

Cost estimates of recently completed and proposed transmission projects from renewable sources

Name of project	CREZ	Sunrise Powerlink	Plains and Eastern	Oaxaca to Mexico City	Southern Cross	Champlain-Hudson
Status	Completed	Completed	Proposed	Proposed	Proposed	Proposed
Generation source	Wind	Wind/Solar	Wind	Wind	Wind	Hydro
Length (miles)	3,600	116	700	370	400	333
Type of line	AC	AC	High-voltage DC	High-voltage DC	High-voltage DC	High-voltage DC
Voltage	Various	500kV & 230 kV	600 kV		500 kV	300 kV
Line placement	Overhead	Overhead/ underground	Overhead	Overhead	Overhead	Underground
Location	Texas	Imperial Valley to San Diego	West Texas to Memphis, TN	Oaxaca to Mexico City	West Texas to Mississippi	Southern Quebec to New York City
Capacity GW	11	1	4	3	2	1
Transmission line upfront cost	\$7.0 bn	\$1.9 bn	\$2.5 bn	\$1.7 bn	\$1.4 bn	\$2.2 bn
Upfront cost per kW	\$636	\$1,900	\$625	\$567	\$700	\$2,200
Upfront cost per MW	\$636,364	\$1,900,000	\$625,000	\$566,667	\$700,000	\$2,200,000
Capacity factor	45%	39%	45%	45%	45%	30%
MWh	43,362,000	3,416,400	15,768,000	11,826,000	7,884,000	2,628,000
Cost per MWh	\$17.12	\$59.00	\$16.82	\$15.25	\$18.84	\$88.80

Sources: Various media reports and project websites. Discount rate = 10%. Useful life = 30 years. May 2017.