Presentation Outline

• Learning from the Plant Barry MHI Integrated Field Demonstration Project
• Scale Up and Commercialization of MHI Capture Technology
• Defining Capture/Treatment; Transport; and Utilization/Storage Elements of CCUS
• Evolving to a CO₂ Hub & Spoke Network
SECARB Integrated Field Demonstration Project

- Carbon capture from Plant Barry (equivalent to 25MW of electricity).
- 12 mile CO\textsubscript{2} pipeline constructed by Denbury Resources.
- CO\textsubscript{2} injection into \sim 9,400 ft. deep saline formation (Paluxy) above Citronelle Field
- Monitoring of CO\textsubscript{2} storage during injection and three years post-injection.
Plant Barry Capture Unit: 25MW, 500 TPD
WA Parish Petra Nova
250 MW MHI CCUS Commercial Scale Up (10x Plant Barry)

Source: http://www.nrg.com/
Plant Barry MHI Integrated Field Demonstration Project
Source: SECARB Phase III Anthropogenic Test

- Carbon capture from Plant Barry (equivalent to 25MW of electricity).
- 12 mile CO$_2$ pipeline constructed by Denbury Resources.
- CO$_2$ injection into ~9,400 ft. deep saline formation (Paluxy) above Citronelle Field.
Plant Barry 25 MW CO₂ Capture Plant

Flue gas inlet

Flue gas quench column

Flue gas demister and outlet

CO₂ absorber (lower) and Water wash (upper) column

Solvent regeneration ("CO₂ stripper") column

CO₂ compression and dehydration unit

Industrial Facility

Low Purity CO₂
Pre-treatment
Capture & Separation

High Purity CO₂
Conditioning
Compression

CO₂ Pipeline
CO$_2$ Hub and Spoke

- Step 1: Single Producer to User
- Step 2: Intrastate Participants
- Step 3: Interstate Network