**CUSTOMER:** JW Marriott Hotel Mexico City

**LOCATION:** Mexico City, Mexico

BACKGROUND:

The domestic hot water load for JW Marriott's Mexico City hotel was split into high pressure and low pressure zones, which roughly split the hotel in half. Each zone was calculated to required 70 gpm (260 lpm) maximum simultaneous demand.

SCOPE OF WORK: Armstrong International recommended a single Brain® Digital Recirculating Valve (DRV) per zone. The hot water supply to The Brain® is 155°F (68°C) and the system setpoint is 135°F (57°C).

The Brain® provides safe consistent hot water to each zone. The integral RS485 Serial Port on The Brain® connects the DRV directly to a Building Automation System (BAS) to receive and communicate the setpoint, inlet/outlet temperature and over-temp alert inputs from The Brain®.

**BENEFITS:** The Brain® has provided the JW Marriott with the following:

- Safety: Constant and accurate water temperature prevents potential scalding.
- Accuracy: Outlet temperature to system is +/- 2°F
- Simplicity: Constant steam pressure prevents stall, therefore, no pump trap is required; instantaneous water supply does not require storage tanks; and a single integral digital control valve (DRV80) replaces multiple components.
- Connectivity: The Brain and
  BrainScan™communicate through an
  onboard status display and remotely
  through a Building Automation System to
  provide self diagnostics, alarms and temperature trending.

