

9.4.4 Turbine Island Ventilation Systems

Ventilation systems for the turbine island consists of the turbine building ventilation system (TBVS) and the switchgear building ventilation system, turbine island (SWBVS).

The turbine building ventilation system (TBVS) provides heating and ventilation in the Turbine Building (TB) for normal operating modes as well as during refueling outages. The TBVS supplies conditioned air to maintain TB temperatures within the operating requirements for equipment operation and provides an acceptable environment for personnel who operate and maintain the equipment within the building. The TBVS is classified as a non-safety-related system; it does not provide accident response nor does it provide radioactive effluent control functions for the U.S. EPR.

The TBVS does not exhaust turbine gland seal or condenser evacuation. These gaseous exhausts are directed to the NABVS, where they are exhausted through the vent stack and monitored. Refer to Sections 10.4.2 and 10.4.3 for a description of main condenser evacuation system exhaust and turbine gland sealing system exhaust.

As noted in Table 1.8-1—Summary of U.S. EPR Plant Interfaces with Remainder of Plant, the TB and its associated ventilation system is an interface with the U.S. EPR standard design. A COL applicant that references the U.S. EPR design certification will provide site-specific design information for the TBVS.

The switchgear building ventilation system, turbine island (SWBVS) provides heating and ventilation in the remainder of the Switchgear Building (SWGB) for normal operating modes as well as during refueling outages. The SWBVS supplies conditioned air to maintain SWGB temperatures within the operating requirements for equipment operation and provides an acceptable environment for personnel who operate and maintain the equipment within the building. The SWBVS is classified as a non-safety-related system; it does not provide accident response nor does it provide radioactive effluent control functions for the U.S. EPR.

As noted in Table 1.8-1—Summary of U.S. EPR Plant Interfaces with Remainder of Plant, the SWBVS is an interface with the U.S. EPR standard design. A COL applicant that references the U.S. EPR design certification will provide site-specific design information for the SWBVS.