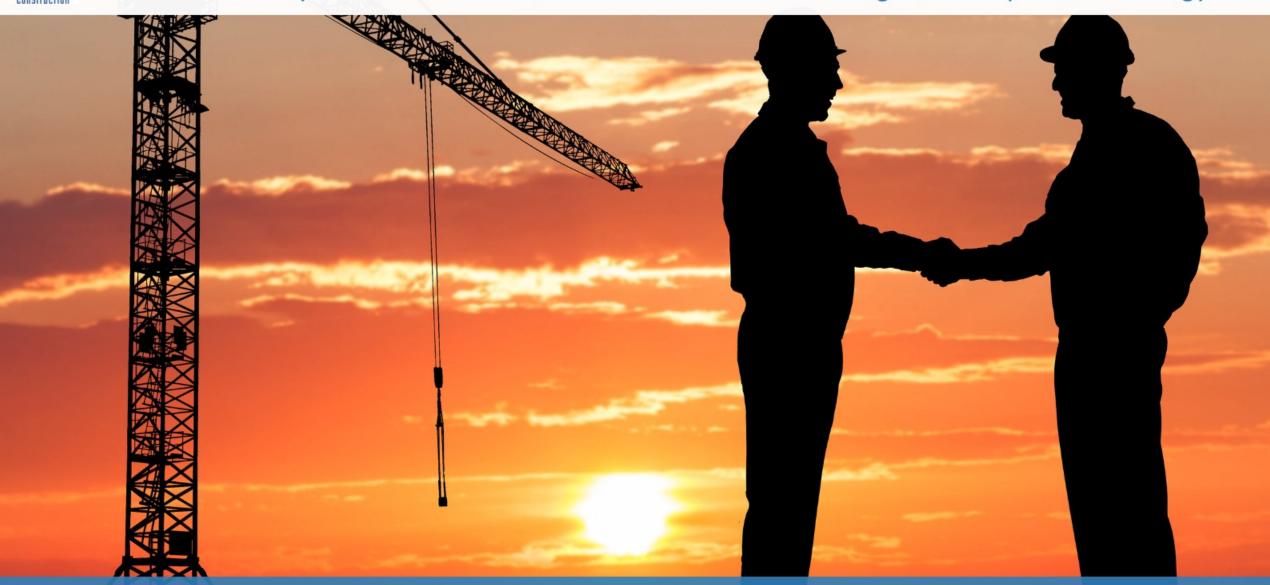


"Relationship Building for Successful Projects"

Presented by Nathan Clemens, USLFO - Red River Manager, US Liquids, TC Energy

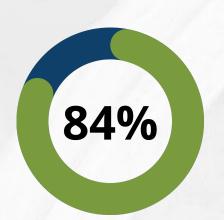


Friday, Dec. 9, 2022 | 12 pm | Rice University

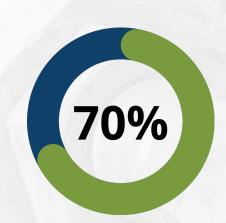
Rice Global Engineering & Construction Forum "Relationship Building for Successful Projects"

- Safety Moment
- Career Background
- Successful Projects Typical Metrics
- Relationships
- Questions

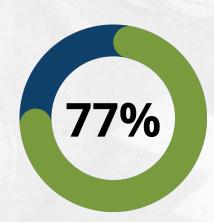
A 2017 study found:



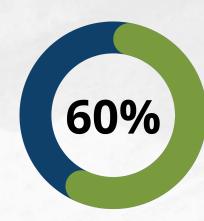
of workers with a head injury were NOT wearing hard hats



of workers with a hand injury were NOT wearing proper hand protection



of workers with a foot injury were NOT wearing appropriate safety footwear



of workers with an
eye injury were NOT
wearing any eye
protection



of workers with a face injury were NOT wearing face protection

Wearing the appropriate PPE makes a difference

Eye Protection

- Ensure glasses are stamped with ANSI Z87.1 on the arm or bridge of the glasses and have rigid, form fitting, side shields (may be snap-on type as well). Both frames and lens must indicate they meet the standard.
- Ordinary glasses do *not* provide the required protection







Career Background

- Engineer by Education
- Consulting Engineer Design
- Consulting Engineer EPC
- General Contractor
- Owner/Operator Major Projects
- Owner/Operator Operations

Successful Projects Typical Metrics

Safety

Overall metrics are good (TRIR, etc.), but also overall safety culture

Cost

- Within estimate range, the closer the better
- Estimate was industry/geographic competitive to begin with

Schedule

- Within schedule range or schedule float
- Again, was schedule competitive to begin with

Quality

 Broad topic, more subjectivity (meets intended scope/functionality, weld failure rate, repairs after in-service, etc.)

Relationships

- You exceeded all the typical metrics on your project (safety, cost, schedule, quality) is it successful?
- Probably depends on who you ask:
 - Consulting/design engineer
 - Contractor
 - Operator Projects Group
 - Operator Business Development/Commercial/Executives
 - Operator Operations
 - Operator Maintenance
 - Operator Others (regulatory, accounting, etc.)
- If all the above stakeholders feel the project successful, metrics aside, I would call it successful, and I believe productive relationships are key to this.

