



Why are birds not electrocuted when they sit on power lines?

Electricity moves through power lines from high energy areas to low energy areas, such as from the powerful production plant to your much lower voltage home. Electricity will travel sometimes hundreds of miles through power lines. Electricity is always trying to get to the ground by any means possible. So, to get electrons to move through the lines, the lines must be connected to the ground at some point. The point where power connects to reach the ground is usually where it will travel through copper lines running down the poles to the surface below. This completes the “CIRCUIT”.

The reason people or animals get shocked and electrocuted is because they are touching the line with one part of their body and another part, usually their feet, is touching the ground. They complete the circuit, as the electricity will run through them to reach the ground. Electricity moving through a living body can cause burns, damage to organs and even death.



Since the bird is sitting with both feet on the line, and not touching the ground or the pole that reaches to the ground, the bird is not completing a circuit and is not shocked or electrocuted. Should the bird have one foot on the line and another on the pole or ground, it would be electrocuted. The same can be said for people. If they are touching a power line (or something conducting power from the line) and they touch the ground, they would complete the circuit by using their body as a conductor and would be shocked or electrocuted.

