lists and determine the value of the power line easement from this comparison. In a contested condemnation case, the landowner will also hire an appraiser. Two lists and a comparison from the landowner’s perspective will invariably result in a higher value for the easement. The judge will decide, but the differing results from different appraisers should raise an inescapable

question about this valuation process; it is not a science.

The decision process is often heavily weighed against the property owner, because by the time “right-of-way acquisition” enters the development process, decisions the property owner might challenge — such as the chosen route — have already been determined. A flowchart prepared by Texas energy developer Oncor² shows public information meetings not scheduled until well into the environmental assessment process, and it indicates no notice to the landowner until after the filing of a CPCN (Certificate of Public Convenience and Necessity) with the appropriate regulatory agency or public utilities commission. Long, most landowners would say, after the horse left the barn.

The problem of developing transmission corridors is generally looked at from every perspective except that of the landowner. If asked, many landowners would say that they can accept the “public necessity” of infrastructure development. What they don’t accept is that it should be done without effective notice to them and at their expense. When landowners invite themselves to negotiations, they invite themselves because in their minds, it’s their property being argued about.

“TAKE IT OR LEAVE IT”? TAKE IT OR ELSE

Utilities looking for power-line right-of-way often come to landowners with an offer they “can’t refuse,” a one-time lease payment, at a rate the utility would prefer, for a “lifetime” easement, giving the utility virtual ownership

TRANSMISSION CORRIDORS AND LWAs

Often, the developer’s ability to fund a wind energy project depends upon being able to deliver the energy to market, and delivery means added transmission corridors. A big hurdle to developing renewable energy is the development of ways to deliver the energy to places that need it, such as urban and industrial centers.

The development of transmission corridors is another way for landowners to work cooperatively. Cooperative, collective bargaining will help rural communities and landowners avoid some of the pitfalls of traditional development. The development of transmission for the Peetz wind farm in northeastern Colorado is typical of the traditional approach.

Developers built a transmission corridor from the Peetz Table Wind Energy Center to a substation near Brush, Colorado, where the new lines connect to the grid. The Peetz wind farm includes 267 wind turbines, generating 400 MW and connected to a transmission line running over private property owned by a multitude of people. The transmission corridor to Brush is 70 miles long and the development impacted 60 landowners, who received a one-time payment of \$3.00 per linear foot of line crossing their property. In other words, that \$3.00 payment gave the developer a permanent right of way for what may be a value-producing transmission line for 100 years.

Landowners and rural communities

are recognizing that they have a vested interest in continuous payment for continuous use, with royalties rather than one-time payments.

What is emerging is an approach similar to the landowner wind association model, what could be called a landowner transmission association.

Landowners are exploring this model as a way to gain the same benefits that LWAs are seeing: better projects, better contracts, and a more timely delivery of energy to market. Landowners would receive payments related to the amount of kilowatt hours transmitted over the lines on an annual basis. As production increases, the local revenue will increase for the landowners who own the corridor.

of the land for the lifetime of the structures erected on the easement. Typically, these offers are made after the government has granted the utility a CPCN, which includes “the right to condemn” (i.e., eminent domain). The unspoken threat is on the table: Take the offer, or we’ll just take the land. If the corridor is on private land, it is on someone’s property. Under the Fifth Amendment to the Constitution, the government can’t simply take your house, your yard, your patio or your driveway and give it to a corporation... except through eminent domain.

The argument for seizing the land is, as the certificate’s name implies, public benefit that trumps private ownership. However, public need could be served more fairly and efficiently if private landowners were able to participate in the planning and site selection for an easement before the threat of eminent domain adds heat but no light to the discussion. There are examples of transmission line development projects that have benefitted from early stakeholder engagement,³ in improved technical planning as well as land use and public acceptance.

In the California Renewable Energy Transmission Initiative process, affected landowners are recognized as stakeholders, as are local units of government and environmental groups. Adding other stakeholders to discussions between utilities and landowners might be challenging logistically, but these groups can have a decisive impact on development success; in fact, they can block development. If they are included early in the process, the development project can be improved and the risks of blocked development can be reduced.

The unfairness of the eminent domain seizure process is obvious, once we take a moment to look at it. Some landowners focus on the injustice of the seizure, but most are more focused on a solvable problem: just compensation. Addressing that problem solves problems for everyone, from the developer eager to put a shovel in the ground to the consumer waiting to plug in a new electric car.



The American public believes in fairness, and fairness would require that the landowner shares in the financial benefits that the use of their land offers other stakeholders and beneficiaries —utility shareholders, consumers, and developers of generation resources.

The landowner has resources, though they may be expensive resources not available to the average family farmer or rancher. A wealthy landowner with extensive holdings in Colorado’s San Luis Valley area has managed to bring a transmission development project to a standstill. While the financial resources to deny a utility are out of the reach of most of landowners, and there are development projects for which opposition is absolute, there is no question that forcing the landowner into an adversarial position and a feeling of victimization is not facilitating our nation’s attempts to deal with our energy challenges.

THE TRANSMISSION PROBLEM

Areas with great potential for solar or wind energy almost by definition do not have dense populations. The challenge of renewables is that the wind resources are in places like Wyoming’s Albany County (population density 1 person per square mile) and the demand for electricity is in places like Colorado’s Denver County (population 3,700 per square mile). Unlike fossil fuel and nuclear power plants, which can be sited in or near population centers, wind and solar energy generation must “come to the resource.” Distributed, small-scale power generators in cities may reduce the problem, but they will not be sufficient by themselves. A robust, widespread transmission grid is critical to maintaining reliability when integrating sources of variable energy generation like wind and solar.

Even if the resource area already has transmission lines and corridors built for traditional generators, there may not be enough transmission capacity to carry the additional energy. Unless the transmission infrastructure is less than ten years old, the generation potential of the area may not have taken renewable energy into account. According to a study prepared by Holland & Hart for a conference sponsored in 2009 by the National Renewable Energy Laboratory,⁴ demand for electricity in the U.S. is projected to increase by more than 20 percent in the next 20 years, and western states have seen little construction of transmission lines or improvement of existing lines. So more lines and more corridors are needed, and property — owned outright or with easements — is needed to provide them. Faced with the opportunities created by an urgent problem, utilities could offer the landowners a game-changing incentive. Instead, eminent domain is forced on them.

Often the reason landowners resist is commonsense economics; the traditional way of taking a site for a large

power line doesn't generate enough income to landowners that it can overcome their many objections. It just isn't worth the compromises and inconveniences to the landowner. What's needed is not the brute force of seizure but a model for siting transmission corridors that offers landowners an opportunity to participate in the decision-making process and some incentive to work effectively with utilities.

In the American West, most utilities would have to go before a public utilities commission to show the public need for the proposed power line and give a justification or rationale for the location. The utility's analysis at this point will have been narrowed down to a specific track which may not, in fact, be the only or the most cost-effective route. The analysis has been paid for by the utility and it is weighted to the benefit of the utility. In other words, when the public and landowners are engaged in the discussion, potential siting has already been selected, and arguments must be made against the proposed routes.

By coming this late to the decision-making, landowners find themselves with the same disadvantage that environmentalists have: If they say, "Put it somewhere else," the utility can argue that they have already determined that these are "the only choices," and the burden of proof rests with those objecting. The site the utility prefers has a distinct advantage because the utility has already gathered all the evidence favoring their choice, at an expense most landowners cannot afford. To offset this advantage, a transmission corridor association of landowners with a stake in the outcome can contract with the necessary expertise to advocate for alternate routes.

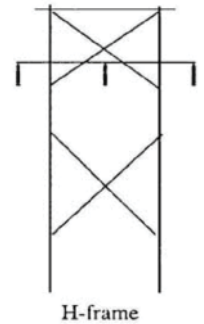
Unfortunately, the development process entangles the siting of the specific route with the "public necessity" for infrastructure development. There may be a clear "public need" for additional electricity in the Denver-area grid, and a wind farm in northeastern Colorado may be the most convenient source for that electricity, but the CPCN usually is not applied for at this point. If the exact route from the Peetz wind farm to Denver and the lands it will impact were researched and selected after issuance of the CPCN, then other stakeholders could have an equal, or at least a fair say in where the power lines are to be located.

Once the utility has identified the public need for the infrastructure, including siting their preferred route, and received the certificate of public convenience and necessity, landowners face formidable influences. The CPCN carries enormous weight in the developers' approach to the landowner, because by "proving" a public need for that route, the utility has effectively guaranteed that the courts will grant them the right of condemnation. In that case, the offer to the landowner is little more than a belated courtesy.

To influence the process, landowners must be involved much earlier, when options for routes and payment structures are still open and both parties can come to the table with flexibility, options for reasonable offers, and willingness to bargain for mutual benefit.

TRADITIONAL SITING AGREEMENTS FOR TRANSMISSION EASEMENTS

All of us are familiar with the long lines of towers that carry power lines across rural America. To understand how that line of towers affects the landowner, an example is helpful. Here is what is involved in siting a power line. In this example, assume that a single 345 KVA line is on a double pole or H-frame (shown at right). The utility would designate a strip of land 200 feet wide for this easement. A one-mile long corridor would require taking 25 acres. The utility would place 5 or 6 H-frames in this one-mile easement. Simply put, they would have purchased about three acres (the footprint of the towers) and right of access to another 22 acres under the power lines.



The traditional contract for this corridor would offer the landowner a one-time payment of approximately \$15,000, and the lifetime of the contract would be perpetual. "Perpetual" is a hard concept to grasp in a culture that considers ten years ago "history." It may seem unrealistic to imagine the same landowner working a property for 100 years, but in the Rocky Mountain region, many farms and ranches have been in the same family for four and even more generations. In Colorado, hundreds of agricultural properties are registered as "Centennial Farms" because they have been in the same family for a century. A transmission easement granted in perpetuity in 1911 (when electricity came to Denver, Colorado) would still be in effect today, with no income after that first payment. Keep in mind that the lump sum payments of earlier years have been far less than the \$15,000 in this example.

In this case, the family would get considerably more than the value of the transmission easement lease by continuing to farm the land. If the corridor were in use for 100 years for a lump sum payment of \$15,000, then the landowner would have been paid \$150/year for the use of 25 acres of his property. By way of comparison, a farmer planting winter wheat in the SE Wyoming/NE Colorado region would be making \$100-\$150 per acre, or \$300-plus for just the three acres perpetually unavailable to farm. Most landowners are not going to agree to losing money, unless the greater good is clearly being served.

LANDOWNERS WITH VESTED INTERESTS ARE OPPOSING NEW LINES

More and more landowners are actively opposing efforts to site new lines on their property.⁵ Opposition may be a simple matter of self-interest and economics. Nobody wants a power line in their back yard, even if it's going to benefit them directly. Why should the landowner be any different? The landowner usually isn't a member of the demographic that will benefit directly from the increased transmission, and the small amount of income landowners receive for their easements (about fifty cents a month per acre in the example above of the H-frame line) doesn't interest them. The threat of condemnation only makes the utility's offer more offensive, and soon the opposing parties are in court. Attorneys that argue these cases are expensive, of course, and the attorney's fees, court costs and the time lost in conflict all add into the utility's fixed cost of delivering energy to population centers. Lost time, lost capital, lost land: Who benefits?

Putting a fair share of the profits for the transmission corridor in the landowner's hands is a better use of the money spent on litigation. As Figure 1 (page 7) illustrates, the cost of increasing the landowner share to equal what the land can produce by farming it represents a 6% increase in the cost of the power line, and an increase of barely 1% in the total cost of the electricity, some of which will be offset by reduced development costs such as litigation. But if landowners and transmission line developers can reach a mutually beneficial financial arrangement, one that provides adequate landowner compensation without surcharging electric costs to the detriment of electric consumers, and if the arrangement gives consumers the benefits of economical renewable energy, then everyone benefits. There are no benefits in conflict, annoyance, and additional costs. Why not avoid all these emotional and financial burdens? Getting the project underway in a timely manner without attorney's fees and court costs outweighs a relatively small increase in incentive to landowners.

Of course, the utility company may argue that taking private property for electric service is a public service, for the greater good of the public receiving the service. This argument puts the utility in a very positive light. However, does anyone think they would perform this public service if it were not profitable? This argument tries to turn a financial disagreement into a good guy/bad guy problem, with the landowner in the black hat. Utilities will also argue that paying more for easements will raise the price of electricity for consumers. This is true, but the overall impact on actual development costs can be rationalized, in that it means

giving consumers the benefit of the new line and the new, clean energy generation it delivers. In practice, the increase is on the order of 1 percent, a penny on the dollar. Even if the utility must make a profit on that penny, the cost to the consumer is still less than 2% of their electric bill. The utilities are not running charities, and the landowner isn't either.

To achieve what is needed for our nation's electric grid and to expand our renewable energy and national security resources, we have to re-evaluate the way electric transmission corridors are developed. We have to take into account local and distant needs, and local and distant rights. That is how a democracy that respects property rights should operate.

THE SOLUTION: LANDOWNER ALLIANCES AND ANNUAL PAYMENTS

Everyone, including landowners, needs to look at the numbers. Farmers and ranchers see renewable energy as an opportunity to harvest a new commodity they can gain income from. In the area of wind

development, some farmers and ranchers are benefiting to the tune of anywhere from \$4,000 to \$10,000/year for each wind turbine

on their land.⁶ In return, they have surrendered some privacy (various entities have contractual access to the land with, for example, heavy equipment) and they have given up, on the average, about a quarter-acre of land they could be farming or grazing. The rest of the land is still useful for farming and grazing. They might have a turbine on each quarter section or 160 acres (turbines must be spaced apart to work effectively), and the actual footprint of a large turbine takes up about ¼ of an acre including right of way. This is a reciprocal relationship, where the landowner is seeing significant income in return for disruption or inconvenience, the wind developer is making a profit, and the public with access to the new energy source is benefiting too.

Compare these numbers with the traditional transmission corridor deal. Six H-frames spanning a mile not only take up twice as much space (half an acre per tower) but their total footprint includes 25 acres of right of way. A quarter section is half a mile wide, so the landowner is providing right of way of 12 acres per quarter section. That is close to fifty times the quarter acre taken for wind development, and the return for the landowner is a small, one-time lump sum for a virtually permanent surrender of property. Looking at the comparison, landowners ask why they should carry that electricity over their property for a trivial fraction of what the landowners generating the electricity with turbines on

**Renewable Energy Is
a New Commodity**



Cornerstone TransCo, LLC

Analysis for Transmission Lines from 115KV to 345KV

Flow of dollars to Various Participants in Wind Farm Project(s)

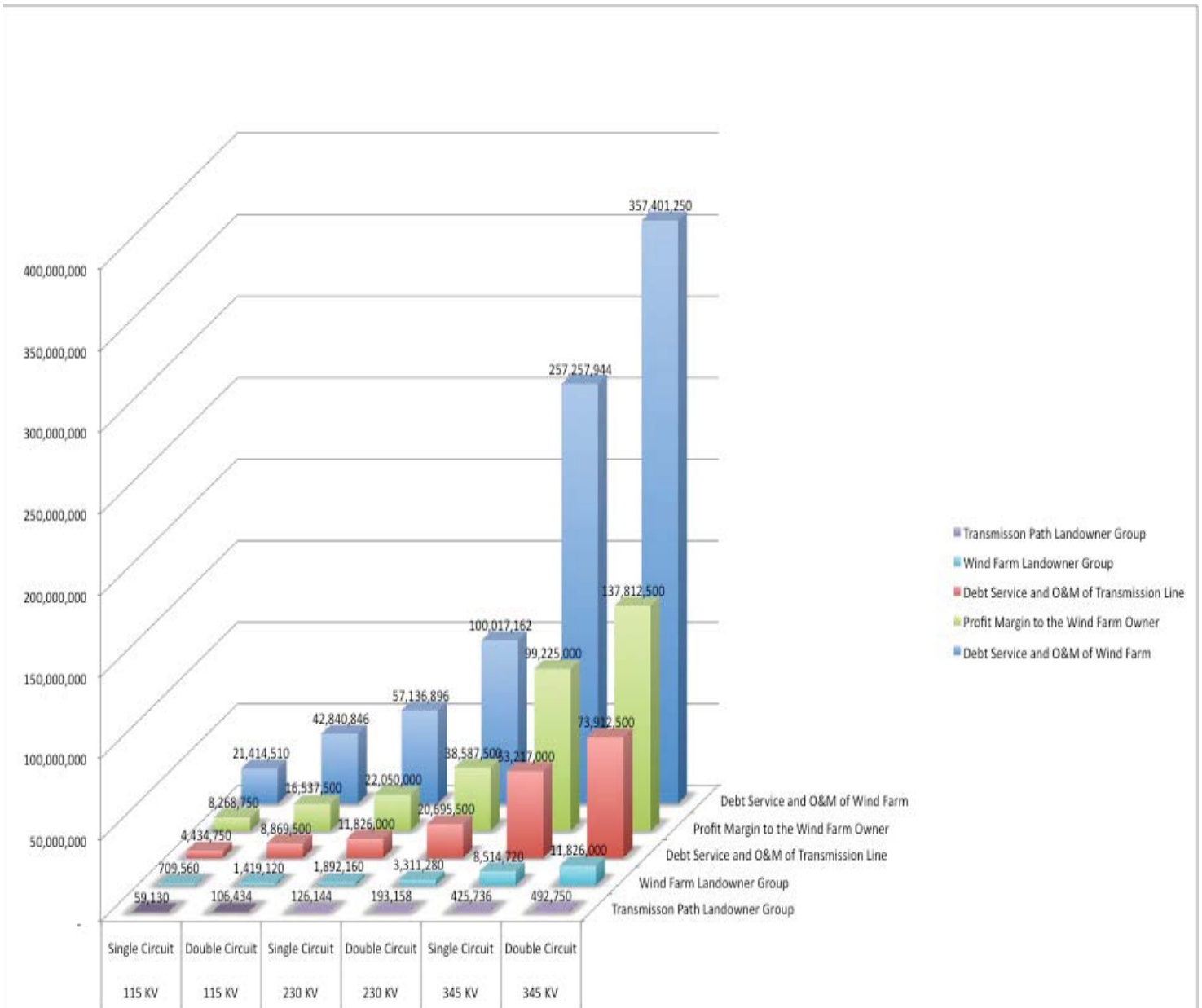


Figure 1. Under this plan, the payment for a corridor connected to a wind farm amounts to less than 4% than that of the payments landowners receive for hosting turbines on their property. This small payment would also be less than 0.7% of the debt service and operation and maintenance costs for the same corridor. The costs for debt service and O&M for a large wind farm (2,500 MW) could be as high as \$357M and the landowners lease payment may be nearly \$12M while landowners are generally asked to host transmission lines for basically nothing. Cornerstone suggests that an annual payment built into the costs of the line of \$500,000 would entice landowners to host transmission lines.

their land are receiving.

To be usable, energy must be delivered to the consumer. It may be delivered in the form of a fossil resource — natural gas for our furnaces and water heaters, gasoline for our cars and generators, coal for the power plants we rely on for electricity — or in the form of a renewable, naturally occurring resource like wind, sunshine, or geothermal heat. The promise of distributed electricity generation, through rooftop solar panels or back yard turbines, depends on the presence of the resource. Most Americans do not live in an area that produces the amount of energy we use in a relatively reliable, steady stream. So moving to a renewable energy economy means we must address the problem of transmission infrastructure. Doing so will benefit the consumer waiting for it and the utility delivering it. Doing so should also benefit the landowner who facilitates that delivery by providing access to private lands.

LANDOWNER TRANSMISSION ASSOCIATIONS

The first step in giving the landowner a place at the bargaining table is cooperation among landowners through transmission associations. Negotiating singly, the landowner's ability to bargain for a better deal is compromised because the utility usually comes to the landowner with a right to condemn in his back pocket. By forming an association of landowners whose property is in the natural route from a renewable resource to a market, individuals with a disproportionately small stake in the process (compared to the utility) and a disproportionate amount of resources (again, compared to the utility), will find negotiating strength in numbers.

By forming associations with common interests, landowners can avoid the common weakness of an individual's position, including pressure from his own neighbors: Because the rights to build a corridor must be continuous, as other landowners buy into the agreement, the pressure mounts to join in and make their neighbors' contracts good. When landowners have agreed in advance on their negotiating position, none of them is likely to find that they are the sole holdout, pressured not only by the utility but by their neighbors as well.

A wind farm can skip a landowner who can't or won't reach an agreement with a wind developer, but transmission lines require a continuous uninterrupted corridor, like railroad lines or freeways. In a case where a landowner corridor association can deliver 99% of the needed corridor, eminent domain might be used to complete the corridor, as a last resort. New lines often cross a patchwork of public and private lands. The landowners could include vacation home owners who are not participating in the rural community and have less interest in joining an association.

These landowners' rights are important, but they should still be subject to the last resort of eminent domain. Eminent domain may need to be used to satisfy a public need, but it should only be used sparingly and with court oversight.

If those neighbors gather their resources together, then they can bargain with the utility as a group. Landowners are exploring a new model that is emerging in the new energy economy, a cooperative model in the broadest sense, which allows them to bring the collected strength of numbers to their side of the bargaining table. This model is working with wind development. Landowner wind associations can assess resources, agree on bargaining positions, and come to the bargaining table with the power to shape the results. The same model can work for transmission corridor contracts. When a group of landowners whose property is impacted by a proposed corridor bands together, they bring market forces to bear that allow them to demand fair compensation from the developer.

If landowners in an association have reached an agreement with a developer, they are a local force to counter and buffer opposition. They can support the development in local meetings, in state siting decisions, and utility commission proceedings. A landowner association creates a local, informed constituency in favor of a new transmission line, to balance the current dynamic, where local reactions range from hostile opposition to grudging acquiescence.

The question is, when to form such associations. Fortunately, energy development projects must include a plan for delivering the power to the grid. If a solar or wind project is in development, the developers (ideally, a wind association) have a place in mind to "plug in" the power. Landowners between the power source (say, a wind farm) and the plug-in point (a utility substation) can anticipate that a route could cross their land. By aligning with the resource developer, these landowners can research and create their own routes and present them to the utility that will actually build out the corridor. This proactive approach saves the utility costs and time. It is the approach being explored by Cornerstone TransCO and others.

This model can help get projects moving by engaging the common interests of all parties — developer, consumer, and landowner. It makes siting projects easier, and it gets new energy resources to the market in a timely manner. Under ideal association contracts, landowners receive annual payments for the life of the corridor rather than a one-time payment for perpetual rights. Independent transmission developers like Cornerstone TransCO have tried this incentive to convince landowners to embrace corridor development on their property, and the results are encouraging. Landowners are organizing and educating themselves on clean energy and transmission lines to the

LANDOWNER WIND ASSOCIATIONS: COOPERATIVE WIND DEVELOPMENT

The Landowner Wind Association is the successful model for landowner alliances to develop transmission corridors. Here is how cooperative wind development was born and how it works.

Conventional development methods have not been effective for rural communities and landowners. Usually, developers without ties to the community are met with suspicion, because they represent financial interests outside the community. At wind energy workshops hosted by rural organizations, common concerns include the worry that developers are untrustworthy speculators willing to pit neighbors against each other for their own gain. Community members are concerned that their lack of knowledge gives the developer unfair advantages. Landowners are put off by non-disclosure contracts.

These are legitimate concerns, but they can be addressed if the landowners and the community take the initiative and drive the negotiations. The first step toward empowerment is forming landowner associations to pool resources. As a group, landowners can assess the value of their bundled wind resource, gather expertise to help them make informed decisions, and negotiate with developers from a position of strength. The group can pool their resources and interests and give their local communities a stake in the development process.

This cooperative model fosters community involvement, trust, and acceptance. The LWA model provides advantages for the developer as well as the landowner and the community. The collective bargaining aspect is good for both sides – developers don't have to knock on 50 doors and then negotiate separately with each landowner.

LWAs can provide helpful information to the developer about the wind quality, terrain, and other local issues from the start. This allows the development team to more effectively assess the merits of the project and any risks or challenges.

By taking a proactive role from the beginning, landowners signal that the project will be a partnership. The LWA gives the chosen developer a trusted local presence in the community that will have to live with the project once it is done. The LWA also can advocate for transmission needs and other necessary infrastructure for the project.

CREATING A LANDOWNER WIND ASSOCIATION

When a group of landowners want to create an LWA, the first step is identifying land suitable for

commercial wind development. Then the initial group reaches out to all landowners in the area to generate broader interest. At that point, they should be ready to incorporate and draw up articles of agreement, so they can act collectively.

The next step is creating a Request for Proposal. This document will be given to potential developers. It spells out the association's plans and requirements and offers the developer a chance to propose an agreement for meeting those goals. An effective RFP offers the developer a marketing plan and feasibility study prepared by the association and indicates the expectations of the landowners regarding fees and payments.

Just as cooperation and collective bargaining are the key to getting a good deal, a well-researched RFP is the key to attracting developers. It tells the developer that the group is serious about their interest. Grant Stumbaugh, wind energy expert with the USDA, says, "Associations always get more interest if they provide credible wind data in the RFP. The Wyoming Anemometer Loan Program has been instrumental in providing associations with wind data which is a great bargaining chip in negotiating with wind developers."

Planning and preparation pay off in many ways. The landowner association's pooled resources can hire technical expertise both for the wind resource research and to prepare the RFP. Knowledgeable landowners can provide credible allies to the developer when it comes time to approach the local community for permits.

For more information, sample documents and suggested technical resources, go to the Rocky Mountain Farmers Union web site and explore the renewable energy topics: rmfu.org/co-op/renewable-energy/.



benefit of their bottom lines.

There are models of contracts that contain modest annual payments for transmission to move energy to population centers. Those contracts have annual payments prior to and after the installation of the lines as well as sign-up bonuses, to get landowners to sign on in an expedited fashion. Annual payments have been between \$2500 and \$3,000 per linear mile, and signing bonuses have been in the range of \$1,000 per contract. The contracted easement allows for normal use during construction, with things like expanded work space during installation, maintenance, repair, and replacement of transmission facilities. Terms for transmission easements are perpetual, but with annual payments rather than lump sums. Building large transmission lines can cost⁷ between \$1.2 million and \$4 million per mile, depending on how large the line is and how much energy it will carry. In these contracts, if the transmission facilities are not installed within 10 years, the easements expire. Landowners reserve the right to use the easement, as long as their use does not interfere with the electrical transmission. In a word, everybody wins.

Similar contract associations, with elements of a hybrid co-op, are being incorporated as wind farms grow in the Midwest. The terms of these contracts take into account some sensible forward thinking. As more electricity flows and as lines are enlarged to satisfy the need to move more power, wheeling arrangements with landowners could come into play. For example, if a single 345 KVA transmission line is built that carries clean energy and then the wind farm grows until the transmission system must be increased to a double circuit 345 KVA, the landowner is duly reimbursed for the damages caused by contractors making improvements to the lines and for the increase in the easement while under construction. Larger lines impact the ways landowners can operate their land and therefore those landowners need to be reimbursed accordingly.

By banding together in landowner associations and engaging actively in the development process, landowners can forge collaborative relationships with developers and consumers that allow all parties to feel that they have made a good bargain. Landowner associations also give utilities and others seeking linear rights of way across private land an effective point of contact, so they can give more notice of their plans earlier and engage the members of the local communities at points in the development process when landowner knowledge about the land could contribute to success developing it.

From a developer's perspective, including landowners in transmission deals can make sense. First, getting the line built is more likely with the enthusiastic support of partners

who are also benefitting financially. Second, projects that are planned with knowledgeable partners, who can contribute their life-long, intimate understanding of the land, are more likely to succeed. Third, since there is a lot of windy and sunny land, and a variety of competing rights of way between any two points that need a new transmission line, landowners are not unlikely to make exorbitant demands. Landowner expectations will be kept in check by competition. Finally, the developer still has the option of planning without consideration for landowner perspectives and can still obtain right of way by condemnation.

ANNUAL PAYMENTS

Siting transmission lines and corridors can be accomplished more effectively when landowners participate in the process. The president of Cornerstone TransCO, Brent Orr, has developed corridors with this structure in mind in Colorado and Texas. When Cornerstone does an analysis for landowner payments, they make assumptions about how much revenue a project can pay to landowners without jeopardizing the economic viability of the project. Their cost and profit analysis (Figure 1 on page 7) shows a proposed system of paying landowners for wind farms and transmission corridors under which the owners of the corridor for a wind farm would receive around 5% of the amount paid to the owner of the wind farm acreage, amounting to less than 1% of the combined debt service, operations and maintenance costs for the corridor.

For example, the annual costs for a wind farm that would need the capacity of a double circuit 345 KV line (turbines creating 2,500 MW) work out to \$357M (debt service and O&M). That wind farm creates profits of \$137M for the turbine owners, while the owners of the acreage where the wind turbines are located get just short of \$11M. The annual costs for a 50-mile double circuit 345 KV transmission line (debt service, O&M) are about \$74M, with the landowners in the line path seeing less than half a million dollars annually in returns for the surrender of 1,200 acres of property and easements. In other words, the owners of wind farm acreage are being paid five times as much as the corridor landowners, as a percentage of debt service and O&M. But under this proposed model, the corridor landowners are getting ten times as much as they have historically been paid for similar easements.⁸

Clearly, payments to the corridor landowners could double or even triple without approaching \$500,000 or having a significant impact on the profitability of the project overall. Mr. Orr adds that for "wind farms to be economically viable the farm needs to be built in the best wind resource area. Wind farms can't be built just anywhere, unlike transmission corridors which can be built

**Bargain Collectively and
Everybody Wins**

anywhere.” That is to say, a transmission line must begin at the installation that uses the renewable resource, but then it can connect to the grid by any reasonably direct path. By pooling resources cooperatively and responding proactively to the development of renewable energy generation projects, landowners in the potential path of transmission corridors can participate more effectively in the process of developing transmission corridors.

In developing new natural gas pipelines, state and local authorities are not involved, and all regulation is managed by the Federal Energy Regulatory Commission (FERC). A pipeline developer under FERC’s regulation can offer capacity in a proposed pipeline under an “open season” process, where those who would ship gas on the proposed pipeline sign up to take certain amounts of capacity on the new line. Similarly, it might be possible for entities that desire to provide a new electric transmission line to give notice to landowners and counties (and others) in the area where their new line might be located, that the developing entity is seeking partners that can propose a linear right of way between two identified points in exchange for their financial participation in the deal. The developer, if a utility with rights to eminent domain, would not be worse off for having considered the possible economic and efficiency savings from having landowners, counties, and others as right of way partners in their proposed new line, and might find that the terms of such a deal would be more desirable than planning in the absence of landowner inputs and participation and proceeding to condemnation.

Whether landowners choose to bargain collectively with corridor developers and utilities, a key change that must occur is the form of compensation.

In the past, easements have been granted in perpetuity (or for a century), with the justification that the developer must have virtual ownership of the easement in order to protect the investment built on it. Electricity has been part of Denver infrastructure for a hundred years. The easements that bring that power to Denver were negotiated with a single payment at a time when a fine dinner cost two dollars, a wage-earner might bring home \$300 a month, a six-room house cost \$3,000, and a family of four could get by on \$1,400 a year.

Many of today’s landowners inherited that single payment and the obstructions and inconveniences those easements create today, and hindsight warns against making deals like that for their great grandchildren to live with. The alternative is a steady income running parallel to that of the utility company (and tiny in comparison). Such deals will be easier to make if the landowner has the strength of numbers that an alliance creates. As we examine that

barriers to quick development of corridors to support our renewable resources, we should also ensure that our courts and our laws make these annual payments the new model for landowner compensation.

CONCLUSION

Although eminent domain is the typical tool for taking lands from farmers and ranchers to create easements, it does not make for good relations between the parties doing the taking and the parties having their property seized. Landowners don’t like condemnation or eminent domain, whether it means the taking of acreage from a farm or invasion of the airspace over a patio. Maybe public needs could be served with a fairer method.

There are two steps needed to get to that fairer method. The first is to change the model for transmission corridor development. When promising renewable energy sources are identified, landowners in the path for delivering that energy must be given notice that development is a possibility. Other stakeholders, such as local groups with an interest in the outcome and environmental groups or community interest that could aid or block success, should be notified. Landowners can collect their bargaining power and respond proactively to the need for transmission corridors. With their pooled resources, they can make a case for alternate routes acceptable to them, rather than simply take the role of naysayer to oppose the utility’s siting decisions.

This means landowners working with developers as partners, not adversaries, working together to identify and satisfy a public need. Together, the diverse stakeholders can help site power lines in a timely manner and increase revenues for the farm or ranch. Power lines would be located with landowner input on best possible routes, and the landowner becomes a partner in the development process, facilitating development. Landowners, especially family farmers and ranchers, are members of the local communities impacted by renewable energy development, and they can be valuable allies in the development process.

More and more landowners are looking for ways to increase their incomes on the farm or ranch. Across the U.S., rural communities are land-rich and income poor. Rural people routinely find that their urban cousins want access to the rural landowner’s private property for various uses, such as recreation, without thought for the privacy of the owner, much less of the potential for property damage. Family farmers and ranchers pass their property through many generations of beneficial use, and they are sympathetic to public needs. However, they are no more willing to have their property seized than the condo-

**Insist on
Annual Payments**

dwelling urban executive. Eminent domain is intended to address emergencies of public necessity, not to allow routine condemnation whenever and wherever utilities want, with no consideration for the rights of the owners. Condemnation should be the instrument of last resort, not the routine solution

Even though the utility has to pay for an easement seized through eminent domain, easement payments under eminent domain are notoriously unfair to the property owner, because the bargaining muscle is on one side of the table. Dueling assessments can be mounted, but the right to condemn in the developer's sleeve if things don't go his way. Token payments aren't going to convince a landowner to accept a power line, especially when the token payment gives the landowner no recourse with respect to unforeseen and uncompensated changes to the land in perpetuity. The promise of annual revenue streams for power lines has appeal for landowners who need continuous revenue to support their families and communities. By pooling their

resources, landowners can fight successfully for better deals. Several wind developers have won landowners over with the new cooperative approach, working with an association that gives the landowner the clout to bargain successfully with the developer.

Reducing landowner resistance gets the lines sited in a timely fashion. It can get them built in record time. Everybody wins: landowner, developer, consumer A new line connecting a wind farm in Texas to a much larger transmission line over 100 miles away was built in 18 months.⁹ New lines using this approach have been explored in Colorado, North Dakota, Texas, and Montana, places where property rights are considered sacred.¹⁰

New lines for wind energy are being proposed all over the West, and we need them. Utilities that offer annual revenue streams for transmission corridors, rather than threats sweetened with a little cash, will find themselves partnered with landowners who will go to bat for them instead of fighting them in the courts.

NOTES

1. www.cfra.org/files/Connect_the_Dots.pdf, p. 4.
See also American Wind Energy Association's *Green Power Superhighways* (2009): "Almost 300,000 MW of wind projects, more than enough to meet 20 percent of our electricity needs, are waiting in line to connect to the grid because there is inadequate transmission capacity to carry the electricity they would produce. Concern about inadequate transmission is shared by the solar, geothermal, and hydropower industries as well. In California alone, more than 13,000 MW of large solar power plants are waiting to connect to the grid. Most of these projects will require new or significant upgrades to the existing transmission grid." (archive.awea.org/GreenPowerSuperhighways.pdf, p. 6).
2. www.oncor.com/electricity/transmission/docs/LicensingProcessFirstpage0409.pdf.
3. www.energy.ca.gov/reti/.
4. www.nrel.gov/analysis/pdfs/davidson_utility_codes.pdf, p. 2.
5. A notable example in Colorado is billionaire hedge-fund manager Louis Bacon, who owns a ranch in south central Colorado and has fought the Public Utilities Commission and Xcel Energy to a standstill over a power line across La Veta Pass, with the support of environmental groups and Colorado's *Denver Post* (www.denverpost.com/opinion/ci_18846450).
6. Windustry: *Wind Energy Easements and Leases: Compensation Packages* (saline.unl.edu/c/document_library/get_file?folderId=294039&name=DLFE-18538.pdf).
7. *The Cost of Transmission for Wind Energy: A Review of Transmission Planning Studies*, U.S. Department of Energy (2009). eetd.lbl.gov/ea/emp/reports/lbnl-1471e.pdf, p. 16.
8. A single payment of \$800/acre for the transmission easement would give the landowners owning the 50-mile corridor about \$55,000/year, assuming a 25-year lifetime for the corridor, as opposed to \$492,000/year as shown in Figure 1.
9. "Power Line Built in Super Quick Time," *Windpower Monthly*, December 2009, pp. 36-37.
10. Linc Reinhiller of Hazen, North Dakota, reported how affected landowners got together and retained an attorney to negotiate their joint interests on a line built in the 1980s by Montana Dakota Utilities. The settlement provided long-term annual payments worth considerably more than a one-time easement payment.

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