Delta House Project
Delta House Floating Production System

- New four column semisubmersible
- First production April 16, 2015
- Total project cost ~$2B
- Peaking capacity
  - 100 MBOPD
  - 240 MMCFD
  - 40 MBWPD
- Process production from five fields
- In the gulf of Mexico 130 miles southeast of New Orleans
- Located in water about a mile deep
- Designed to survive hurricanes
Delta House - Unique Aspects

- Designed to be first of many
- Engineering began prior to any discoveries
- Yard bidding prior to any discoveries
- Private equity to own FPS and Exports
- Sanctioned project with only two wells drilled
- About three years from discovery to first production
Delta House by the Numbers

- 39,000 Tons Displacement
- 15 MW power generation
- 15000 HP compression
- 9000 HP pumps
- Over 12,000 people involved
- Over 170 companies involved
- At its peak, enough oil and gas to make 1.5MM gallons of Gasoline per day
Delta House Project Scope
Delta House Suction Pile
Delta House Project Scope
Subsea Tree
Subsea Manifold
Flowline End Termination
Flowline Jumper
Delta House Hull

July 13, 2013

December 9, 2013

December 19, 2013

January 2, 2014
Delta House Hull
Delta House Topsides
Wet Tow

Photo courtesy Tim Burdick of Crowley Maritime
Delta House – Why the Opti-ex design?

- Wet trees – separate drilling and production
- Similar to recently executed Who Dat project
- Flexible to 10,000’ water depth
- Robust design for metocean conditions
- Quayside integration
- Single deck reduces schedule risk
- Reduced steel/easier to fabricate
LLOG expected to build 10 units
Capture learnings of each project
Faster schedule
Small incremental cost for bigger size
Value of unused capacity
Potential for expansion if capacity is too low
Can design to handle a wide range of fluids
Delta House Timeline

2011
- October: Topside/Hull Engineering Initiated
- December: Yards Bid

2012
- February: First Discovery
- December: Topside Construction Initiated

2013
- March: Hull Construction Initiated

2014
- March: Hull Departs Korea
- June: Topside Hull Integration
- October: Installation Complete

2015
- April: First Oil
Future Plans

- LLOG is beginning engineering for the next FPS
- Optimization work to increase available payload
- Additional Capabilities (increased export pressure, water injection)
- Drill exploration wells