

## Discussion Group P10 - Pipeline Applications

### Leaders:

- Bill Litton (Magellan Midstream Partners LP)
- Bruce Weber (Champion)
- Ralph Dickau (ROD Engineering Ltd.)
- Morg Bruck (HMIC)
- George Maddox (Best PumpWorks)
- Bryce Dreger (Enbridge)

### Suggested Topics:

- Operation (single, series, batch products, parallel)
- Maintenance (mechanical seals, bearings, pigging, vibration)
- Hydraulic rerates (destaging, volute chipping, volute inserts, impeller underfilling)