

# Inventions & Innovation Emerging Technology

## Two-Phase Hero Turbine with Curved No-Separation Nozzles

This new steam turbine, now in the prototype testing phase, has a unique design that can improve thermal cycle efficiencies up to 50% over conventional steam turbines. The turbine has converging/diverging nozzles that avoid two-phase flow separation and abrupt flashing, thus achieving higher efficiency. In addition to energy cost savings, operating costs are reduced through lower maintenance costs and increased longevity from reduced corrosion.



### Contact

*FAS Engineering, Inc.  
2039 Dublin Drive  
Glendale, CA 91206*

*Contact: Gracio Fabris  
Telephone: 818-952-0217  
Email: [gfabris@earthlink.net](mailto:gfabris@earthlink.net)*



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