

Office of State Lands and Investments

Funding Wyoming Public Education

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Wyoming Task Force on Wind Energy Eminent Domain
At Casper, Wyoming on May 27, 2010

How Are Landowners Currently Paid for Transmission Easements

Presented by Butch Parks

INTRODUCTION

The State Board of Land Commissioners is directed by the State Constitution and the Legislature to manage some 3.6 million surface acres of State Trust Land. The administrative arm of the Board is the Office of State Lands and Investments (Office). The Office administers State Trust Land in accordance with The Rules and Regulations of the Board of Land Commissioners. The State Board of Land Commissioners has fiduciary responsibility to manage State Trust Lands for the exclusive benefit of the beneficiaries designated in the congressional acts. Those beneficiaries include public institutions in Wyoming, the largest being public schools at about 86%.

The 2 management goals most important to the Office are:

1. The optimization of trust asset revenues
2. Preservation and enhancement of trust asset values

These goals are most likely similar to those of most landowners. Accordingly, this presentation will show how the Office administers transmission easements on State Trust Lands as an example of land management for other landowners.

Today's presentation will include

- General description of transmission lines, projects, easement requirements, and need
- Rules that govern easements on State Trust Land
- Determination of market value and terms for transmission easements
- Other considerations of value for transmission easements
- How other neighboring states and the BLM charge for transmission easements
- Condemnation value of transmission easements

Description: The bulk transfer of electric power from generation substations to delivery substations is transmitted through a power transmission network commonly referred to as a "grid" at voltages of 110kV (kilovolts) or above and usually through overhead power lines on large wood or steel structures. A transmission easement is a conveyance to allow for use but not ownership of land generally for overhead high voltage power lines and support structures.

Currently there are seven or more large electrical transmission projects proposed in Wyoming to improve reliability and add capacity to the Western Transmission Grid. In addition, there will be many transmission lines that connect new electrical generation facilities to the Western Grid. It is anticipated that these proposed projects will cross State trust lands and require transmission easements. The Office of State Lands and Investments has fiduciary responsibility to the trust beneficiaries and as such considers transmission easements as an opportunity to benefit the trust. The term of transmission easements may vary from a period consistent with the anticipated economic life of a generation facility to 99 years or perpetual as needed to deliver reliable power to North America. The necessary width of transmission easements is determined by industry standards, usually between 90ft and 300ft. Generally, higher voltages require greater separation between conductors, terrain, and obstructions and therefore require wider easements. Other factors may affect width requirements such as span lengths, structure heights, road crossings, spanning sensitive areas, construction costs, and change of direction. The route of transmission lines is normally the most cost effective route that limits environmental impacts to acceptable levels. The need for transmission lines is to provide clean, affordable, and reliable electricity for the growing electrical demands of North America.

Rules: Chapter 3, Easements, Rules of the Board of Land Commissioners governs the conveyance of easements on State Trust Land. The Rules would offer other landowners good management practices when entering into a transmission easement agreement. The Office administers easements on State Trust Lands in accordance with Chapter 3.

- The Rules and the application process can be reviewed at <http://slf-web.state.wy.us/> .
- The land specialist in charge of easements at State Lands is Tina Vigil tvigil@wyo.gov .
- Since 2001, the Office has entered into 15 easement agreements for transmission lines ranging in width from 100' to 300', terms from 35 years to 99 years, and considerations of one-time payments from \$15/rod to \$127.50/rod.
- The Rules require a completed application, a \$25 application fee, and a deposit of 75% of the estimated consideration.
- The Rules require the consideration to be no less than market value.
- When-ever possible and practical, the Rules suggest a term no greater than 35 years.
- There are provisions for renewal of easements and transfer of easements.
- The widths of easements are the narrowest possible width with applicant justification.
- The Rules require the location to be routed so as to minimize or eliminate impacts to State Land, preferably along section lines, roads, pipelines, or utility corridors.
- When encroaching upon an existing easement or permitted use, the grantee of an easement must prevent or mitigate impacts to existing easements and permitted uses.
- The Rules provide for the use of State Land for construction purposes outside of the boundaries of the easement through a temporary use permit.
- Prior to construction, the easement grantee must post a performance bond including reclamation.
- There are post-construction reclamation and decommissioning reclamation requirements.
- Surface impact payments are required for negative impacts to existing surface lessees.
- The standards of construction must comply with accepted industry standards, protect cultural resources, and pay for any timber resources at current stumpage values.
- A post-construction report and an approved "as built" survey plat are required.
- In the event of default, there is a provision for cancellation or termination.

Market Value: Research of fair market value for transmission lines has been difficult because the number of comparable sales is limited. The Office has reviewed the prices received for existing transmission easements as well as the offering prices for transmission easements under application. In addition, the Office has researched the processes and prices of the surrounding states and the BLM. Where possible, power companies, transmission companies, and private landowners have shared sales prices for transmission easements.

The Office is suggesting transmission line prices should be based on the required transmission width and the length measured in rods. The required width of transmission easements is generally determined by electrical code standards for the transmission voltage. Other factors may affect width requirements such as span lengths, structure heights, road crossings, spanning sensitive areas, construction costs, and change of direction. A company would be required to establish evidence of the required width and that width would be the specified width of the easement even if the pricing schedule (see #4 below) allowed wider widths for the same price.

The Office suggests that the term of a transmission easement should be consistent with the economic life of the generation facility it is associated with. In the event that the transmission line is part of the “grid” and not specifically required for a specific generation facility, the appropriate term should be 99 years.

At this time OSLI recommends that the highest of the following prices be considered the market value for transmission easements:

1. The offering price of the developer at time of application
2. The agreed price between the developer and other landowners within the project
3. The appraised value of the property contained within the easement
4. The following schedule for a 99 year term:

Width	Consideration	at full width equates to \$/acre
Up to 100'	\$ 75.00/rod	\$ 1,980.00/acre
101' up to 150'	\$ 85.00/rod	\$ 1,496.00/acre
151' up to 200'	\$113.00/rod	\$ 1,491.60/acre
201' up to 300'	\$127.50/rod	\$ 1,122.00/acre
301' up to 350'	\$140.00/rod	\$ 1,056.00/acre

Other Considerations: There are other factors to be considered when negotiating the terms of a transmission easement. These factors are considerations for both the grantor (landowner) and the grantee (transmission company).

- Timeliness of the easement transaction
- Importance of the location
- Avoiding legal costs
- Developing good relationships for future interactions between landowner and transmission company
- On partial conveyances, consideration of value for the property as a whole
- Consideration for planned uses that might conflict with transmission lines
- Considerations for negative impacts to leaseholds, existing uses, and permitted uses as well as costs to mitigate those impacts
- Environmental concerns for wildlife, cultural, scenic landscapes, etc.
- Consideration of transmission costs to rate-payer costs and government regulation thereof

- Consideration of transmission costs to rate-payer costs and market rate tolerance:
The potential inflection point is believed to be between 5% and 7% of average household disposable income. Current rates and consumption indicate that slightly less than 4% of disposable income is spent on electricity. If disposable income increases at 1.5% per year while consumption increases at 1% per year with utility prices increasing at 3-5 % per year, we will reach market inflection within 6 years, especially considering that carbon emission costs may be implemented. Already certain parts of the country may have reached the inflection point such as California, Florida, and Virginia.
- Maintenance of transmission lines, maintenance costs, and interruption to landowners operations.

Comparing Wyoming to BLM and Other States:

The BLM utilizes a formula that provides annual payments from transmission owners over the life of the project, although easements are generally not offered into perpetuity. The generic formula used to calculate rental payments is as follows:

$$\text{Annual Rental Payment} = \text{Zone Value (per acre)} \times \text{Rent Schedule} \times \text{Acres}$$

For detailed explanation of the determination of rent schedules, zones, and zone values, visit the BLM web-site at <http://www.blm.gov/wo/st/en/prog/more/lands.html> .

BLM 2009 – 2015 Per Acre Rent Schedules

County Zone Number and Per Acre Zone Value	2009* Per Acre Rent (with 25% phase-in discount)	2010 Per Acre Rent (1.9 percent IPD-GDP increase – average annual increase from 1994 - 2003)	2011** Per Acre Rent (1.9 percent IPD-GDP increase – average annual increase from 1994 - 2003)	2012 Per Acre Rent (1.9 percent IPD-GDP increase – average annual increase from 1994 - 2003)	2013 Per Acre Rent (1.9 percent IPD-GDP increase – average annual increase from 1994 - 2003)	2014 Per Acre Rent (1.9 percent IPD-GDP increase – average annual increase from 1994 - 2003)	2015 Per Acre Rent (1.9 percent IPD-GDP increase – average annual increase from 1994 - 2003)
Zone 1 \$250	\$5.78	\$7.85	\$8.00	\$8.15	\$8.30	\$8.46	\$8.62
Zone 2 \$500	\$11.55	\$15.69	\$15.99	\$16.30	\$16.61	\$16.92	\$17.24
Zone 3 \$1,000	\$23.10	\$31.39	\$31.99	\$32.59	\$33.21	\$33.84	\$34.49
Zone 4 \$1,500	\$34.66	\$47.08	\$47.98	\$48.89	\$49.82	\$50.76	\$51.73
Zone 5 \$2,000	\$46.21	\$62.78	\$63.97	\$65.19	\$66.42	\$67.69	\$68.97
Zone 6 \$3,000	\$69.31	\$94.17	\$95.96	\$97.78	\$99.64	\$101.53	\$103.46
Zone 7 \$5,000	\$115.52	\$156.94	\$159.93	\$162.96	\$166.06	\$169.22	\$172.43
Zone 8 \$10,000	\$231.02	\$313.89	\$319.85	\$325.93	\$332.12	\$338.43	\$344.86

Zone 9 \$20,000	\$462.05	\$627.77	\$639.70	\$651.85	\$664.24	\$676.86	\$689.72
Zone 10 \$30,000	\$693.08	\$941.66	\$959.55	\$977.78	\$996.36	\$1,015.29	\$1,034.58
Zone 11 \$50,000	\$1,155.13	\$1,569.43	\$1,599.25	\$1,629.64	\$1,660.60	\$1,692.15	\$1,724.30
Zone 12 \$100,000	\$2,310.26	\$3,138.86	\$3,198.50	\$3,259.27	\$3,321.20	\$3,384.30	\$3,448.60

*Counties are assigned to appropriate zones for calendar years 2009-2010 based upon 2002 NASS Census Data (80% of average per acre land and building value).

**Counties are re-assigned to appropriate zones for calendar years 2011-2015 based on 2007 NASS Census Data (80% of average per acre land and building value).

Adjusted 2002 to 2007 Per Acre Land and Building Value and Rent Schedule Zone

State	County	80% 2002 L/B values	Rent Schedule Zone 2006 - 2010	80% 2007 L/B values	Rent Schedule Zone 2011 - 2015
Wyoming	Albany	\$182	1	\$377	2
Wyoming	Big Horn	\$574	3	\$702	3
Wyoming	Campbell	\$142	1	\$312	2
Wyoming	Carbon	\$171	1	\$251	2
Wyoming	Converse	\$123	1	\$275	2
Wyoming	Crook	\$288	2	\$478	2
Wyoming	Fremont	\$249	1	\$733	3
Wyoming	Goshen	\$330	2	\$478	2
Wyoming	Hot Springs	\$130	1	\$587	3
Wyoming	Johnson	\$216	1	\$309	2
Wyoming	Laramie	\$244	1	\$388	2
Wyoming	Lincoln	\$725	3	\$918	3
Wyoming	Natrona	\$150	1	\$267	2
Wyoming	Niobrara	\$210	1	\$302	2
Wyoming	Park	\$541	3	\$664	3
Wyoming	Platte	\$268	2	\$490	2
Wyoming	Sheridan	\$365	2	\$629	3
Wyoming	Sublette	\$586	3	\$810	3
Wyoming	Sweetwater	\$78	1	\$143	1
Wyoming	Teton	\$2,446	6	\$1,460	4
Wyoming	Uinta	\$298	2	\$470	2
Wyoming	Washakie	\$311	2	\$456	2
Wyoming	Weston	\$174	1	\$354	2

NOTE: The next three pages will provide an illustration of how one might compare the benefits of annual payments (using the BLM method) VS onetime payment for 99 year term (using the State method) VS onetime payments for three 33 year terms (using Idaho and Colo. methods). This is for ILLUSTRATION ONLY. ASSUMPTIONS WERE MADE as to land values 99 years into the future and a 7% per annum value of money was presumed. Calculations are NOT VERIFIED.

BLM. Assume a 300' Wide Transmission Line in Wyoming through State lands, private lands and BLM. The route crosses through Natrona, Converse, Albany, Carbon, Sweetwater, and Lincoln counties. Assuming 1 mile of 300' wide transmission easement on BLM lands in each county and using their current per acre rent schedule gives annual payments for each mile of 300' wide transmission easement as follows:

Year	Con-verse	Na-trona	Albany	Carbon	Sweet-water	Lincoln	Annual	Increase
2010	285.43	285.43	285.43	285.43	285.43	1141.34	2568.49	
2011	581.4	581.4	581.4	581.4	290.88	1163.16	3779.64	0.320441
2012	592.67	592.67	592.67	592.67	296.33	1184.97	3851.98	0.01878
2013	603.94	603.94	603.94	603.94	301.79	1207.52	3925.07	0.018621
2014	615.21	615.21	615.21	615.21	307.61	1230.42	3998.87	0.018455
2015	626.85	626.85	626.85	626.85	313.42	1254.06	4074.88	0.018653
2011-2015	3020	3020	3020	3020	1510	6040	19630	0.39495

Now on five year increments beginning with 2011-2015 and projecting the same increases as shown from 2011-2015 for 6 Miles of BLM R.O.W. in 6 Counties over 99 years and a 7 % yield per year:

Years	Payment	Yield
2011-2015	19,630	3,797,444
2016-2020	27,384	4,895,984
2021-2025	38,201	4,868,107
2026-2030	53,290	4,840,313
2031-2035	74,340	4,812,742
2036-2040	103,705	4,785,332
2041-2045	144,668	4,758,030
2046-2050	201,813	4,730,926
2051-2055	281,529	4,703,948
2056-2060	392,733	4,677,125
2061-2065	547,863	4,650,459
2066-2070	764,269	4,623,942
2071-2075	1,066,155	4,597,575
2076-2080	1,487,287	4,571,360
2081-2085	2,074,765	4,545,294
2086-2090	2,894,297	4,519,371
2091-2095	4,037,545	4,493,599
2096-2100	5,632,375	4,467,982
2101-2105	7,857,163	4,442,506
2106-2109	10,340,027	4,167,013

99 YR

TOTAL \$38,039,045 \$91,949,064

Grand 99 YR TOTAL \$38,039,045 + \$91,949,064 = \$129,988,109

On State lands a one-time payment for a 99 year easement at \$127.50 per rod results in a one – time payment of \$40,800 for each mile of 300’ wide easement. Six miles would be \$244,800. If the State’s investments yielded 7% per year, after 99 years, a \$244,800 initial investment would equal:

Time Period	Yield @ 7%
2011-2015	98,654
2016-2020	138,412
2021-2025	194,192
2026-2030	272,451
2031-2035	382,249
2036-2040	536,296
2041-2045	752,423
2046-2050	1,055,650
2051-2055	1,481,077
2056-2060	2,077,951
2061-2065	2,915,366
2066-2070	4,090,259
2071-2075	5,738,633
2076-2080	8,051,303
2081-2085	11,295,978
2086-2090	15,848,257
2091-2095	22,235,105
2096-2100	31,195,853
2101-2105	43,767,781
2106-2109	47,356,827
99 YR TOTAL	\$199,729,527

Note: 99 YR TOTAL includes the initial one-time payment

Other States. Information was made available from Colorado, Idaho, Utah, Montana, South Dakota, and Nebraska. Utah, Colorado, and Idaho are experiencing demand for transmission easements. Montana didn't reply. South Dakota doesn't have recent experience in transmission easements on state land and is not seeing development to export their energy. In the case of Nebraska, the electric utility is owned by the state, so their methods would not be applicable to Wyoming.

Colorado limits their easements to 30 years and currently is averaging \$50/rod for a 150' wide transmission easement. The price is based on market value of the land encumbered by the easement. Based on a 150' wide easement, there would be 17.6 rods to the acre or \$880 price for an easement encumbering 1 acre of land.

Idaho limits their easements to 35 years and price is based on value of the land encumbered by an easement. Currently the minimum land values in Idaho are \$875 per acre.

Utah indicated that the price for transmission easements is based on 80% of the land value or their scheduled prices. Minimum land values are about \$500 per acre. Typically, transmission easements are \$50 per rod for a 30 year term.

If Wyoming were to use the method of Idaho and Colorado, assuming average land values of \$500 per acre and assuming a 33 year term, a 300' wide transmission easement that was 6 miles long as in the previous comparison would encumber 218.18 acres. The cost would be a payment of \$109,091.

In order to make a 99 year comparison, there would be 2 renewals of 33 years each. Assuming the rule of thumb that real estate values double every 20 years, then average increase per year is 5% and for 33 years is 165%. Therefore, the first 33 year renewal would be priced at \$109,091 + 1.65(\$109,091) = \$289,091 and the second 33 year renewal would be priced at \$289,091 + 1.65(\$289,091) = \$766,091.

To determine the 99YR TOTAL value using the 33 year easement method and a 7% annual yield on investments (the investments being the easement payments would be the totals of:

1st 33 yr Term = \$109,091 invested for 99 years at 7% yield per year = \$ 89,007,347

2nd 33 yr Term = \$289,091 invested for 66 years at 7% yield per year = \$ 24,951,444

3rd 33 yr Term = \$766,091 invested for 33 years at 7% yield per year = \$ 7,490,838

99YR TOTAL = \$ 121,449,629

Comparison of 99YR Total Payments and Yield :

BLM - Annual Payments \$129,988,109

Wyoming State Land - 99 yr onetime payment \$199,729,527

Colo and Idaho – three 33 yr term payments \$121,449,629

Again: This analysis is for ILLUSTRATION ONLY. ASSUMPTIONS were made. Calculations were NOT VERIFIED.

Condemnation value: The definition of condemnation value according to the Appraisal Institute is “A misleading term for the value to be compensated in a condemnation. The value sought under the laws applicable to condemnation is market value.”

If the criteria required for condemnation meets Wyoming Statutes, then the condemnation value in Wyoming is that value necessary to make the landowner “whole” and place the landowner in the same position as if the property had never been taken by condemnation.

In a condemnation appraisal, the Statutes require that “generally accepted appraisal techniques” performed by a certified appraiser be used in determining the value of the entire parcel before and the value of the entire parcel after the taking. In almost all cases, the actual taking is a partial of the entire parcel.

The appraisal standards for determining if a sale represents market value require:

- A willing buyer and willing seller
- An arms length transaction
- Sales without undue influence, compulsion, or duress
- Project need for the property is not to be considered
- Property values where threat of condemnation existed cannot be considered
- Sales that do not show a willingness to pay inflated values to move a project along
- Sales that do not represent generosity on the part of the landowner