



## CASE STUDY

### INDIVIDUAL TEMPERED STATIONS

Power Company, Pacific Northwest

**Haws**  
*Integrated*<sup>™</sup>

ENGINEERED SOLUTIONS<sup>®</sup> FOR SAFETY

## INDIVIDUAL TEMPERED STATIONS

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Working in the power industry means regular exposure to numerous potential hazards, including the risks of explosion, fire and suffocation associated with integrated gasification technology. This environmentally sustainable process converts coal and other fuels into gas before using a combined cycle power block to generate electricity. For everyone's safety, strict adherence to appropriate standards is crucial.

#### BACKGROUND

To meet current safety regulations, a large and aging power facility in the Pacific Northwest needed to update safety shower systems throughout its integrated gasification area. Hazards associated with gasification include gases and residues that can result in explosions and fire, posing great risk to all employees. Despite the availability of cold potable water throughout the facility, the stringent safety measures set forth by the American National Standard Institute (ANSI) mandate individual tempered water systems to ensure appropriate temperatures during flushing. In addition, the shower systems had to comply with additional ANSI standards relating to proper height for combination showerheads and sufficient pressure and volume to each component during simultaneous use.

#### OBJECTIVE

While the facility had an abundance of cold potable water, each unit in the building required a tempering water system to meet specific ANSI water temperature mandates (Section 4.5.6., 7.4.5). The design also needed to address standards pertaining to appropriate combination showerhead height (Section 4.1.2) and simultaneous operation (Section 7.4.4). *Haws Integrated* needed to work closely with the power company to devise a single, efficient safety system that would power each of the more than 40 individual tempered water combination showers across the entire indoor and outdoor integrated gasification area of the facility.

#### SOLUTION

To satisfy specific site conditions at the power facility and bring it up to current safety standards, *Haws Integrated* designed a single skid system, HAWS® Model 8780, with one electrical connection and one potable water connection. The skid system was designed to power multiple indoor and outdoor combination safety shower and eye/face wash units, *Haws* Models 8317CTFP and 8330, constructed from solid and corrosive resistant materials. The 8780 system features a booster pump as well as a number of tempering and electrical options. It also incorporates several fail-safe features such as anti-scald protection and full flow cold water bypass.

#### RESULTS

*Haws Integrated* worked directly with the power company to design and install a custom safety system that not only accounted for the project's specific design conditions, but also brought the entire power facility up to code. Going forward, *Haws Integrated* remains available for onsite system assessments to maintain continuous ANSI compliance, including coordinated system and facility expansions and modifications.

