Reduce Steam and Condensate Loss

Customer: United States Army Post

Location: Pacific Northwest

Scope of Work:
A large Army Post in the northwest had significant energy loss from its steam distribution system. An extensive audit established a recurring loss of over $750,000 annually. Working through a Bonneville Power Administration (BPA) delivery order, they installed a steam trap monitoring system to save energy dollars, improve steam system safety, and qualify for a $450,000 energy rebate from Puget Sound Energy. Armstrong components were installed under a turnkey contract between BPA and Utility Systems Solutions, Inc, (US2) an SBA 8(a) and SDVOSB certified contractor. The payback, calculated on an average cost of $12.50/1000 lb. of steam, provided an excellent return on investment.

Upgrade Projects:
US2 performed a comprehensive steam trap audit, system design and developed a budgetary proposal, then performed the turnkey installation of the Armstrong SteamEye components in the turnkey project. Over 800 traps were replaced or retrofitted with monitoring devices in order to achieve comprehensive steam trap coverage. Because of the size of the system, three separate populations of monitored traps were established. For security reasons, the trap monitoring transmitters report to a SteamStar System receiver that is maintained off post via wireless internet access. After the installation, the system is being maintained under a multi-year service contract to ensure the energy savings.

Benefits:
This army post has reduced steam and condensate losses, established a multi-year program to sustain the energy savings and created a contracting framework with BPA to achieve additional savings from related projects in condensate recovery and component insulation.