

#47: ELECTRIC POWER TRANSMISSION AND DISTRIBUTION CONTROL

The capacity of highly loaded electric power conductors, especially switching and transforming equipment, is limited by the temperature rise characteristics caused by the slight resistive losses. Accordingly, equipment utilization capacity is a direct function of the local temperature at critical points in the equipment.

With continuous real time monitoring with IRt/c's, critical equipment can be used much more effectively. If the temperature is below operating limits, additional power may be safely routed through the equipment. With the non-contact capability of the IRt/c, installation is simple, and live conductors may be safely and easily monitored. Inexpensive standard thermocouple transmitters and data collection equipment may be used to transmit the information to a central office where load switching decisions are made.

