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## F700-Based PowerGate Improves Uptime and Lowers Total Cost of Ownership at Wynn Las Vegas

### Case Study

#### Solution

- PowerGate F700 pump package
- FR-A7-ETH Ethernet Interface

#### Benefits

- High uptime
- Low TCO
- Easy integration with existing controls

#### Advantages

- Robust hardware solution
- Extended warranty
- Multiple interface options



#### BACKGROUND

Wynn Las Vegas has experienced numerous drive failures since the original system was first installed seven years ago. This results in difficulty in maintaining water pressure to their high-profile show, which requires the water flow to cycle off and on at varying levels for the 30 minute shows all night long. Repair and replacement costs were adding up, and the loss of uptime made it difficult to meet the high expectations of their guests. Unfortunately, the show control used for this effect is a closed architecture that does not lend itself to simple integration with commonly available field bus solutions.

#### CHALLENGE

Wynn Las Vegas, a large resort casino in Las Vegas, NV had been experiencing failures of the pump drives that provide the water flow for their famous Lake of Dreams. The high cost of replacing the failed drives and the downtime of a highly visible attraction led the engineering team at Wynn Las Vegas to pursue other, more reliable options.



#### SOLUTION

The F700-based PowerGate solution from Mitsubishi Electric was chosen to drive the water pumps for the effect's waterfalls, which are seen by millions of guests every year on the world-famous Las Vegas Boulevard, "The Strip". The FR-A7N-ETH Ethernet interface module acts as a connectivity hub into the proprietary show control and re-maps the command and diagnostic data to allow for smooth integration. The PowerGate solution provides a seamless upgrade path to allow replacement of the older drives as needed without complicated program changes or extended periods of downtime. The high reliability, optional extended warranty, and exceptional service and support from both Mitsubishi Electric and the local supplier all contribute to a lower total cost of ownership (TCO), improved uptime, and greater peace of mind.

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### RESULTS

Since the first PowerGate was installed into this application there have been no failures or alarms. Additional PowerGate systems have been purchased for this attraction as a result of Mitsubishi Electric's solid reputation of quality in both pumping and air handling applications throughout the Wynn Las Vegas and its sister property, Encore.



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