CHENIERE ENERGY, INC.
LNG Market Outlook and US LNG’s Function -
The Perspective from Cheniere
IEEJ – 20 October 2017

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Today’s Presentation

- Update on US LNG projects
- U.S. Gas Market Overview
- Impact of U.S. LNG on Global LNG Dynamics

Sabine Pass First Cargo: 24th Feb 2016
Safe Harbor Statements

Forward-Looking Statements

This presentation contains certain statements that are, or may be deemed to be, "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. All statements, other than statements of historical or present facts or conditions, included or incorporated by reference herein are "forward-looking statements." Included among "forward-looking statements" are, among other things:

- statements regarding the ability of Cheniere Energy Partners, L.P. to pay distributions to its unitholders or Cheniere Energy Partners LP Holdings, LLC or Cheniere Energy, Inc. to pay dividends to its shareholders or participate in share or unit buybacks;
- statements regarding Cheniere Energy, Inc.'s, Cheniere Energy Partners LP Holdings, LLC's or Cheniere Energy Partners, L.P.'s expected receipt of cash distributions from their respective subsidiaries;
- statements that Cheniere Energy Partners, L.P. expects to commence or complete construction of its proposed liquefied natural gas ("LNG") terminals, liquefaction facilities, pipeline facilities or other projects, or any expansions or portions thereof, by certain dates or at all;
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- statements regarding future levels of domestic and international natural gas production, supply or consumption or future levels of LNG imports into or exports from North America and other countries worldwide, or purchases of natural gas, regardless of the source of such information, or the transportation or other infrastructure, or demand for and prices related to natural gas, LNG or other hydrocarbon products;
- statements regarding any financing transactions or arrangements, or ability to enter into such transactions;
- statements relating to the construction of our proposed liquefaction facilities and natural gas liquefaction trains ("Trains") and the construction of the Corpus Christi Pipeline, including statements concerning the engagement of any engineering, procurement and construction ("EPC") contractor or other contractor and the anticipated terms and provisions of any agreement with any EPC or other contractor, and anticipated costs related thereto;
- statements regarding any agreement to be entered into or performed substantially in the future, including any revenues anticipated to be received and the anticipated timing thereof, and statements regarding the amounts of total LNG regasification, natural gas, liquefaction or storage capacities that are, or may become, subject to contracts;
- statements regarding counterparties to our commercial contracts, construction contracts and other contracts;
- statements regarding our planned development and construction of additional Trains or pipelines, including the financing of such Trains or pipelines;
- statements that our Trains, when completed, will have certain characteristics, including amounts of liquefaction capacities;
- statements regarding our business strategy, our strengths, our business and operation plans or any other plans, forecasts, projections or objectives, including anticipated revenues, capital expenditures, maintenance and operating costs, run-rate SG&A estimates, cash flows, EBITDA, Adjusted EBITDA, run-rate EBITDA, distributable cash flow, and distributable cash flow per share and unit, any or all of which are subject to change;
- statements regarding projections of revenues, expenses, earnings or losses, working capital or other financial items;
- statements regarding legislative, governmental, regulatory, administrative or other public body actions, approvals, requirements, permits, applications, filings, investigations, proceedings or decisions;
- statements regarding our anticipated LNG and natural gas marketing activities; and
- any other statements that relate to non-historical or future information.

These forward-looking statements are often identified by the use of terms and phrases such as "achieve," "anticipate," "believe," "contemplate," "develop," "estimate," "example," "expect," "forecast," "goals," "guidance," "opportunities," "plan," "potential," "project," "propose," "subject to," "strategy," "target," and similar terms and phrases, or by use of future tense. Although we believe that the expectations reflected in these forward-looking statements are reasonable, they do involve assumptions, risks and uncertainties, and these expectations may prove to be incorrect. You should not place undue reliance on these forward-looking statements, which speak only as of the date of this presentation. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of a variety of factors, including those discussed in "Risk Factors" in the Cheniere Energy, Inc., Cheniere Energy Partners, L.P. and Cheniere Energy Partners LP Holdings, LLC Annual Reports on Form 10-K filed with the SEC on February 24, 2017, which are incorporated by reference into this presentation. All forward-looking statements attributable to us or persons acting on our behalf are expressly qualified in their entirety by these "Risk Factors." These forward-looking statements are made as of the date of this presentation, and other than as required by law, we undertake no obligation to update or revise any forward-looking statement or provide reasons why actual results may differ, whether as a result of new information, future events or otherwise.

Reconciliation to U.S. GAAP Financial Information

The following presentation includes certain "non-GAAP financial measures" as defined in Regulation G under the Securities Exchange Act of 1934, as amended. Schedules are included in the appendix hereto that reconcile the non-GAAP financial measures included in the following presentation to the most directly comparable financial measures calculated and presented in accordance with U.S. GAAP.
LNG Trade Today – A Snapshot

- 53 years old
- 264 mt (35 bcf/d) in 2016
- 19 exporting countries
- 40 importing countries*
- ~435 trading ships**
- ~10% of all gas consumed worldwide
- ~30% of internationally traded gas

*including small scale importers; Norway, Sweden, Finland
**excludes FSRUs, small vessels, laid-up vessels

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Sabine Pass First Cargo: 24th Feb 2016
Cheniere LNG Platform Along United States Gulf Coast

Sabine Pass Liquefaction Project
- Trains 1-4 substantial completion achieved
- Train 5 is under construction
- Train 6 is fully permitted, ready to commercialize
- Land secured for further expansion

Corpus Christi LNG Terminal
- Trains 1 and 2 are under construction
- First LNG expected in late 2018
- Train 3 is fully permitted and being commercialized
- Trains 4-5 (or mid-scale equivalent) : Initiated development
- Land secured for further expansion

- First operational lower-48 export facility (Sabine Pass)
- First greenfield export project under construction (Corpus Christi)
- 7 train platform (operating / under construction) = 31.5 mtpa
- Cheniere now the largest gas consumer in the U.S.
Sabine Pass Liquefaction Project
Sabine Pass Liquefaction – 2Q 2017
Corpus Christi Liquefaction – 2Q 2017
Cheniere LNG Projects: Attractive Features

- Cheniere LNG SPAs: LNG price tied to Henry Hub, offer destination flexibility, upstream gas procurement services, no lifting requirements
- SPAs with investment grade off-takers featuring parent as counterparty or guarantor & pricing with HH + fixed fee (no price reopeners)
- EPC contractor: proven track record of execution; proven liquefaction technology

Sabine Pass Customers

BG GROUP
Gas Natural Fenosa
Korea Gas Corporation
GAIL (India) Limited
Total Gas & Power N.A.
Centrica plc

Corpus Christi Customers

PT Pertamina (Persero)
Endesa S.A.
Iberdrola S.A.
Gas Natural Fenosa
Woodside Energy Trading
Électricité de France
EDP Energias de Portugal S.A.
U.S. LNG Capacity Under Construction

Source: Cheniere Research estimates for first export. Actual start dates may differ depending on construction schedules.
US LNG - A Wide Range of Customers

Portfolio Composition of Major Buyers (2020)

- ~50% sold to Asian entities
- ~42% sold to end-users
- Of 58% sold to resellers; at least 57% resold/allocated

US FOB off-takers by type

- Asian end-user e.g. Iberdrola
- European end-user e.g. Chubu
- European buyer; domestic/portfolio e.g. GNF
- Asian reseller e.g. Mitsui
- Portfolio player e.g. Shell

Source: Cheniere interpretation of Wood Mackenzie Data (2017). Top 15 portfolios shown. Volumes are net of re-sales.
Current Status of US LNG Projects

**Note: Excludes Alaska**

**FERC Status (as of September 2017)**

- **13.5 mtpa online**
- **53.5 mtpa under construction**
- **over 300 mtpa proposed**

- Corpus Christi 4-5
- G2 LNG
- Venture Global (Calcasieu)
- Texas LNG Brownsville
- Rio Grande LNG
- Magnolia
- Freeport T1-3
- Cameron T4/5
- Golden Pass
- Lake Charles CC T3
- SP T6
- Fourchon Commonwealth
- Cameron T1-3
- Elba
- Jordan Cove *
- DRiftwood LNG
- Freeport 4
- Annova LNG
- Eagle LNG
- Port Arthur LNG

*Previously denied by FERC and had to re-file

Source: US FERC, US DOE, and press reports
Projected Company Ranking by LNG Sales in 2020

On Track to Be a Top-5 Seller Less Than 5 Years After First Cargo

Source: Cheniere Research, Wood Mackenzie

Note: volumes include ‘equity’ LNG, third-party offtake and own project offtake. Tolling facility production reflected in offtaker volumes.
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Shale Gas has Doubled U.S. Natural Gas Resources Since 2006 …

- Total U.S. future gas supply (reserves + resources) stands at record 3,141 Tcf
- Represents 100+ years of current domestic needs

Source: Potential Gas Committee, 2017; EIA (Proved Reserves)
... And Has Fundamentally Reset Price Expectations

Break-even price at Henry Hub for North American natural gas resources

800 Tcf @ <$3.00/mmBtu = 25 years supply at 2015 production levels

Henry Hub Natural Gas Price

U.S. Natural Gas Production

Total U.S. Natural Gas Marketed Production

- 1972: 62 Bcf/d
- 2005: 52 Bcf/d
- 2016: 78 Bcf/d

Shale Wells Supplied 51% of US Gas in 2016

Source: EIA Natural Gas Monthly Sept. 2017
Supply and Demand since 2005

**Supply**

*Marketed Production Growth 2005 to 2016*

- **Unconventional**: 37 Bcf/d (annual average growth 2005-2016: 3.4 pa)
- **Conventional**: -11 Bcf/d (-1.0 pa)
- **Net**: 26 Bcf/d (2.4 pa)

**Shale Gas Production**

- Other Shale
- Marcellus+Utica
- Haynesville (LA & TX)
- Eagle Ford (TX)
- Fayetteville (AR)
- Barnett (TX)
- Woodford (OK)
- Bakken (ND & MT)

**Consumption**

*Incremental natural gas consumption 2005 - 2016*

- Residential: 3.1 Bcf/d
- Industrial: 4.1 Bcf/d
- Power: 11.3 Bcf/d
- Pipeline Exports: 0.3 Bcf/d
- LNG Exports: -1.3 Bcf/d

*Base Year 2005*

Source: EIA
Dry Gas Growth Will Be Driven By Marcellus/Utica, Permian & Haynesville

Cumulative Production Growth from mid-2017

Nearly 9 Bcf/d net growth expected through year-end 2019

Source: Spring Rock; Cheniere Research
Current Production Growth Supported By Prices Below $3.50 Henry, $60 Oil

US Gas Rigs vs. NYMEX cal-2018 Henry Hub strip

- Henry Hub 2018 Calendar Strip
- US Gas Directed Rig Count

US Oil Rigs vs. NYMEX cal-2018 WTI strip

- WTI 2018 Calendar Strip
- US Oil Directed Rig Count

Permian oil rig deployments support associated gas production

Source: NYMEX, Baker Hughes
Northeast Output Will Soon Be Unconstrained By Pipeline Infrastructure

- Incremental pipeline projects will provide up to 7 Bcf/d of additional market access by early 2018
- Additional 6 Bcf/d takeaway capacity is expected to enter service from mid-2018 through year-end 2019

Northeast US Dry Natural Gas Production vs. Pipeline Takeaway Capacity
Marcellus/Utica production in New York, Ohio, Pennsylvania, West Virginia

5.7 Bcf/d growth projected from mid-2018 to year-end 2019

Source: Spring Rock; Cheniere Research
EIA U.S. Outlook to 2040

Gas production outlook

EIA base case sees dry gas growing 31 Bcf/d from 2016
Shale gas will be 67% of total dry gas production
Gas production grows at 1.5% CAGR through 2040

Gas consumption outlook

U.S. Gas demand grows at 1.5% CAGR
Incremental Natural Gas Consumption by 2040

- Residential demand has peaked; population shift to warmer climates & efficiency gains
- Industrial; low prices stimulate 0.9% demand CAGR
- Power at forecast prices; gas displaces coal in power gen. driving 0.4% CAGR.

Source: EIA AEO 2017
EIA Price Outlook for Henry Hub and WTI

$/MMBtu (nominal)

Source: EIA Annual Energy Outlook 2016, 2017; Note: Actuals to 2016 from EIA
U.S. Natural Gas Production Continues to Evolve

- **Recent evolution**
  - *Larger wells*: average initial production (IP) rates have more than tripled since 2009
  - *Longer laterals*: average horizontal feet drilled in Marcellus have doubled since 2009
  - *Multi-stage fracking*: producers have increased number of stages used in hydraulic fracturing process
  - *Innovation*: operational efficiencies improving drill times

- **Future evolution - continued technological advances to reduce costs and increase efficiencies**
  - *Data processing*, better software modelling and real time monitoring to help with well spacing, space staging, completion engineering…
  - *Enhanced recovery factors* by experimenting with pump fluids and recovery methods
  - *Targeted and steered drilling* to make more precise cuts into deep terrain
  - *Extracting from multiple benches* of production within same play
  - *Non-intrusive technologies* such as micro-seismic geophones and electromagnetics.
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LNG: A High Growth Industry

LNG trade growth – by importing region

- Other
- North America
- Europe
- Asia Pacific

CAGR 9% / 16 mtpa
CAGR 7% / 9 mtpa
CAGR 8% / 4 mtpa

Source: IHS Markit (2017)
Commercial Evolution Underway in Contract Length

LNG trade by contract length

* Contract duration of 4 years or less (GIIGNL)  ** Prompt = delivered within 3 months of transaction date

Europe’s Balancing Role in the LNG market

Supply outpacing Asia demand growth

Asia demand growth outpacing supply

Europe decants volumes

Market loosening

Market tightening

Market Stable

Source: Cheniere interpretation of IHS Waterborne data (Apr 2016), delivered volumes
LNG Supply vs. Demand to 2030

Source: Cheniere Research estimates; Woodmac for historical figures
LNG Import Outlook by Region

**Asia and Middle East**

- Bunkers Asia
- Middle East
- Other Asia
- China
- India
- JKT

**Atlantic Basin**

- Bunkers Atlantic
- Africa
- Europe
- N. America
- S. America

Source: Cheniere Research, Cheniere interpretation of Wood Mackenzie data (Q4 2016)
Opportunities and Challenges for Gas and LNG in Asia

Opportunities

- Demand for gas in Asia set to nearly triple over coming decades
- New markets, new buyers and new demand segments for LNG emerging in the region
- A more liquid and more responsive global LNG trade will make gas more attractive
- But gas growth in Asia should not be taken for granted …..

Challenges

- Demand uncertainty a common theme across Asia as energy transition and market liberalisations gather pace
- Some new markets will require help with the commercial or technical aspects of LNG
- Coal likely to remain cheap – and tempting

Gas needs to prove it is affordable, reliable and secure

* Source WEC Energy Scenarios 2016
**Market Context**

Market context for LNG buyers has been evolving in recent years …

| **Growing Supply Availability** | • Increasing market length through 2019 (+)  
|                               | • Some portfolio players looking to reduce own length  
|                               | • Expectations of growing liquidity / spot availability  
|                               | • Healthy slate of potential new supply projects |
| **Growing Price Uncertainty** | • Reducing Oil Indexation Levels; 0.16 at peak falling to ~0.115 now  
|                               | • Oil price uncertainty  
|                               | • Inversion of Spot, Oil-indexed and HH-indexed prices; |
| **Growing Demand Uncertainty** | • Liberalising markets: new players, increasing market competition  
|                               | • Changing fuel mix outlook: ‘fall’ of nuclear and coal, rise of renewables  
|                               | • Domestic gas balance; maturing fields, unconventional gas uncertainty |

Buyers looking to rebalance their purchase portfolios to include greater spot / ST volumes
Contracting behaviour reacting to changing market environment

- **Lower Overall Sales**
  - **Reaction to Market Length**
  - **ACQ (mmtpa)**
  - **Share of total (%)**
  - **Full year?**

- **Shorter Duration Contracts**
  - **Reaction to Market Uncertainty**
  - **ACQ (mmtpa)**
  - **Average length (yrs)**

- **Lower HH Sales**
  - **Reaction to Price Uncertainty**
  - **ACQ (mmtpa)**
  - **Share of total (%)**

- **Smaller Volume Contracts**
  - **Reaction to Market Uncertainty**
  - **ACQ (mmtpa)**
  - **Average volume (mmtpa)**

Source: Cheniere interpretation of Wood Mackenzie data (2017)

Are these changes structural or cyclical?
LNG trade is diversifying and fragmenting

Supply

Exports / sellers

Number of:
- Exporting countries
- Exporting terminals
- Sellers

Suppliers concentration by country*

HHI

Herfindahl-Hirschman Index

Concentration
- Highly
- Moderately
- Unconcentrated

Imports / buyers

Number of:
- Importing countries
- Importing terminals
- Buyers

Purchase concentration by country*

HHI

Herfindahl-Hirschman Index

Concentration
- Highly
- Moderately
- Unconcentrated

*each country considered a single supplier / buyer. Market categories for HHI: US Department of Justice
U.S. LNG Exports Driving Change in the Industry

- Destination-free, flexible volumes
- Growing liquidity
- FOB and DES hub formation
- New markets facilitated by abundant, competitively priced gas

A more responsive, more competitive, more diverse and more resilient LNG trade system
Benefits of U.S. LNG exports

- **Largescale resource base with strong Government support for exports**

  ![U.S. Future Supply of Natural Gas](image)

- **Diversification from oil indexation**

  ![LNG Contracts by Price Index](image)

- **70+ flexible U.S. cargoes per month by 2020 - underpinning growing industry liquidity**

  ![U.S. Supply & FOB Customers](image)

- **Inter-project competition driving innovation**

  ![Visualization of possible mid-scale trains](image)

**U.S. LNG driving change in the industry**

Source:  
(1) Potential Gas Committee, 2017; EIA (Proved Reserves), (2) Cheniere Research, Primary FOB Customers Only, 100% UF, 170,000 cm vessel, (3) Cheniere interpretation of Wood Mackenzie data (Q1 2017)
Destination of Sabine Pass Cargoes

Since Start Up, More than 190 Cargoes Loaded and Delivered to 25 Countries

Sabine Pass Exports By Destination Region
(Since Startup)
LNG Trade Figures H1 2017

Regional imports balance H1 2017 (Year-over-year)

Supply: 16.0
Asia: 13.1
MENA: 0.5
Lat Am: -0.7
N. America: 0.1
M. Europe: 4.9
N. Europe: -1.8

Growth by Supply Country H1-2017 (YoY)

Top 5 growth: 7.08, 5.59, 1.55, 1.43, 0.67
Bottom 5 growth: -0.02, -0.06, -0.60, -0.80, -0.86

Growth by Import Country H1-2017 (YoY)

Top 4 growth: 4.2, 3.1, 3.0, 3.3
Bottom 4 growth: -0.3, -0.4, -0.6, -2.1

Source: Waterborne IHS data, delivered volumes
Global Gas Prices (as of 10/10/2017)

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<td>HH</td>
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Note: Asia L-T Contract Proxy = 14.85% Japan Crude Cocktail (3-month average)+ $0.50/MMBtu; same formula is used with Brent crude oil prices for forward curves

Source: Bloomberg, CME, ICE, Platts, Japan Ministry of Finance, Cheniere Research
Global LNG balance – 2015 to Aug 2017

Rising supply not yet overflowing into N. Europe

Supply: Australia + US
Imports: UK + Netherlands + Belgium

Where did the incremental global supply go?
~60 MT

Incremental imports since 2014


Note: countries with less than +/-3 mt increment were aggregated
10 Ways U.S. LNG is Changing the Global Market

1. Significant new supply source *reduces the market power of incumbents*

2. Competitive cost sets *price marker for new LNG supplies*

3. Transparent pricing *improves price discovery*

4. Destination flexible supply *reduces the rigidity of current trade*

5. Growth in liquidity will result in *development of trading and risk management tools …*

6. … and aid the *formation of LNG trade hubs in Asia*

7. Volume flexibility provides buyers a ‘*safety valve’ on supply commitments*

8. HH indexed pricing *weakens the influence of oil price on the global gas market*

9. HH pricing construct *reduces pricing volatility*

10. Increasing influence of *US energy diplomacy*
Will a Liquid Hub for LNG Form Over the Next Decade?

Drivers

- Significant supply at ‘open market’ location (USGC)
- LNG & gas hub initiatives in Asia
- New players interested in new instruments
- Increase in flexible supply
- Any significant disconnect between spot and term prices

Inhibitors

- Limited buyer-seller alignment
- Current low industry liquidity
- Lack of consensus on location for an Asian LNG hub
  - Market access
  - Deregulated Pricing
  - Multiple Buyers / Sellers
- Existing long-term contracts
- Established pricing indexes
- Quality constraints
- Storage constraints
- Financing secured through long-term oil indexed / HH-plus contracts

Inhibitors will likely not stop Asian hubs from forming – but will determine pace and location of hub developments
Slowdown in FIDs

FIDs per annum

mtpa

Qatar ➔ Hiatus ➔ Australia ➔ US ➔ Hiatus

Source: Cheniere interpretation of Wood Mackenzie data (Q1 2017)
U.S. LNG Advantaged by Low Costs

Break-even price at Henry Hub for North American natural gas resources

800 Tcf @ <$3.00/mmBtu = 25 years supply at 2015 production levels


Liquefaction plant EPC* costs

*Engineering, procurement and construction costs for liquefaction plant. Does not include upstream development, pipelines or financing and owner’s costs.

Source: Poten & Partners
Long-Term LNG Price Outlook (EIA)

Note: prices are annual averages

Sources: Actuals - Platts, Heren, IPE, Petroleum Association of Japan and Bloomberg (Apr 2016); Forecasts – EIA, Wood Mackenzie, IHS CERA, and PIRA (2016)
Benefits of US LNG for Asian Buyers

- **Price competitiveness**
  - Largescale, low-cost gas resource
  - HH-plus price structure
  - De-linked from oil

- **Price stability**
  - Reduced volatility from fixed-component

- **Buyer control**
  - Destination flexible volumes to manage demand uncertainty
  - and / or build trading platform

- **Reliability**
  - Largescale, nationwide resource base
New LNG Market Realities

New market realities …

Fragmenting / Evolving market place

Globalising / Commoditising industry – with regional nature

Supplier challenge: how to lower cost, innovate & create new markets

… will require new commercial solutions …

New contract structures: price index, term, flexibility

… but will also have to be financeable
Summing Up

- Flexible U.S. LNG ramping up and responding to global market signals
- U.S. LNG has already changed the industry. Providing buyers with;
  - Price diversification and transparency
  - Destination flexibility
  - Increased supply availability and market competition
  - A sustainably low-cost supply over the long-run
- And is set to drive further change
  - Growing liquidity / hub formation / price discovery
  - Resulting in a more competitive and more resilient trade system
- Buyers can enjoy and capitalize on these functions of U.S. LNG in a direct manner
- But Buyers and Sellers will have to work together to achieve the commercial bargain required to bring on new supply under current low-price conditions
- Cheniere able to move quickly to expand its platform with two permitted brownfield trains, plus enough land at both sites to allow for significant further expansion
Thank You