- Electric equipment insulating materials would be specified to be free of polychlorinated biphenyls (PCBs).

- Hazardous wastes generated during construction would be handled, controlled, and disposed of by the contractor in accordance with standard industry practices and appropriate regulations.

- A 6-foot-high chain-link fence would be installed around the perimeter of the proposed power plant site and around individual water well heads. A four-strand barbed wire fence would be installed around the evaporation ponds. A cattle guard and gate would be installed where the access road enters the plant, and the gate would remain closed during normal operating hours.

#### 2.2.1.8 Operational Noise

A typical combined-cycle power plant generating 720-MW of power has a characteristic noise level of 75 A-weighted decibels (dBA) at 400 feet from the main facilities. Much of this noise originates from the turbines and cooling towers, but operational noise can occur from a variety of sources and activities at the plant. Section 3.1.8 provides more detail on noise levels that could be expected at various distances from the proposed power plant boundary.

### 2.2.2 Transmission System Modifications

#### 2.2.2.1 Substation and Electrical Equipment

The substation would provide the interconnection between the proposed power plant and the Mead-Phoenix Project 500-kV transmission line. The proposed electrical substation for the high-voltage transmission interconnection would cover about 12 acres and would be located between the proposed power plant and the existing Mead-Phoenix Project 500-kV transmission line. The transmission line crosses the proposed power plant site, eliminating the need for new electrical transmission lines to connect the proposed power plant to the regional grid. Western would design, construct, maintain, and operate the proposed substation. Figure 2-4a shows the location of the substation, and Figure 2-8 provides a photograph of a typical substation. A substation contains several different kinds of equipment arranged to carry out electrical functions, minimize safety risk, and accommodate operation and maintenance. The discussion below describes the equipment that would be installed in the proposed substation.

***Transformers***

Three 3-phase 500/16-kV transformers would be installed during the first phase of the proposed Project to step-up the voltage from the proposed power plant. Electricity produced by the steam turbine generators and the combustion turbine generators would be transformed to 500-kV for delivery over the transmission system. Each generator would be connected to the high-voltage substation via generator leads, conductor support structures, and a generator step-up transformer. Also, one 3-phase 69/16-kV transformer for interconnecting with the existing Mohave Electric Cooperative (MEC) 69-kV transmission line would be used for construction power and station service. One 3-phase 16/12.47-kV transformer would be installed for serving water supply pump loads. A 500/69-kV transformer may be installed to strengthen the tie with the local 69-kV system. For Phase 2 of the proposed Project, one additional 3-phase 500/16-kV generator step-up transformer would be installed.

The step-up transformers each would contain about 45 cubic meters (12,000 gallons) of cooling oil. An oil containment liner would be installed to collect and retain oil within the substation should an oil spill occur, in accordance with a Spill Prevention, Control and Countermeasures (SPCC) Plan. Only newly purchased electrical equipment certified as PCB-free would be installed.