TIOGA DOWNS Casino Racing & Entertainment

Exhibit X.C.7. – Energy Consumption Monitoring

Submit as Exhibit X.C.7. a description of plans for developing an ongoing system that will submeter and monitor all major sources of energy consumption and for undertaking regular and sustained efforts throughout the life-cycle of the facility to maintain and improve energy efficiency and reliance on renewable sources of power in all buildings and equipment that are part of the facility.

A full Measurement and Verification Program ("M&V") in alignment with the requirements of LEED Credit EAc5 is being developed for Tioga Downs. Tioga Downs seeks to promote clear communication and understanding of its energy consumption thereby facilitating a coordinated means to reduce consumption and lower costs.

The M&V Plan is based on Option D: Calibrated Simulation of the International Performance Measurement & Verification Protocol (IPMVP) Volume III: Concepts and Options for Determining Energy Savings in New Construction, April, 2003. Option D has been selected for the M&V plan because of a) the integrated design process yielded efficiency strategies intended to work in concert with each other, making isolation of the energy conservation measures ("ECM") inappropriate and b) a computer simulation was used in the design phase to predict the whole building energy use.

The plan is intended to verify the cost consumption and savings associated with energy efficiency measures incorporated into the design, and to provide a recalibrated energy model that will serve as a tool in identifying and remedying causes of underperformance. Through the use of the building management system data logging and permanently installed sub-metering, the facility's operations staff will work with Cadmus and Energy & Environmental Solutions, the commissioning and energy modeling firms, to measure the actual utility usage of the building and key end uses for one year of post-occupancy consumption. A program will be developed during that year for continued monitoring and modeling of the systems performance into the future.

Collected data will be analyzed and used to verify the predicted energy performance, hence savings, of the ECMs integrated into the design as part of the LEED effort. The project will be fully commissioned to insure that the equipment is operating at its maximum design potential and in alignment with the energy model. Should a component of an ECM fail to work in the designed manner, maintenance will be performed to restore the equipment to its designed operation. Permanent and spot metering will be used to measure electric consumption. Operation staff will use metered trend data and spot checks to identify underperforming systems so that corrective action can be taken.

Permanent metering equipment will have Utility Grade Metering Accuracy. Within the M&V program, it is expected that the data collected during the period will be highly accurate. Limitations of the modeling program are expected to be the greatest potential source of inaccuracy. Adherence to ASRAE 90.1-2007 Appendix G protocols will be used to minimize this potential. The project is setting a goal of 5% error in the calibrated energy models.

The M&V strategy will be reviewed following the month of implementation to ensure that the procedures and processes are effective in capturing the required data. On a monthly basis, operations staff shall record the energy consumption of loads associated with the ECM. Also, operations staff shall record any significant O&M activities performed on the systems during that time period, including any associated costs. At the end of the one year M&V period, summaries will be prepared of the electrical consumption data for comparison with the recalibrated baseline and expected consumption. The metered equipment shall be inspected at the conclusion of each M&V period and as needed to verify proper operation.