

## Discussion Group T19: Torsional Monitoring

### Leaders:

- Jeff Moore (Southwest Research Institute)
- Brian Pettinato (Elliott Group)
- Thomas Eldridge (Shell)
- John Kocur (ExxonMobil)
- Troy Feese (Engineering Dynamics Inc.)

### Suggested Topics:

- Introduction

"Last significant Safety, Health, and Environment threat to rotating equipment that we don't measure,"

J.Kocur, Turbosymposium '13

Recent Torsional Related Incidents

- Torsionally Induced Coupling Slips and Failures
- VFD induced torsional failures
- Other Incidents

Contractual Requirements

- FAT Measurement, Commissioning Measurement, or Continuous Monitoring?
- End user mandates of torsional verification - What's Important?
  - a. Verify Natural frequency?
  - b. Verify Separation Margin?
  - c. Verify Absence of Destructive Excitation Sources?

Torsional Measurement

- Mean Torque vs Dynamic Torque Measurement
- Measurement Devices currently available
  - a. Permanent vs Temporary
  - b. Frequency vs Amplitude and Frequency
- Development Efforts