

## **ENERGY CONSUMPTION MONITORING**

### **EXHIBIT X. C.7**

Resorts World Hudson Valley will use energy consumption monitoring (ECM) to reduce energy costs through improved energy efficiency and energy management control. Other benefits will include increased resource efficiency, improved production budgeting, and reduced greenhouse gas (GHG) emissions. ECM techniques will provide energy managers with feedback on operating practices, results of energy management projects, and guidance on the level of energy use that is expected during a certain period. In addition, it also gives early warning of unexpected excess consumption caused by malfunctions, operator error, unwanted user behaviors, maintenance errors, and the like. Results and findings are reported through the building management system (BMS) and are readily available to the facility director and ownership. The ultimate goal is to reduce energy costs through improved energy efficiency and energy management control.

The BMS that will be used for this project will have the capability to provide real-time daily, weekly, and monthly logging of electrical and propane usage for all buildings. BMS data logged would parallel information from the utility companies. “Enhanced” monitoring may be provided to segregate the central utility plant energy, lighting energy, hot water heating, kitchens, etc. Special consideration must be given to the electrical panel loading designations and routing of piping to isolate the different mechanical, electrical, and plumbing (MEP) systems. Again, the BMS will be able to handle these tasks easily. Since the building will use LEED design practices, a configuration similar to the enhanced monitoring above will be monitored to receive the points necessary for the desired LEED certification.

Excess electricity produced by the renewable energy system, but not consumed by the customer, can flow into the utility grid and is registered as a credit through the meter. If consumption of electricity exceeds what is generated by the energy system, the meter will register the amount of electricity that is consumed from the electricity grid. The Central Hudson Gas and Electric Corporation tariff details the rules and regulations applicable to electrical consumption.

Resorts World Hudson Valley consists of several site destinations—Interpretive Wetland Trail and Resorts World Grand Hotel and Convention Center. The Resorts World Grand Hotel and Conference Center will have the solar system deployed and also will be on a separate meter (net metering). Depending on the major systems’ designs for equipment and electrical loads, sub metering will be incorporated. The developer can create a program for each of the sub groups that establishes goals for energy efficiency, equipment optimization, and peak consumptions.