A yellow chevron pointing to the right, located to the left of the text.

simulation
knowledge
profit

Flare Systems Analysis

Is the current equipment size appropriate for safe plant operation?

Save CapEx without compromising safety by benefiting from previously oversized flare networks

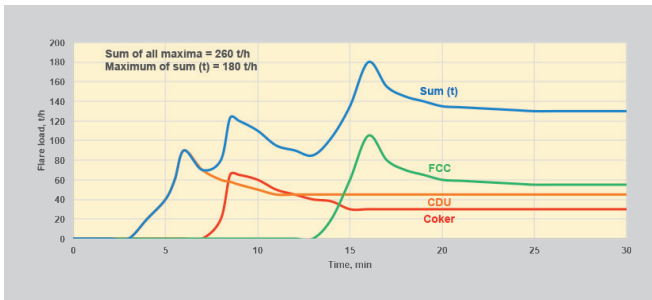
Benefits

- Revalidation, or new design, of flare equipment
- Available simulation model for any future what-if study
- Updated and revalidated pressure relief devices sizing
- Single repository database of easy access from anywhere in the organization
- Consistent generation of any documentation related to safety devices

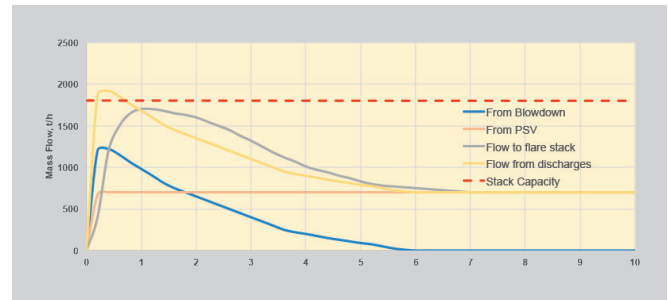
Functionalities

- **Analysis of pressure relief devices**
 - Contingencies analysis for emergency scenarios
 - Loads calculation by steady state and dynamic simulation
 - Relief devices (re-)sizing according to API standards
 - PSV database creation/consolidation: IPSV
- **Flare header design & operational analysis**
 - Validation of existing flare header
 - Header hydraulics behavior
 - Temperature profiles
 - Dynamic analysis of peak loads simultaneity
 - Time duration of constraints violation
- **Flare Radiation Analysis**
 - Multiple flares in multiple stacks
 - Dynamic radiation and temperature predictions

Reduce CapEx by considering dynamic effects in your Flare Systems Analysis

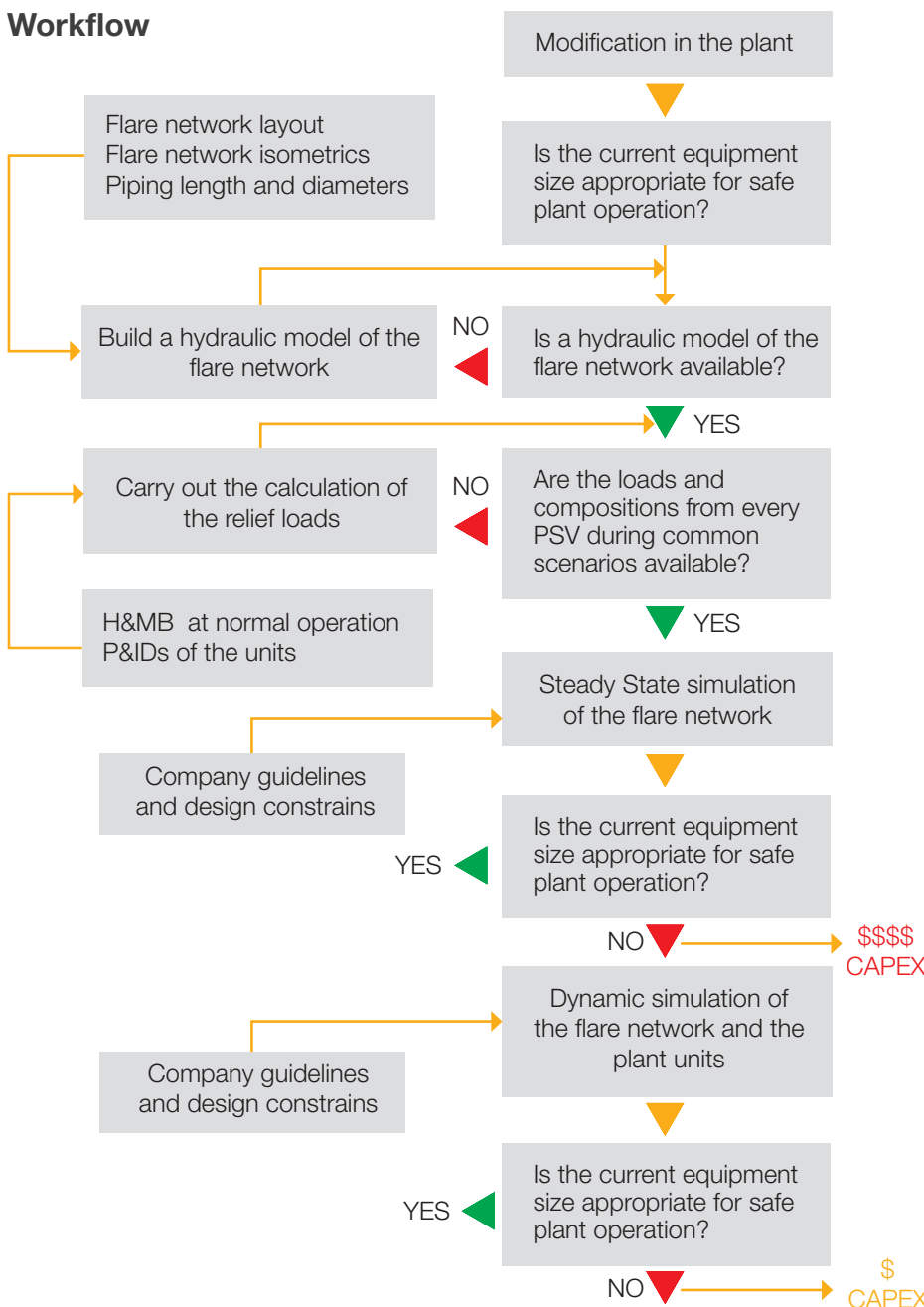


Evidence of Non-Simultaneity of peak loads, determined by dynamic simulation of three refinery discharging units



Impact of taking into consideration the line packing effect of the flare network

Workflow



Follow-up projects

- Dynamic Simulation Studies for the discharging units
- Debottlenecking studies for headers with new units
- IPSV acquisition
- Radiation Analysis

Case studies

Scan this code to see our latest case studies list

