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Support of Steam Trap addition to Title 24, part 6, section 1206

The American Council for an Energy Efficient Economy (ACEEE) and has had a long history with energy efficiency standards in the organization's 40 year history. In ACEEE's State Energy Scorecard California has continued to set the standard across multiple categories so we are pleased to see the inclusion of steam traps in California's codes.

ACEEE is pleased to support the proposed steam trap fault detection and diagnostics (FDD) code as a reliable and cost-effective additional industrial process efficiency update to the Title 24, part 6 building energy efficiency standards, section 120.6 " Mandatory Requirements for Covered Processes― Adding requirements for the efficient use of steam continues the history of Title 24 in leveraging good industrial practice across the sector.

The generation of process heat is a large consumer of industrial energy, with steam being a major contributor. Steam traps are important components that can suffer performance degradation if not regularly maintained resulting in unnecessary energy use and GHG emissions. The proposed improvement of automated detection, diagnostics, and alerts are an efficient way to avoid this degradation while saving labor and maintenance costs. Steam trap monitoring is typically non-invasive and is strapped to the outside of the condensate pipe downstream of steam traps. The monitoring systems do not control process steam, they only signal to the plant operator the operating characteristics of steam traps scattered throughout the plant. As a result, the technology does not interfere with the operation of safety of monitored systems. Besides saving energy steam trap monitoring provides information to the plant manager prior to complete failure of the steam trap so that it is possible to replace steam traps before they have completely failed which can reduce downtime for steam systems. Also, the proposed required installation strainers and blow-off assemblies would increase the time between failures again improving system performance and minimizing maintenance. Strainers have been used for years to protect steam process equipment and they are considered a best practice.

These process steam code improvements are a good way to reduce energy and GHGs consistent with California targets while delivering cost-effective energy savings, process reliability and safety benefits for the plant operators.

Additional submitted attachment is included below.

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