

CLIENT CASE STUDY

“FLARE SYSTEM OPTIMIZATION”

- ∴ **Facility Type:** Refinery
- ∴ **Services Provided:** Flare Load Optimization

The Opportunity:

- ∴ A major United States refinery worked with an EPC on the site's action items where they recommended a new flare worth approximately \$30 Million. The refinery wanted a third-party review on the EPC's recommendation and hired Smith & Burgess to verify their results.

Our Solution:

- ∴ Smith & Burgess determined the EPC based their recommendations on overly conservative assumptions, misapplied guidelines, and missed PSI information; which resulted in higher flare loads. Our engineers revalidated each of their scenarios and recalculated the flare relief loads based on updated the Heat and Material Balance calculations which resulted in significantly lower flare loads.

The Results:

- ∴ Smith & Burgess brought the refinery's \$30 Million worth of proposed modifications down to less than \$500,000. In addition to the cost savings, our engineers identified an increase of daily capacity by simply switching from turbine driven pumps to motor driven pumps at no extra cost.



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