## MOHEGAN SUN AT THE CONCORD Exhibit VIII.C.16. Physical Plant and Mechanical Systems

**Hotel**: Hotel guest room heating, ventilation, and air conditioning (HVAC) will be provided by unitary water cooled air conditioning equipment. The terminal equipment in each guest room will have a hydronic coil to provide heating. Rooftop mounted direct outside air systems (DOAS) will provide tempered outside air ventilation to hotel rooms and corridors. The DOAS will be propane fuel fired to generate heating. The exhaust and ventilation systems are intended to incorporate air to air heat recovery. The condenser water cooling tower associated with the guest room air conditioners will be located on the roof of the central physical plant. The central plant is approximately 10,000 square feet of facility space. The central physical plant will also enclose the hotel's propane fired boilers that generate heating and domestic hot water. The boilers will be high efficiency modular condensing boilers. The cooling towers and boilers will have a redundant module to provide N+1 100% redundancy. The hotel will have a dedicated emergency power life safety generator which can also be used during load curtailment programs to provide an approximate load reduction of 25%.

Casino: The casino facility will be provided with dedicated air cooled rooftop HVAC equipment to provide air side heating, air conditioning and outside air ventilation. The associated furnaces will be propane fuel fired obtained from a central fuel tank system located on site and remote from the building facility. The systems will include enthalpy economizer. Excess outside/return air will be transferred as make up air to the enclosed garage exhaust system below the casino for heat recovery. Domestic hot water will be obtained from modular propane fuel fired high efficiency condensing boilers located in the central plant. Rooftop air conditioners will be provided with emergency backup power for 100% redundancy. Fuel oil for the generators will provide between 10 and 24 hours of generator operation. The generators may also be used during load curtailment programs to shed up to 100% of the peak demand.

Related casino computer rooms and data power will be served by static uninterruptible power supply systems (UPS). The UPS will include battery backup and will also be backed up by standby power generators.

Food Services, Retail, Convention/Meeting Space, Back of House: These areas will be served by dedicated rooftop HVAC equipment to provide air side heating, air conditioning and outside air ventilation. The associated furnaces will be propane fuel fired obtained from a central fuel tank system located on site and remote from the building facility. The systems will include enthalpy economizer. Domestic hot water will be obtained from modular propane fired high efficiency condensing boilers located in the central plant. The fuel oil fired life safety emergency power generator may also be used during load curtailment programs to shed approximately 15% of peak demand.

Summary of Utilities and Physical Plant: Domestic water and fire protection systems water service will be obtained from the municipal systems and municipal water

treatment plant. Sewage sanitary systems will discharge from the facility to the municipal systems and municipal sewage treatment plant. Electric power will be obtained from the local utility company. Utility power distribution to the facility will have 100% redundant feeders and transformers. Primary feeders to the transformation substations will also be 100% redundant. Utility company fuel gas is not available and therefore a centralized propane fuel tank plant will be provided.

The hotel will include a central mechanical plant containing heating boilers, domestic hot water boilers and air conditioning system cooling towers. The hotel will include a dedicated life safety fuel oil fired emergency power generator. The hotel cooling towers will be located on the roof of the central plant.

The casino will have heating boilers and domestic hot water boilers located in a central plant. Standby independent power generators serving the casino will be located outdoors adjacent to the central plant.

The convention space, food service areas and retail areas will have heating boilers and domestic hot water boilers located in the central plant. Emergency power independent generators serving the spaces will be located outdoors and adjacent to the central plant.

The central plant is approximately 10,000 square feet and is a portion of the building facility located with the back of house areas. The central propane fuel tank farm will be located above ground on site and remote from the building facility.