

Supplemental Testimony of Thomas L Welch to the Energy, Utilities and Technology Committee
concerning LD 1710

At the hearing, I was asked for an estimate of the cost of the line envisioned by LD 1710. In order to bring the resources in question to the New England market, a line of about 200 miles in length would likely be required.

The American Clean Power Association in May 2021 estimated that a 200-mile line (including necessary substation and other upgrades) would cost around \$500 million. See <http://www.mainelegislature.org/legis/bills/getTestimonyDoc.asp?id=165179>

This estimate, of \$2.5 million per mile for 345 kV transmission lines in Maine, appears reasonable based on my experience and the increasingly competitive transmission construction market. While costs vary from region to region, one recent estimate for construction in a southeastern area estimated the per mile cost of such a line at \$1.5 to \$2.5 million (in 2008 dollars, equivalent to \$1.8 to \$3.1 million in today's dollars). See

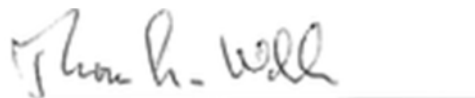
https://web.ecs.baylor.edu/faculty/grady/_13_EE392J_2_Spring11_AEP_Transmission_Facts.pdf

A study of the cost of transmission for wind integration done in 2009 by the Lawrence Berkeley National Laboratory showed a similar range of costs. See

<https://doi.org/10.2172/948131>

at pp. 19-22

Thomas L Welch
May 25, 2021

A handwritten signature in dark ink, appearing to read "Thomas L. Welch", is written over a horizontal line.

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