

## **Should A Generator Be Installed Capable Of Running The Refrigeration System & Complex Lighting**

We often have owners ask us about the need for installing a generator to maintain the ice sheet in the event of a power failure. The benefits and resulting cost for installing a generator should be considered in depth from all angles.

If the ideas we propose are adopted for this project, the building will be highly energy efficient. This translates into a complex with little heat load onto the ice sheet when its not being used.

When a power failure occurs, the ice sheet will take from 4 hours to as much as 12 hours before it hits the 32 degree mark and begins forming a layer of water atop of the ice sheet. Most everyday power failures from an unexpected thunderstorm are usually short lived and will not jeopardize the ice sheet.

If a major catastrophic event occurs such as a hurricane or tornado, the ice sheet may indeed melt. But then again, when a disaster of this nature occurs, who would want to be ice skating? We say let the ice sheet does melt.

Most insurance policies are designed to protect the owner under such events. With an ice sheet meltdown, the insurance company will pay to have the ice sheet repainted at no cost to the owner. Often, we want to re-paint our ice sheet but do not wish to incur the expense and down time. These types of disasters are the perfect time to give your ice sheet a face lift at the expense of the insurance company. After all, that's why we purchase insurance. If business interruption insurance is also secured, lost revenues can also be recouped.

So for the short-term power failures, the generator may not even be required. For the long-term power failures, we could hold our ice sheet with a generator, but would likely not have anyone visiting the facility. When a disaster like this happens, even the families without any damage feel too guilty to have fun while their neighbors are in ruins.

Every aspect of a development project like this should be evaluated on a return for investment basis. We believe if the generator is evaluated, it will not be a wise investment for most complexes unless it is designed for full time operation such as a mini-turbine in a cogeneration application.

The elimination of the generator will save a significant amount of money for something, which would rarely, if ever, be used. Now the emergency lighting system can be wall mounted, battery-pack type units, which would help the project and make for a more efficient operation. The emergency wall lights should be installed with a time delay off cycle to protect the complex, in the event of a power blink. This is a more economical approach to the emergency lighting system rather than installing a series of re-strike bulbs in the metal halide fixtures.