

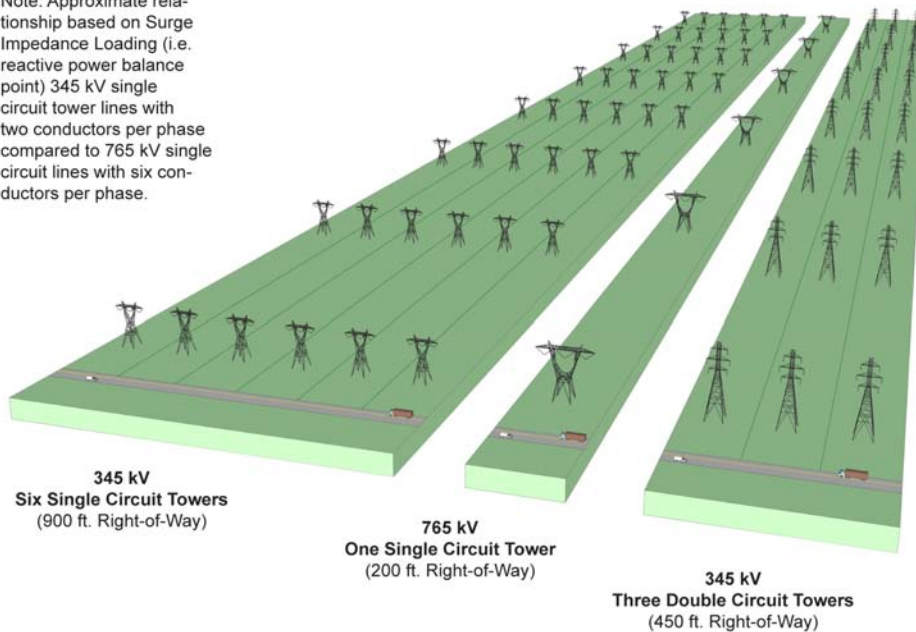


Looking Towards the Future: *Right-of-Way Stewardship*

AEP advocates the development of a robust interstate grid. 765kV technology allows for the maximum electric transfer capabilities of any AC voltage used in the United States and reflects an ideal solution when considering land use requirements. Transmission lines require the acquisition of land use rights. AEP believes its important to maximize the benefit associated with needed land use rights.

From a siting standpoint, 765 kV is much more efficient in terms of economies of scale and right-of-way than lower capacity lines. A 765 kV line requires a much narrower right-of-way than multiple smaller lines needed to transmit the same amount of power and is capable of using either four-bundled or six-bundled subconductors. 765kV tower spanning capabilities also allow for longer spans between structures thereby resulting in 765kV having a smaller towers per mile number than AEP experiences with lower voltage construction.

Note: Approximate relationship based on Surge Impedance Loading (i.e. reactive power balance point) 345 kV single circuit tower lines with two conductors per phase compared to 765 kV single circuit lines with six conductors per phase.



345 kV
Six Single Circuit Towers
(900 ft. Right-of-Way)

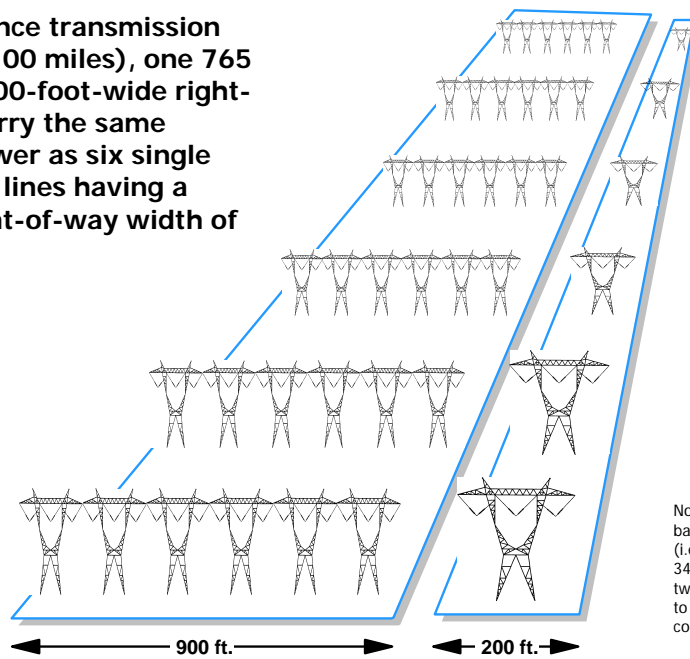


765 kV
One Single Circuit Tower
(200 ft. Right-of-Way)



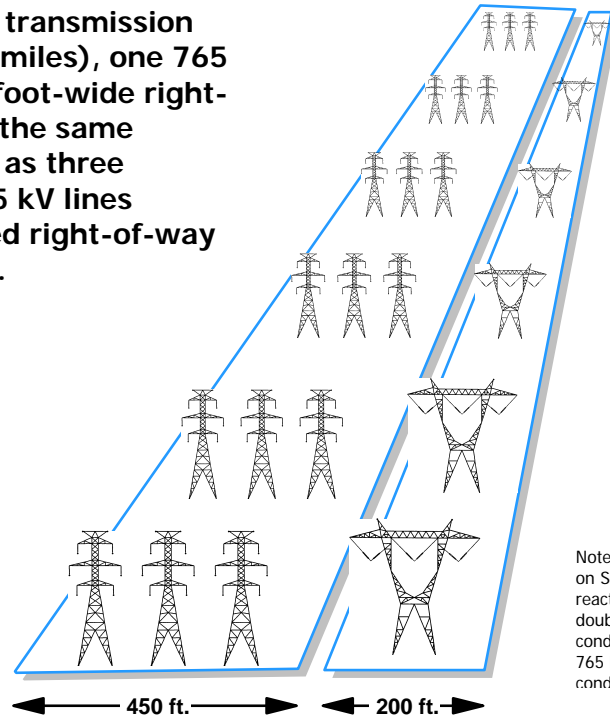
345 kV
Three Double Circuit Towers
(450 ft. Right-of-Way)

For long distance transmission (longer than 100 miles), one 765 kV line on a 200-foot-wide right-of-way can carry the same amount of power as six single circuit 345 kV lines having a combined right-of-way width of 900 feet.



765 kV vs. Single Circuit 345 kV: a 765 kV line requires a 200-foot wide right-of-way. Six single-circuit 345 kV lines would be required to carry a comparable amount of power (based on the surge impedance level), with a combined width of 900 feet of right-of-way (assuming no overlap). In addition, a single-circuit 345 kV line uses lattice towers averaging 110 feet tall, while a 765 kV line has lattice towers averaging 127 feet tall.*

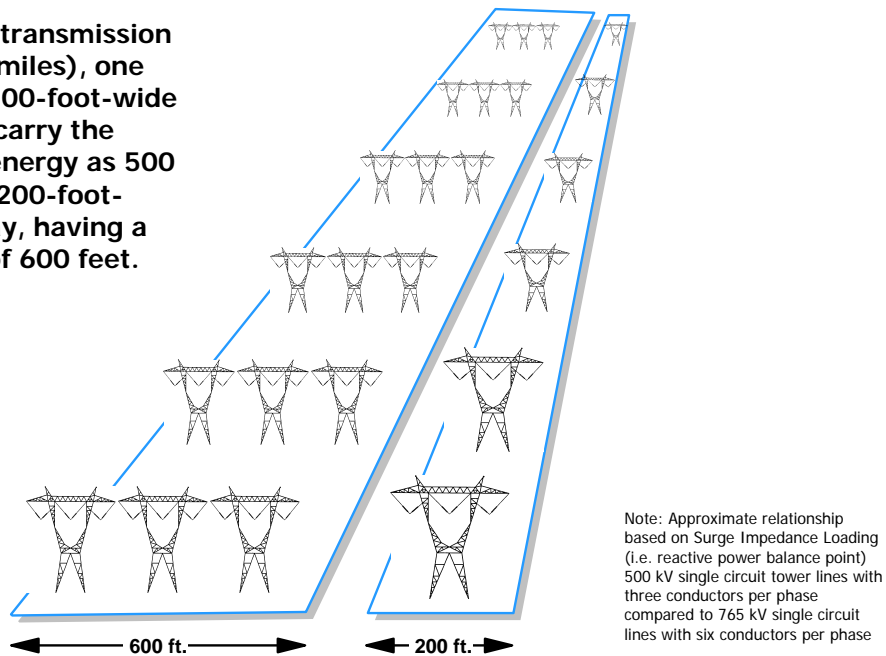
For long distance transmission (longer than 100 miles), one 765 kV line on a 200-foot-wide right-of-way can carry the same amount of power as three double circuit 345 kV lines having a combined right-of-way width of 450 feet.



765 kV vs. Double Circuit 345 kV: A 765 kV line requires a 200-foot wide right-of-way. Three double-circuit 345 kV lines would be required to carry a comparable amount of power (based on the surge impedance level), with a combined width of 450 feet of right-of-way (assuming no overlap). In

addition, a double-circuit 345 kV line uses lattice towers averaging 170 feet tall, while a 765 kV line has lattice towers averaging 127 feet tall.*

For long distance transmission (longer than 100 miles), one 765 kV line on a 200-foot-wide right-of-way can carry the same amount of energy as 500 kV lines on three 200-foot-wide rights-of-way, having a combined width of 600 feet.



765 kV vs. 500 kV: With six-bundled 765 kV subconductors, the equivalent numbers of lower voltage classes is three 500 kV lines, with a combined total of 600 feet of right of way, six 345 kV lines, with a combined total of 900 feet of right of way, or 24 double-circuit 138 kV lines, with a combined total right of way of 2,400 feet. In comparison, a 765 kV line only requires 200 feet of right-of-way.

*Average tower height calculations based on standard conductor size with standard tension and sagging characteristics, AEP's required conductor-to-ground clearance and similar terrain conditions. Tower heights vary depending on site conditions.