## **Power Restoration Process** Step 1 Tennessee Valley Authority (TVA) generating facilities transmit power over long distances to one or more transmission substations. These lines seldom fail, but can be damaged by natural disasters such as ice storms and tornadoes. Tens of thousands of customers could be served by one high voltage transmission line, therefore, if damaged, they are repaired first by TVA. TVA SUBSTATION TVA TRANSMISSION LINE Sten 2 CDE Lightband has 13 distribution substations, each serving TVA TRANSMISSION LINE thousands of customers. When a major outage occurs. these are evaluated first. A substation problem could be caused by failure of the transmission line supplying the substation or Customers (not CDE Lightband) an equipment failure inside the substation. If the problem can be are responsible for damage to corrected at this level, power can be restored to thousands. CDE LIGHTBAND SUBSTATION any equipment attached to their home or business. Life sustaining facilities such as Step 4 hospitals and nursing homes receive CDE LIGHTBAND PRIMARY Tap lines carry power to the transformers that provide priority attention during major outages. **DISTRIBUTION LINE** service to smaller groups of homes and businesses. These lines are repaired in the order that restores service to the greatest number of customers first. CDE LIGHTBAND TAP LINE Main distribution lines are checked next if the problem cannot be isolated at the substation. These lines carry electricity to multiple neighborhoods and businesses. When a distribution line is repaired, all customers served by this line could have power restored, as long PAD MOUNT TRANSFORMER **POLE WITH** as there is not a problem further down the line. **TRANSFORMER**