Disclosure

Forward-Looking Statements: This presentation includes “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995. The use of words such as “may”, “might”, “should”, “will”, “expect”, “plan”, “anticipate”, “believe”, “estimate”, “project”, “forecast”, “outlook”, “intend”, “future”, “potential” or “continue”, and other similar expressions are intended to identify forward-looking statements. All of these forward-looking statements are based on estimates and assumptions by our management as of the date of this presentation that, although we believe to be reasonable, are inherently uncertain. Forward-looking statements involve risks and uncertainties that could cause the Company’s actual results or circumstances to differ materially from those expressed or implied by forward-looking statements. These risks and uncertainties include, among others, the following: the cyclicality of the markets that the Company serves; a delay, significant reduction in or loss of purchases by large customers; fluctuations in energy prices; the potential for negative developments in the natural gas industry related to hydraulic fracturing; changes in government energy policy or failure of expected changes in policy to materialize; competition; economic downturns and deteriorating financial conditions; our ability to manage our fixed-price contract exposure; the Company’s ability to successfully manage its costs and growth, including its ability to successfully manage operational expansions; our reliance on key suppliers and potential supplier failures or defects; the modification or cancellation of orders in our backlog; changes in government healthcare regulations and reimbursement policies; general economic, political, business and market risks associated with the Company’s global operations and transactions; our ability to successfully acquire or integrate new product lines or businesses, including the ability to successfully integrate AirSep’s business and achieve anticipated revenue, earnings and accretion related to AirSep; the loss of key employees and deterioration of employee or labor relations; litigation and disputes involving the Company, including product liability, contract, warranty, employment and environmental claims; the adequacy of our warranty reserves; fluctuations in foreign currency exchange and interest rates; the financial distress of third parties; the regulation of our products by the U.S. Food & Drug Administration and other governmental authorities; the pricing and availability of raw materials; potential future impairment of the Company’s goodwill and other intangibles; the cost of compliance with environmental, health and safety laws; our ability to protect our intellectual property; technological security threats; additional liabilities related to taxes; the impact of severe weather; risks associated with our indebtedness, leverage, debt service and liquidity; and volatility and fluctuations in the price of the Company’s stock. For a discussion of these and additional risks that could cause actual results to differ from those described in the forward-looking statements, see disclosure under Item 1A. “Risk Factors” in the Company’s most recent Annual Report on Form 10-K and other recent filings with the Securities and Exchange Commission, which should be reviewed carefully. Please consider the Company’s forward-looking statements in light of these risks. Any forward-looking statement speaks only as of its date. We undertake no obligation to publicly update or revise any forward-looking statement, whether as a result of new information, future events or otherwise, except as required by law.
Chart Industries is a leading provider of highly engineered cryogenic equipment for the hydrocarbon, industrial gas, and biomedical markets

- Technology leader that provides high-end equipment to the energy industry, which is the largest end-user of Chart’s products
- One of the leading suppliers in all primary markets served
- Global footprint for our operations on four continents with approximately 4,800 employees
- More than half of sales outside the U.S. and more than half made to the energy markets
Chart Products: LNG Vehicle Fueling

- Liquefied Natural Gas (LNG) refueling systems displaces high priced diesel with clean burning natural gas. Heavy-duty truck fleets equipped with Chart LNG vehicle tanks are fueling up at public fueling stations at a rapidly expanding number of locations across North America. Chart’s fueling station innovations provide a fast, safe, and reliable fueling experience.
Chart Products: Emerging LNG Applications

- LNG powered ships exceed EPA and MARPOL pollution standards at a fraction of the cost of diesel.
- Drill Rig operation costs are reduced by displacing high priced diesel with LNG.
- LNG satellite terminals serviced by ships or trucks to supply industrial sites or towns/housing estates with natural gas.
- Chart pioneered the design of Railroad locomotive LNG tender cars, reducing pollution and fuel cost.
Cryogenic Tank Cars

- DOT-113C120W
- 34,500 gallons gross volume;
- 30,3000 gallons net
- 50 year operating history
Cryogenic Tank Cars

- DOT-113A90W
- 19,120 gallons gross volume;
- 17,200 gallons net liquid argon
- 200,000 lbs liquid argon
- 50 year operating history
Tender Cars – Thru the Years

- ~1994
- 30,300 gallons gross volume; 26,000 gallons net
- Internal pumps
- Originally designed to transfer liquid to the locomotive
Tender Cars – Thru the Years

- 2012
- 30,300 gallons gross volume; 26,000 gallons net
- Internal pumps
- Modified to transfer low pressure gas to the locomotive
Tender Cars – Thru the Years

- ~1990
- 24,000 gallons gross vol.
- 20,230 net gallons LNG vol.
- Transfers low pressure gas to the locomotive
- Two or more years in revenue service
Tender Cars – Thru the Years

- 2012 – artist rendition
- ~12,000 gallons gross volume
- ~10,000 gallons net LNG volume
- 48’ – 53’ ‘Well Car’
- Blue Box for transfer of NG or LNG to locomotive
Tender Cars–Opportunity and Challenges

- Opportunity – the reason we are all here
  - replace high cost diesel fuel with lower cost natural gas
  - Meet tier 4 emissions standards coming soon.
- Engines – EMD / GE / ECI...
  - Low Pressure systems
    - Liquid or gas moves from the tender to the locomotive; ~120 psig
    - BN in 1990s; and recent public comments from Warren Buffet and Matt Rose
    - ECI from 1990s to current
    - CN / ECI 2012
    - Others actively pursuing
Tender Cars–Opportunity and Challenges

- Engines – EMD / GE / ECI...
  - Low Pressure systems
- Challenges
  - Pump
    - Power: availability, control
    - Maintenance / Service
    - System configuration
  - Pressure transfer / Saturated Liquid
    - Fuel supply system / infrastructure
    - Pressure Maintenance
  - Contents Gaging / Liquid Level
    - In all configurations; measuring the LNG in the tender is difficult
Tender Cars–Opportunity and Challenges

- Engines – EMD / GE/ ECI...
  - HPDI
    - Westport / CN/ EMD / Gaz Metro / Canadian Government – Publicly announced partnership
    - High pressure gas injected directly into the cylinder
- Challenges
  - How to get HP gas to the Locomotive Engine
    - Low pressure liquid from the tender?
    - HP Gas from the tender?
  - HPDI is in development
Tender Cars—Opportunity and Challenges

Tenders
- ‘Tank Cars’ or ‘ISO Containers / well cars’
- 30,000 gallons or 10,000 gallons

Challenges
- Make compatible with all NA locomotives
- Share operating data between the tender and locomotive
- Available utilities from the locomotive
  - Limited
  - Not necessarily uniform among manufacturers
- Emergency Shut OFFs between tender and loco
- Transfer of fuel from tender to locomotive
  - Gas or liquid
- Structural enhancements
Tender Cars—Opportunity and Challenges

- Tenders
  - Challenges
    - Structural enhancements
      - To well car
      - To ‘standard’ ISO container
      - To standard cryogenic Tank Car
    - Operating a thermos bottle in the locomotive consist
    - Access from one end to the other of the tender
    - Durability / reliability of valves and components
The Train is leaving the station.....

Make sure you are onboard.....