



Rocky Mountain Clean Energy Transmission Summit
January 9, 2013

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Cornerstone Companies

Cornerstone Energy Development

Cornerstone TransCo

Wind 2 Wire

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Saint Francis, KS

Manila, Philippines

www.CornerstonEnergyDevelopment.com



Key to our success

❑ Experience

- ✓ Over 10 years in wind project development
- ✓ Strategic Relationships

❑ Proven track record (450 MW & counting)

- ✓ Spring Canyon wind project
- ✓ Wray SD wind project
- ✓ Peetz wind table projects

❑ Current development projects

- ✓ Morgan – Yuma County, CO
- ✓ Meade County KS
- ✓ Ness –Trego KS
- ✓ Rush County KS
- ✓ Lane County KS
- ✓ Texas County, OK
- ❑ Camarines Sur, Philippines





Cornerstone TransCo, LLC

Analysis of Landowner Payments for T-Line Easements (Past 100 Years)



Cornerstone TransCo, LLC

Analysis of Landowner Payments for T-Line Easements (Past 100 Years)

Acres / Mile in a 200 ft Easement = \$ 24,242		Average Value of 200 ft Easement (per mile) for the next 100 Years	
Inflation Rate = 4.75%			
Valuation Year	Grassland Price / Acre	Farmland Price / Acre	Relative Value of 24,242 Acres
1912	\$ 10.00	\$ 20.00	\$ 242 \$ 485
1913	10.48	20.95	254 508
1914	10.97	21.95	266 532
1915	11.49	22.99	279 557
1916	12.04	24.08	292 584
1917	12.61	25.22	306 611
1918	13.21	26.42	320 641
1919	13.84	27.68	335 671
1920	14.50	28.99	351 703
1921	15.18	30.37	368 736
1922	15.91	31.81	386 771
1923	16.66	33.32	404 808
1924	17.45	34.90	423 846
1925	18.28	36.56	443 886
1926	19.15	38.30	464 928
1927	20.06	40.12	486 973
1928	21.01	42.02	509 1,019
1929	22.01	44.02	534 1,067
1930	23.06	46.11	559 1,118
1931	24.15	48.30	585 1,171
1932	25.30	50.60	613 1,227
1933	26.50	53.00	642 1,285
1934	27.76	55.52	673 1,346
1935	29.08	58.15	705 1,410
1936	30.46	60.92	738 1,477
1937	31.90	63.81	773 1,547
1938	33.42	66.84	810 1,620
1939	35.01	70.01	849 1,697
1940	36.67	73.34	889 1,778
1941	38.41	76.82	931 1,862
1942	40.24	80.47	975 1,951
1943	42.15	84.30	1,022 2,044
1944	44.15	88.30	1,070 2,141
1945	46.25	92.49	1,121 2,242
1946	48.44	96.89	1,174 2,349
1947	50.74	101.49	1,230 2,460
1948	53.16	106.31	1,289 2,577
1949	55.68	111.36	1,350 2,700
1950	58.32	116.65	1,414 2,828
1951	61.10	122.19	1,481 2,962
1952	64.00	127.99	1,551 3,103
1953	67.04	134.07	1,625 3,250
1954	70.22	140.44	1,702 3,405
1955	73.56	147.11	1,783 3,566

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Valuation Year	Grassland Price / Acre	Farmland Price / Acre	Relative Value of 24,242 Acres
1967	128.37	256.74	3,112 6,224
1968	134.47	268.94	3,260 6,520
1969	140.86	281.71	3,415 6,829
1970	147.55	295.10	3,577 7,154
1971	154.56	309.11	3,747 7,494
1972	161.90	323.80	3,925 7,850
1973	169.59	339.18	4,111 8,222
1974	177.64	355.29	4,307 8,613
1975	186.08	372.16	4,511 9,022
1976	194.92	389.84	4,725 9,451
1977	204.18	408.36	4,950 9,900
1978	213.88	427.76	5,185 10,370
1979	224.04	448.07	5,431 10,862
1980	234.68	469.36	5,689 11,378
1981	245.83	491.65	5,959 11,919
1982	257.50	515.01	6,242 12,485
1983	269.73	539.47	6,539 13,078
1984	282.55	565.09	6,850 13,699
1985	295.97	591.94	7,175 14,350
1986	310.03	620.05	7,516 15,032
1987	324.75	649.50	7,873 15,746
1988	340.18	680.36	8,247 16,493
1989	356.34	712.67	8,638 17,277
1990	373.26	746.53	9,049 18,098
1991	390.99	781.99	9,479 18,957
1992	409.56	819.13	9,929 19,858
1993	429.02	858.04	10,400 20,801
1994	449.40	898.79	10,894 21,789
1995	470.74	941.49	11,412 22,824
1996	493.10	986.21	11,954 23,908
1997	516.53	1,033.05	12,522 25,044
1998	541.06	1,082.12	13,117 26,233
1999	566.76	1,133.52	13,740 27,479
2000	593.68	1,187.37	14,392 28,785
2001	621.88	1,243.77	15,076 30,152
2002	651.42	1,302.85	15,792 31,584
2003	682.37	1,364.73	16,542 33,084
2004	714.78	1,429.56	17,328 34,656
2005	748.73	1,497.46	18,151 36,302
2006	784.29	1,568.59	19,013 38,026
2007	821.55	1,643.10	19,916 39,833
2008	860.57	1,721.14	20,862 41,725
2009	901.45	1,802.90	21,853 43,707
2010	944.27	1,888.54	22,891 45,783
2011	989.12	1,978.24	23,979 47,957



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Analysis of Landowner Payments for T-Line Easements (Next 100 Years)

Acres / Mile in a 200 ft Easement = \$ 24,242		Average Value of 200 ft Easement (per mile) for the next 100 Years	
Inflation Rate = 4.75%		\$ 517,992 \$ 1,035,983	
Valuation Year	Grassland Price / Acre	Farmland Price / Acre	Relative Value of 24.242 Acres
2067	12,698	25,395	307,820 615,640
2068	13,301	26,601	322,442 644,883
2069	13,932	27,865	337,757 675,515
2070	14,594	29,189	353,801 707,602
2071	15,288	30,575	370,607 741,213
2072	16,014	32,027	388,210 776,421
2073	16,774	33,549	406,650 813,301
2074	17,571	35,142	425,966 851,932
2075	18,406	36,811	446,200 892,399
2076	19,280	38,560	467,394 934,788
2077	20,196	40,392	489,595 979,191
2078	21,155	42,310	512,851 1,025,702
2079	22,160	44,320	537,211 1,074,423
2080	23,213	46,425	562,729 1,125,458
2081	24,315	48,630	589,459 1,178,917
2082	25,470	50,940	617,458 1,234,916
2083	26,680	53,360	646,787 1,293,574
2084	27,947	55,895	677,510 1,355,019
2085	29,275	58,550	709,691 1,419,383
2086	30,665	61,331	743,402 1,486,803
2087	32,122	64,244	778,713 1,557,426
2088	33,648	67,295	815,702 1,631,404
2089	35,246	70,492	854,448 1,708,896
2090	36,920	73,840	895,034 1,790,068
2091	38,674	77,348	937,548 1,875,097
2092	40,511	81,022	982,082 1,964,164
2093	42,435	84,870	1,028,731 2,057,462
2094	44,451	88,902	1,077,596 2,155,191
2095	46,562	93,124	1,128,781 2,257,563
2096	48,774	97,548	1,182,398 2,364,797
2097	51,091	102,181	1,238,562 2,477,125
2098	53,518	107,035	1,297,394 2,594,788
2099	56,060	112,119	1,359,020 2,718,041
2100	58,722	117,445	1,423,574 2,847,147
2101	61,512	123,023	1,491,193 2,982,387
2102	64,434	128,867	1,562,025 3,124,050
2103	67,494	134,988	1,636,221 3,272,443
2104	70,700	141,400	1,713,942 3,427,884
2105	74,058	148,117	1,795,354 3,590,708
2106	77,576	155,152	1,880,633 3,761,267
2107	81,261	162,522	1,969,964 3,939,927
2108	85,121	170,242	2,063,537 4,127,074
2109	89,164	178,328	2,161,555 4,323,110
2110	93,399	186,799	2,264,229 4,528,457
2111	97,836	195,672	2,371,780 4,743,559



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Inflation Rate = 4.75%		\$ 517,992 \$ 1,035,983	
Valuation Year	Grassland Price / Acre	Farmland Price / Acre	Relative Value of 24.242 Acres
2012	\$ 989	\$ 1,978	\$ 23,979 \$ 47,957
2013	1,036	2,072	25,118 50,235
2014	1,085	2,171	26,311 52,622
2015	1,137	2,274	27,561 55,121
2016	1,191	2,382	28,870 57,739
2017	1,247	2,495	30,241 60,482
2018	1,307	2,613	31,677 63,355
2019	1,369	2,738	33,182 66,364
2020	1,434	2,868	34,758 69,516
2021	1,502	3,004	36,409 72,818
2022	1,573	3,146	38,139 76,277
2023	1,648	3,296	39,950 79,901
2024	1,726	3,452	41,848 83,696
2025	1,808	3,616	43,836 87,671
2026	1,894	3,788	45,918 91,836
2027	1,984	3,968	48,099 96,198
2028	2,078	4,157	50,384 100,767
2029	2,177	4,354	52,777 105,554
2030	2,280	4,561	55,284 110,568
2031	2,389	4,778	57,910 115,820
2032	2,502	5,004	60,660 121,321
2033	2,621	5,242	63,542 127,084
2034	2,746	5,491	66,560 133,120
2035	2,876	5,752	69,722 139,443
2036	3,013	6,025	73,033 146,067
2037	3,156	6,311	76,503 153,005
2038	3,306	6,611	80,136 160,273
2039	3,463	6,925	83,943 167,886
2040	3,627	7,254	87,930 175,860
2041	3,799	7,599	92,107 184,214
2042	3,980	7,960	96,482 192,964
2043	4,169	8,338	101,065 202,130
2044	4,367	8,734	105,865 211,731
2045	4,574	9,149	110,894 221,788
2046	4,792	9,583	116,162 232,323
2047	5,019	10,039	121,679 243,358
2048	5,258	10,515	127,459 254,918
2049	5,507	11,015	133,513 267,026
2050	5,769	11,538	139,855 279,710
2051	6,043	12,086	146,498 292,996
2052	6,330	12,660	153,457 306,914
2053	6,631	13,262	160,746 321,492
2054	6,946	13,891	168,382 336,763
2055	7,276	14,551	176,380 352,759
2056	7,621	15,243	184,758 369,515
2057	7,983	15,967	193,534 387,067
2058	8,362	16,725	202,727 405,453



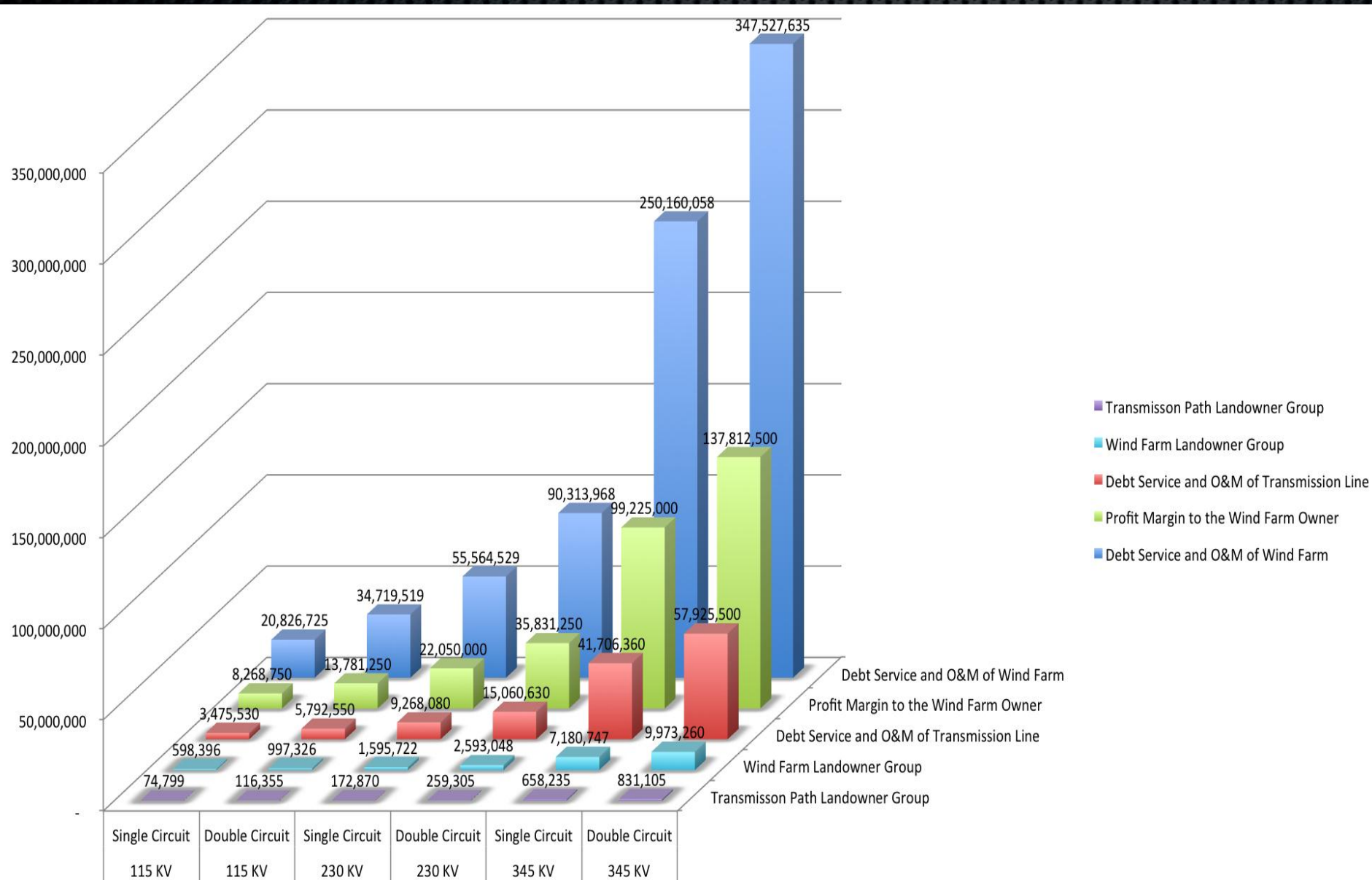
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The following Assumptions have been used in the attached Analysis:

Construction Cost per Megawatt	\$ 10,000,000 ,100,000 /MW
% Equity Financing of Total Project Cost	35.0%
Target ROI % of Equity Capital (after PTC & Taxes)	7.5%
Retail FVM of Power per MWh (in the Midwest USA)	\$ 10,000,000 0.00
Commercial T-Line Debt Service and O&M	\$ 10,000,000 5.75 /MWh
Production Tax Credit ("PTC") for 10 years	\$ 10,000,000 2.00 /MWh
% of Gross Revenue to the Landowner in the Wind Farm	3.0%
Assumed Net Capacity Factor of the Wind Farm(s)	46.0%
Assumed Wholesale FVM of Power per MWh	\$ 10,000,000 3.00 /MWh
Assumed Length of Transmission Line (Miles) from Wind Farm to Interconnection	10,000,000 50 Miles

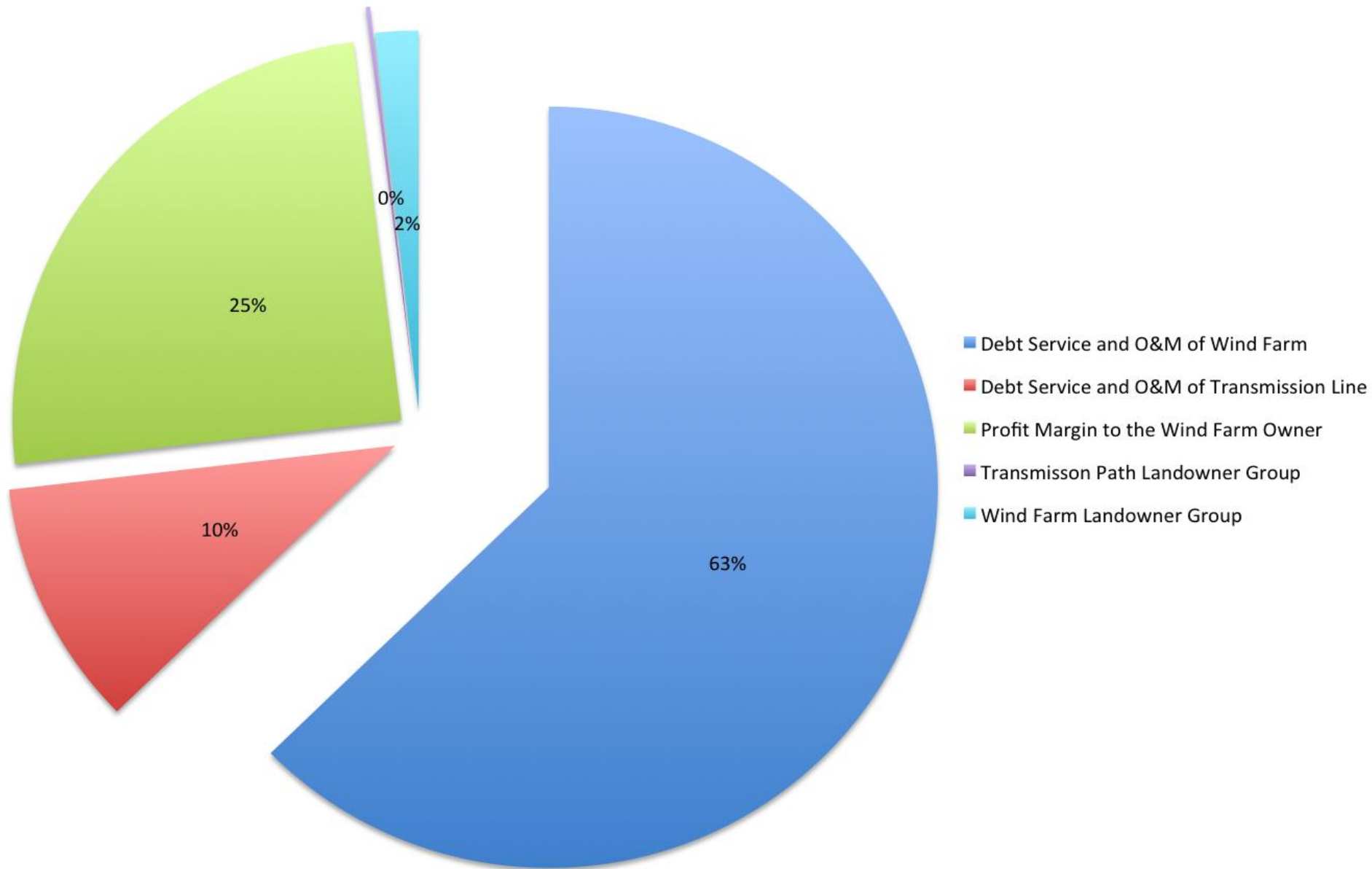


Approximation of the flow of dollars for the primary components of a Wind Farm Project





Approximation of the flow of dollars for the primary components of a Wind Farm Project





Cornerstone TransCo, LLC

Analysis of Landowner Payments for Transmission Line Easements

	<u>115KV Single Circuit</u>	<u>115KV Double Circuit</u>	<u>230KV Single Circuit</u>	<u>230KV Double Circuit</u>	<u>345KV Single Circuit</u>	<u>345KV Double Circuit</u>
Load Capacity of the Rated Line (MW)	150	250	400	650	1,800	2,500
Proposed Annual Payment to the Landowner Group (for Entire Path)	\$ 4,799	\$ 16,355	\$ 72,870	\$ 259,305	\$ 658,235	\$ 1,831,105
Proposed Annual Payment per Mile to the Landowner	\$ 1,496	\$ 2,327	\$ 3,457	\$ 5,186	\$ 13,165	\$ 16,622
Estimated Cost per Mile for 2-Line Construction	\$ 240,000	\$ 300,000	\$ 450,000	\$ 600,000	\$ 1,100,000	\$ 1,500,000
Estimated Total Cost of the Wind Farm Project	\$ 15,000,000	\$ 25,000,000	\$ 40,000,000	\$ 365,000,000	\$ 780,000,000	\$ 1,250,000,000
Estimated Total Cost of the Transmission Line	\$ 2,000,000	\$ 5,000,000	\$ 22,500,000	\$ 30,000,000	\$ 55,000,000	\$ 75,000,000
Retail FVM of Commodity on the Line	\$ 4,399,600	\$ 9,066,000	\$ 45,065,600	\$ 235,731,600	\$ 652,795,200	\$ 906,660,000
Wholesale FVM of Commodity on the Line	\$ 9,946,520	\$ 3,244,200	\$ 3,190,720	\$ 6,434,920	\$ 39,358,240	\$ 32,442,000
Annual PTC for 1st 10 Years of Production	\$ 3,297,680	\$ 2,162,800	\$ 5,460,480	\$ 7,623,280	\$ 59,572,160	\$ 21,628,000



Analysis of Landowner Payments for Transmission Line Easements

Flow of Dollars to All Participants in Wind Farm Project(s)

	115KV	115KV	230KV	230KV	345KV	345KV
	<u>Single Circuit</u>	<u>Double Circuit</u>	<u>Single Circuit</u>	<u>Double Circuit</u>	<u>Single Circuit</u>	<u>Double Circuit</u>
Debt Service and O&M of Wind Farm	20,826,725	34,719,519	55,564,529	90,313,968	250,160,058	347,527,635
Debt Service and O&M of Transmission Line	3,475,530	5,792,550	9,268,080	15,060,630	21,706,360	37,925,500
Profit Margin to the Wind Farm Owner	8,268,750	13,781,250	22,050,000	35,831,250	99,225,000	137,812,500
Transmission Path Landowner Group	4,799	16,355	72,870	259,305	658,235	831,105
Wind Farm Landowner Group	598,396	997,326	1,595,722	2,593,048	7,180,747	9,973,260
KWh Produced Annually	604,440,000	1,007,400,000	1,611,840,000	2,619,240,000	7,253,280,000	10,074,000,000
\$ Amount / KWh to be passed on to Consumers	\$ 0.0001238	\$ 0.0001155	\$ 0.0001073	\$ 0.0000990	\$ 0.0000908	\$ 0.0000825



Cornerstone TransCo, LLC

Supporting NPV Calculations for Comparison

NPV of Revenue Stream

\$	2,936,383	\$	1,000,000
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Discount Rate used in calculation above =
Inflation Escalation =

5.0%
2.50%

5.0%

(\$20 K per Mile)

**Double Circuit
230 KV T-Line**

**Historical Approach
One-Time Payment**

Year # 1	\$	162,222	\$	55,246
Year # 2	\$	166,278	\$	56,627
Year # 3	\$	170,435	\$	58,042
Year # 4	\$	174,695	\$	59,493
Year # 5	\$	179,063	\$	60,981
Year # 6	\$	183,539	\$	62,505
Year # 7	\$	188,128	\$	64,068
Year # 8	\$	192,831	\$	65,670
Year # 9	\$	197,652	\$	67,311
Year # 10	\$	202,593	\$	68,994
Year # 11	\$	207,658	\$	70,719
Year # 12	\$	212,849	\$	72,487
Year # 13	\$	218,171	\$	74,299
Year # 14	\$	223,625	\$	76,157
Year # 15	\$	229,216	\$	78,060
Year # 16	\$	234,946	\$	80,012
Year # 17	\$	240,820	\$	82,012
Year # 18	\$	246,840	\$	84,063
Year # 19	\$	253,011	\$	86,164
Year # 20	\$	259,336	\$	88,318
Year # 21	\$	265,820	\$	90,526
Year # 22	\$	272,465	\$	92,789
Year # 23	\$	279,277	\$	95,109
Year # 24	\$	286,259	\$	97,487
Year # 25	\$	293,415	\$	99,924



Key Elements to be considered when negotiating a Transmission Line Easement:

- ① Be careful to appropriately match the term with the compensation (If your financial situation allows, consider the impact on future generations)
- ② It's very helpful if the landowner group understands the importance of minimizing the T-Line path distance and the number of turns
- ③ Practical cooperation will help maximize landowner revenue and promote greater willingness to keep the path as far as possible from buildings, working facilities and other reasonable causes for path modifications.
- ④ Should be an optional payment structure providing the landowner with a choice of a one-time payment or a perpetual annual payment.
 - A. One-time payment: Historical precedence is roughly \$3.00 / linear foot of easement (with higher amounts for special circumstances such as to get through cities or specially zoned areas) Cornerstone has been working to establish one-time payment rates much higher.
 - B. Perpetual annual payments: Cornerstone has negotiated an annual fee per MWh based on metered power on the line (less a provision for line loss)
 - C. Perpetual annual payments should be adjusted annually for inflation
- ⑤ Challenges and significance of computing the annual payment on metered flow of power.



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