would be provided for the stator winding and direct cooling would be provided for the rotor winding.

A combined-cycle unit using both the steam turbine and combustion turbine to power one electrical generator rated at 220 MW would be added under Phase 2. The combustion turbine would be similar to the first two and would be rated at 160 MW.

2.2.1.3 Heat Recovery Steam Generators and Air Pollution Control Equipment

The high-temperature (about 1,000 degrees Fahrenheit) combustion turbine exhaust gas would be directed through its HRSG, for combined-cycle operation. This HRSG system would use the heat available in the exhaust gas to produce steam for the steam turbine.

Duct burners would be located in the transition section between each combustion turbine exhaust and the HRSG. Duct burners are natural gas burners that would add about 45 million British Thermal Units (BTU) per hour of heat to each HRSG. This additional heat energy would increase plant electrical output up to an additional 9 MW for each HRSG. The duct burners would be used during periods of peak energy demand to maximize the plant's electrical output.

The reduction in combustion turbine gas temperature in the HRSG would allow the use of advanced SCR systems to minimize concentrations of CO and NO_X. The SCR system would control emissions, as needed, to satisfy air quality standards. NO_X would be controlled in the exhaust gas during normal operations to a maximum of 2.5 parts per million volume, dry (ppmvd), corrected to 15 percent oxygen and dry gas conditions. The CO would be controlled during normal operation to a maximum emission rate from the turbine of 5 ppmvd. CO emissions would increase to 8 ppmvd during duct firing. The exhaust gas would be discharged through an integral exhaust stack about 130 feet in height.

The catalyst planned for NO_x control requires the addition of ammonia to the system. Aqueous ammonia is planned for this Project. About 10 part per million (ppm) of aqueous ammonia would be expected to exit the system unreacted. In addition, some formaldehyde and other gases would be released as a result of the natural gas combustion process.

Additional details on air pollutant emissions expected from operation of the proposed power plant are provided in Section 3.1, Air Resources.

2.2.1.4 Steam Turbines, Generators, and Condensers

Two steam turbines are proposed, one with Phase 1 and one with Phase 2. The initial steam turbine would power a generator rated at about 160 MW with a water-cooled condenser. The steam turbine would be fitted with stop and control valves for the high-pressure steam admission. The steam turbine and condensers would be factory-assembled and shipped in modules for field erection. The proposed design and size of the steam turbine would provide for incremental output during peak operations.

After powering the steam turbine, the exhaust steam would be condensed to water using a closed system condenser, which would transfer the heat to water circulated through a cooling tower.

Under Phase 2, the proposed steam turbine would drive the same shaft as the gas turbine also proposed to be installed during Phase 2. Together, the steam and gas turbines would power an enclosed air-cooled generator rated at 220 MW. After powering the steam turbine, the exhaust steam would be condensed, as described above.

2.2.1.5 Plant Cooling System

The Proposed Action would include two separate cooling systems. The first would be the cooling system installed at the inlet of the turbine that would use evaporation of water to cool incoming air. This would increase the air