CASE STUDY

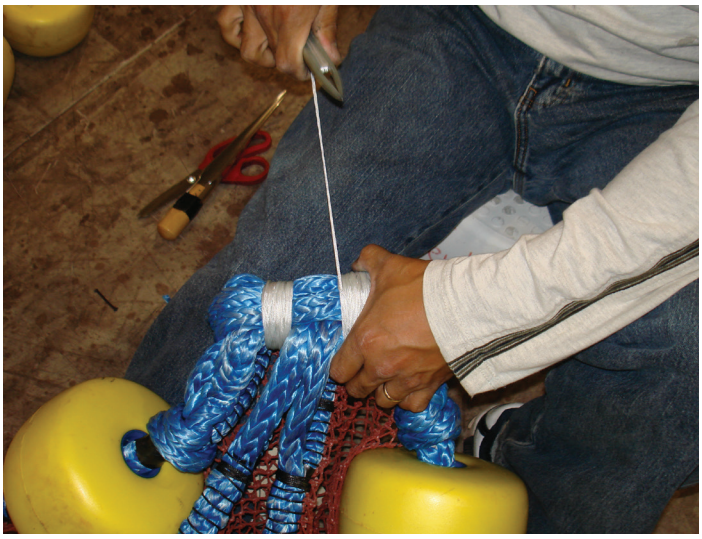
Consumers Energy
Ludington Pump Storage Facility

LUDINGTON, MICHIGAN

LONGEST FULL EXCLUSION NET IN THE WORLD

Pacific Netting Products has been providing our barrier net technology to this customer since 2002 to assist them in reducing passage of fish through generation units at the largest pumped storage facility in the U.S. This massive net is the largest barrier net in the world. During the generation and pumping period, more than 2 billion cubic ft of water per hour flow through it. The high wave action, strong winds, and high water flow present many unique challenges.

For this critical installation, the owner chose to keep a redundant backup net on site. Due to weather and ice, this net is seasonally deployed, continuously cleaned during deployment, and 20% of the net is replaced annually to maintain effectiveness.

KEY FEATURES

- 2.5 mile long, 55 ft average depth 650,000 sq ft
- 1/2" x 1/2" and 3/4" x 3/4" Dyneema diamond mesh netting
- 62 component sections, each varying for 100 to 300 ft in length
- Anchored from sub-surface steel embedment anchors
- Designed for bi-directional currents
- Water flow velocities up to 3.0 fps
- Seasonally deployed, continually maintained