

# EnerSaver® GENERATIVE DRIVE SYSTEM

## Selecting Candidate Sites



### APPLICATION CONSIDERATIONS

#### Power Bill

- Minimum 10,000 kWh/month
  - Review monthly usage (kWh), peak demand readings, and penalty charges

#### Motor Size (hp)

- Minimum 40 hp motor (based on a minimum of 42 amps and running 95% of the time)
- Electric motor must be rated for VFD use

#### Motor Load (Peak Amps)

- Minimum 42 amps continuous operation
  - Higher amps result in larger consumption and higher savings
  - To determine peak amps on each phase, measure with a clamp meter at the motor junction box

#### Pump-Off Controller (POC)

- Is the unit controlled by a POC?
  - How many hours per day is the POC running?
  - Is the POC timed or “smart”?
  - How many strokes per minute is the pump jack running?
    - A higher runtime and number of strokes per minute results in larger consumption and higher savings

#### Demand (Wires) Charges

- Minimum 25 kW/kVA
  - Demand or wires charges can be up to 50%–70% of total bill
  - Higher demand usually results in higher savings

#### Capacity Issues

- Does the wellsite have capacity issues (e.g. the utility can't supply the required peak load)?
  - The EnerSaver generative drive system creates demand reductions on new wellsites, which increases the capacity of the electric grid
    - A Lifting Solutions client was told by the utility that capacity would only permit the install of 3 pumping units; however, by installing an EnerSaver drive, the client was able to install 4 pumping units

#### Single-Phase or Three-Phase

- The EnerSaver generative drive system is not a candidate for single-phase power supply
- The EnerSaver generative drive system is not a candidate on a Floating Ground Delta configuration

#### Power Factor Penalties

- Are power factor penalties present?
  - Some utilities (e.g. ATCO Electric) charge penalties for power factors less than 0.90
    - A Lifting Solutions client paid over \$150/month in penalties
  - Penalties may not be readily identified on an electric bill
  - The EnerSaver generative drive system has a perfect Power Factor (PF=1), which eliminates penalties

#### Power Quality Penalties (Harmonics)

- Electric utilities charge penalties for excessive harmonics or require the client to pay to correct poor harmonics
  - The EnerSaver generative drive system minimizes the amount of harmonics introduced to the grid, which eliminates penalty charges
    - The cost of the generative drive is likely less than the price of a harmonics filter



**LIFTING SOLUTIONS**

Lifting Solutions Inc. provides product and service solutions that reduce lifting costs and lost production, better than anyone else in the industry.

© Copyright 2019 Lifting Solutions Inc.  
MKT-FLY-GBLER-004

[liftingsolutionsinc.com/products](http://liftingsolutionsinc.com/products) or call us toll free 1.855.267.2739