CITY OF ST. PAUL

DEPARTMENT OF SAFETY AND INSPECTIONS
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Overhead Conductor Clearances from Decks, Detached Garages, Swimming Pools, Spas & Hot Tubs

If you are thinking of installing a deck, garage, swimming pool, spa or hot tub outdoors under, or near, overhead power lines (examples: Xcel power lines, garage overhead to house), please be aware that those wires have minimum clearance requirements that must be maintained after the deck, garage, pool or hot tub is installed. These clearances are the minimum necessary for electrical safety as determined by the current National Electrical Code to prevent contact with live wires when standing on a deck, or when in or around a hot tub, spa or swimming pool. Also, please take into consideration that you own and would be responsible for modifications to the customer owned portion of the electrical service: mast, meter socket, etc.. The two items XCEL owns are the overhead wires between your house and the wood pole and the electric meter. Any modification to the service is your financial responsibility, and XCEL energy may have additional charges for their work with the overhead wires.

Decks: A minimum of 10 feet is required between the overhead conductors and any point on the deck directly under the wires. This includes the "drip loop" where the conductors attach to the house. This loop may be the low point of the entire run of wire and must have a minimum of 10 ft. from the deck surface.

Garage: A minimum of 3 feet is required between the overhead conductors and a detached garage roof with a slope of 4 in. to 12 in. or greater. A slope less than that, or a flat roof requires a minimum clearance of 8 feet from the roof surface.

Swimming Pools, Spas and Hot Tubs: The overhead conductors must be a minimum of 22-1/2 feet above the maximum water level of the pool, hot tub or spa. This minimum height is extended for a distance of 10 feet, horizontally around the pool, spa or hot tub. There are greater clearances if the pool, spa or tub is close to the higher voltage wires that may be run from pole to pole normally in the alley, or back of the property line.

How Do I Get The Clearances I Need? There are 3 basic ways to get the additional clearance you need for safety:

1. **Raise the height of the overhead conductors -** this may be possible if the additional height necessary is fairly small. XCEL may charge for moving their wires.
2. **Move the service location -** This requires, at the minimum, moving the mast to a new location so that the overhead wires will not cross within the boundaries of the restricted space above the deck, garage, pool, hot tub or spa. XCEL may charge a fee for moving their wires.
3. **Bury the service, feeder, or branch circuit conductors -** This is an option when planning your garage or deck project to avoid overhead clearance issues**.** This is also possible for pool, spa or hot tub installations, but be aware there are additional requirements when installing underground wiring near a pool. Also, underground wiring shall not be installed under a pool, spa, or hot tub. Your first step, if the conductors are for the service, would be to contact XCEL Energy (800-628-2121) to have them determine whether it is even feasible to bury the service conductors. XCEL does charge a fee for the burial of the conductors.

Who can do this electrical work? Under certain circumstances, an owner-homesteader of a single-family dwelling may do their own electrical work (please contact us for further information before proceeding) after obtaining an electrical permit from this office. Since working around utility wiring may be hazardous, please consider hiring a professional electrical contractor (company) licensed with the State of Minnesota. The contractor obtains their own electrical permit and inspections as needed. For further information, please call the electrical inspectors at (651) 266-9003 between 7:30 & 9:00am. Monday-Friday.