# New Energy Development Company

***STRATEGY | PROJECT DEVELOPMENT | CAPITAL***

# LNG | Natural Gas | Storage Sustainable Investments

***ESTABLISHED TECHNOLOGY, NEW APPLICATIONS***

# New Energy Development Company

***STRATEGY | PROJECT DEVELOPMENT | CAPITAL***

***Together***

*in a* Proposed

Services Offering

# Meet the New Energy Development Partners

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*Hap Ellis*

Alexander “Hap” Ellis III, Managing Partner, New Energy Development Company provides project development, strategic and advisory services in LNG, natural gas, and sustainable investments relating to his extensive experience in project development, corporate and industry strategy, commercial structuring and negotiations, risk management and corporate finance.

Mr. Ellis has served for 18 years as General Partner at RockPort Capital Partners, a multi-stage venture capital firm that invests in alternative and traditional energy, mobility, and sustainability. He has over 40 years of executive experience originating, developing, funding and serving as executive in funds, leading independent power companies and sustainable energy firms. Hap serves as Chairman of The George and Barbara Bush Foundation and Old Westbury Funds ($34 billion), the largest fund of The Bessemer Trust. He is a graduate of Colorado College with a BA in Political Science and earned an MPPM from the Yale School of Management.

*Thomas Quine*

Thomas G. Quine, Partner, New Energy Development Company provides project development, strategic and engineering advisory services in LNG, natural gas, and energy relating to his more than forty years of experience in LNG and natural gas project development, company leadership, complex LNG plant operations, systems design and mechanical engineering, and project planning and control.

Mr. Quine was recently Founder, CEO, and Chairman of Northstar Industries LLC, a prominent and respected North American LNG and natural gas engineering and construction business. Mr. Quine grew Northstar over 24 years by successfully developing and leading many high-profile LNG and energy projects and revolutionizing the small and medium-scale LNG and natural gas midstream industry, including by means of modular liquefaction designs and other patented systems. Mr. Quine graduated with a BS in Electrical Engineering from Wentworth Institute of Technology and a BA in Legal Studies from the University of Massachusetts, Amherst.

*Scott Shields*

Scott Shields, Partner, New Energy Development Company provides project development, strategic and advisory services in LNG, natural gas, energy and sustainable investments relating to his extensive experience in project development, corporate and industry strategy, commercial structuring and negotiations, trading, risk management and corporate finance. He most recently provided strategic consultancy services through Morgan Shields Energy LLC, a company he founded 10 years ago.

Mr. Shields brings over 30 years of executive experience from 4 years each at Repsol LNG, Exxon Corporation, and Enron Capital & Trade, combined with integrated start up consulting and investment banking for many LNG projects and energy companies at Morgan Shields. He is a military veteran and served as co-founder & board member at Oasis Bank SSB before its merger and subsequent IPO in 2018 with $1 billion in assets (NASDAQ: STXB). Mr. Shields is FINRA-licensed Series 79, 82, and 63, and graduated with an MBA from the University of Chicago Booth School of Business and BS in Finance from the Pennsylvania State University.

# What We Do

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## New Energy Mission

Deliver completely optimized, commercially operating LNG, natural gas, sustainability, and storage solutions - from **strategic market assessment** and **commercial structuring,** to **complete project development** and **institutional capital**.

**LNG | Natural Gas | Storage**
**Sustainable Investments**
*ESTABLISHED TECHNOLOGY, NEW APPLICATIONS*

## Target Markets

- Create, enhance mid-scale LNG and Hydrogen Storage to economically provide long term tolling services
  - ✓ Targeting mid-stream companies, local distribution companies, independent power companies, others
  - ✓ Bringing ownership, capital, operating, eliminating bond issues

## Progress

- Currently have formal engagements with well-known entities
- Negotiating additional engagements with sponsors, including midstream companies, utilities, strategic equipment providers

# Significant Benefits Dealing with New Energy

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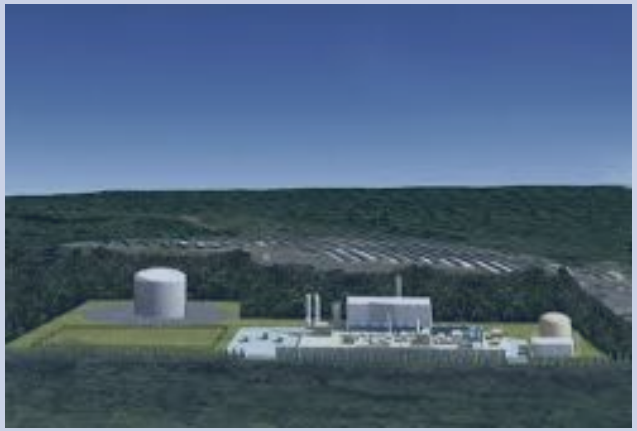
## Benefits

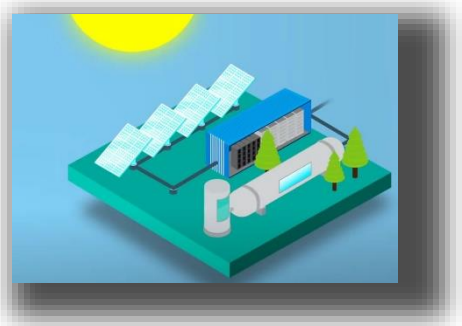
1. Minimized development time
2. Minimized Risk
3. Quickest possible commercial operations date
4. Co-investment Capital

**Proprietary New Energy Development LNG Plant Design**



## Results

- Secure, fair priced, profitable project from trustworthy team
- Profitable, de-risked project by deploying proven “Stage Gate” Project Management and Approval System (see Appendix)



# How We Make Money

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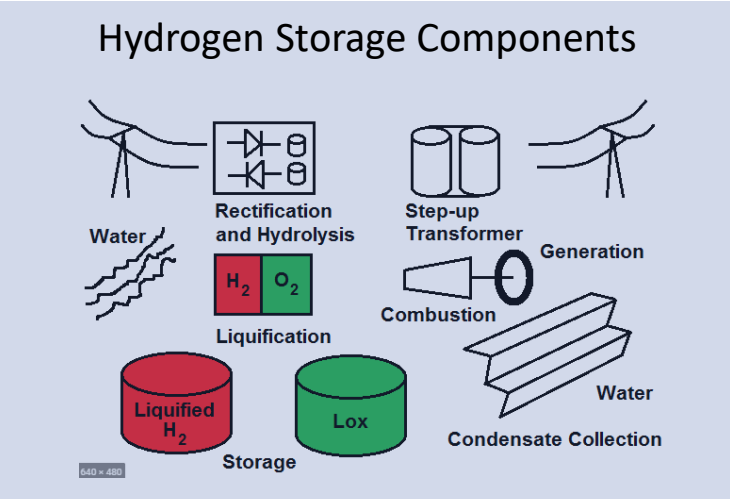
## Our Revenue Model

- **New Energy customizes each engagement**
  - ✓ Engagement stipend / retainer plus reduced hourly billing
  - ✓ Market studies, alternatives, optimized design and engineering
  - ✓ We earn referrals and repeat business

- **New Energy brings additional capital**
  - ✓ Serves to minimize capital risk
  - ✓ Ensures highest quality standards of development and financial performance



# New Energy Dev Co Projects, Parties and Structures

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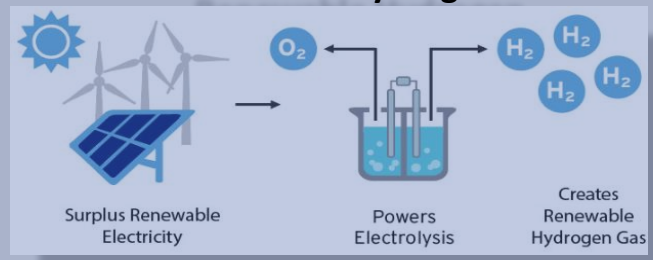
| Parties Involved | Assets and Operations Placed into Ownership Pool | 2 Target Project Types* |
|---|---|---|
| New Energy Development Company | Target Ownership Structures ***LP/GP*** or ***Investment Pool*** | |
| Strategic Investors | New Energy LNGCo 1<br>New Energy LNGCo 2<br>New Energy LNGCo 3<br>New Energy LNGCo 4<br>New Energy LNGCo 5<br>New Energy H2Co 6<br>New Energy H2Co 7<br>New Energy H2Co 8 | |
| Infrastructure Funds | | |
| Major Mid-stream Cos | | |

**Mid-Scale LNG**

**Renewable Hydrogen**




*Each Project musts be >=95% fully subscribed

# New Energy Development Company

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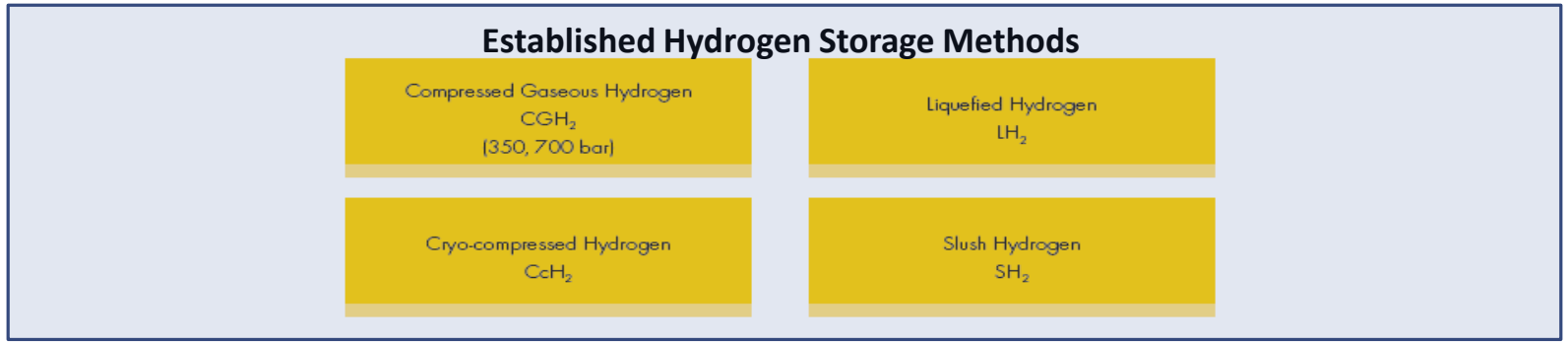
## LNG | Natural Gas | Storage Sustainable Investments

***ESTABLISHED TECHNOLOGY, NEW APPLICATIONS***

For more information, see www.newenergydev.com

# Appendix

- **Org Chart – Project Execution**
- **Full Biographies**
- **Keys to project success**
- **Stage Gate Management and Approval System**
- **LNG design components, site and design features**



# New Energy Project Org Chart

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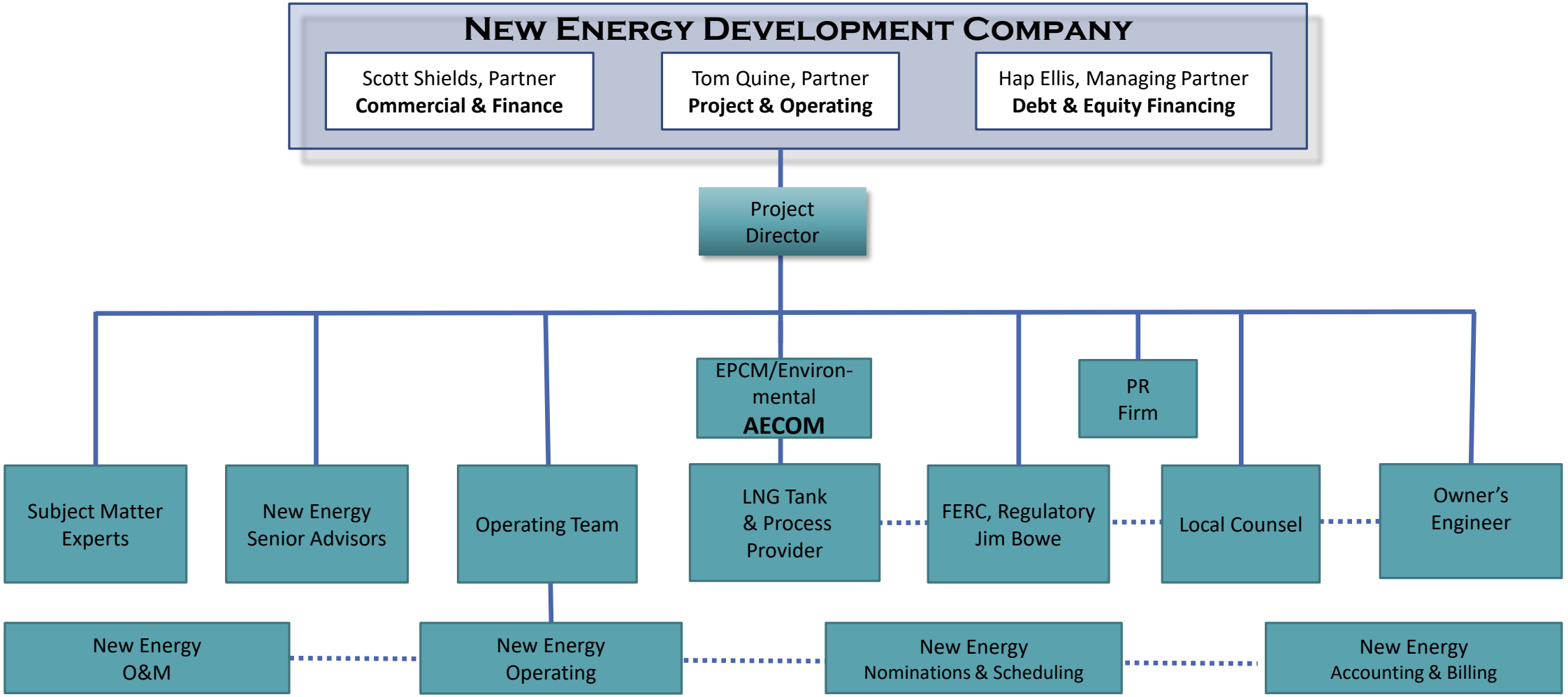
## Project Execution Organization Chart



# Biography, Thomas G. Quine, Partner

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Mr. Quine is a Partner in New Energy Development Company and provides project development, strategic and financial advisory services in LNG, natural gas, and energy relating to his more than forty years of experience in LNG and natural gas project development, company leadership, complex LNG plant operations, systems design and mechanical engineering, and project planning and control.

Mr. Quine began his career working full time in civil structural and utility construction, in the late 1970's, while attending college classes evenings and weekends. During that time, he earned a bachelor's degree in electrical engineering as a Tau Alpha PI Honor Student and graduated with highest honors from Wentworth Institute of Technology. He also earned a bachelor's degree in legal studies from the University of Massachusetts because of his passionate interest in US history and law.

Mr. Quine began his professional career at Essex County Gas Company based on a recommendation for an engineering position by the Dean of Engineering at Wentworth Institute of Technology to the vice president at Essex County Gas Company. Mr. Quine progressed through the ranks and eventually led areas of gas engineering, network analysis, gas supply projection, SCADA, gas dispatch, M&R facilities, district regulators, and all customer metering along with the annual O&M and CAPEX budgets of approximately $30 million year.

As power and gas utilities began to form in the United States, Stone and Webster Management Consulting (SWMC) was an integral player in the initial creation of electric and gas utilities. SWMC placed numerous board members on many natural gas and electric companies in North America, including Essex. Mr. Quine was recruited by an Essex County Gas SWMC Board Member to join Stone and Webster Engineering/Stone and Webster Management Consulting where he spent four years on LNG and natural gas EPC projects and international Consulting assignments in natural gas, LNG and CNG projects.

In 1996, Mr. Quine founded and served as CEO of Northstar Industries, LLC to provide project development formulation, engineering, procurement, prefabrication, and field construction for LNG, natural gas, gas storage, and CNG projects. Over the next 20 years, Mr. Quine and Northstar earned a reputation for providing safe, reliable, and cost-effective systems. Mr. Quine created patentable technology which focused on module design for all sizes of LNG and natural gas projects. Northstar's customer base was historically gas transmission, gas local distribution companies, electric power producers, gas storage customers, and LNG customers.

During this time, Mr. Quine created a great deal of client value by developing project ideas for customers as a paid service. After building this successful EPC business, Mr. Quine left Northstar in order to devote the balance of his career specifically toward complete LNG project development, from concept and capitalization to commercial operations.

# Biography, Scott M. Shields, Partner

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Mr. Shields is a Partner at New Energy Development Company providing project development, strategic and advisory services in LNG, natural gas, and sustainable investments relating to his extensive experience in corporate development, corporate and industry strategy, commercial structuring and negotiations, trading, risk management and corporate finance. He most recently provided strategic consultancy services through Morgan Shields Energy LLC, a company he founded in 2009.

Mr. Shields earned a bachelor's degree with distinction and honors in finance from the Pennsylvania State University and an MBA from the University of Chicago.

He launched his career as a senior financial analyst and internal auditor at Exxon Corporation over twenty-five years ago, where during a span of almost four years, he streamlined global commodity contracts, international crude trading, and supported the company's multi-billion-dollar operations. Following his time at Exxon, Mr. Shields traded physical and financial structured natural gas transactions with Sonat Energy Marketing, based in Birmingham, Alabama.

From those successes, he was identified in 1996 by Enron Capital & Trade as a valuable resource to develop a new, long-term structured transactions group. During his four-year tenure, his successes included re-powering project development and other structured propositions, the largest of which entailed an international structure contributing $10 million to the company's gross margin. In 2005, Mr. Shields was recruited by Atlanta's AGL Resources where he valued and negotiated critical energy storage and balancing agreements at Jefferson Island Storage and Hub, project developed AGL's liquefied natural gas operations and natural gas infrastructure, and successfully negotiated key multi-commodity joint ventures for the AGL and its seven LDCs.

Given Mr. Shields experiences in the LNG industry, he seamlessly transitioned to Vice President of Repsol Energy North America. Over his four years at Repsol LNG, he was integral in its successful entry into North America. Along with his team, Mr. Shields structured, valued, and negotiated the $547mm international binding agreement to supply 100% of the required upstream LNG to the $1.2 billion Canaport LNG import facility. Downstream, he created the strategic plan, marketing plan, and negotiated long-term structured regasification contracts with natural gas utilities, consortiums, and power plants. In 2010, Mr. Shields advanced to Managing Director for a subsidiary of Black Hills Corporation, where he formed and grew the East Gas Origination & Trading Group. While developing its North American strategy and successfully originating and negotiating a company acquisition, Mr. Shields executed two $307 million structured transactions contributing $7.5 million to gross margin within a year of joining the company.

Mr. Shields served on the Board of Directors of Oasis Bank SSB, a business he co-founded in 2005. The board raised the private equity capital, and Mr. Shields served as the Chairman of the Mergers & Acquisitions and Asset & Liability Committees. His team successfully merged the bank with Spirit of Texas Bank, which completed an initial public offering in 2018 with $1 billion in assets.

Mr. Shields is FINRA licensed in investment banking with current series 79, 82, and 63 qualifications. In addition to his professional pursuits, Mr. Shields was nominated to the Katy Independent School District Bond Committee, approving and recommending over $600 million in new bond issuances.

# Biography, Alexander “Hap” Ellis, Partner

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Alexander “Hap” Ellis III is a Partner at New Energy Development Company providing project development, strategic and advisory services in LNG, natural gas, and sustainable investments relating to his extensive experience in project development, corporate and industry strategy, commercial structuring and negotiations, risk management and corporate finance. He has served for 18 years as General Partner at RockPort Capital Partners, a multi-stage venture capital firm that invests in alternative and traditional energy, mobility, and sustainability. He brings to New Energy Development over 40 years of executive experience project developing, originating, funding and serving as executive and/or board member in leading energy companies, sustainable energy firms, and investment firms.

Mr. Ellis serves as Chairman of Old Westbury Funds ($34 billion) which is part of the Bessemer Trust with 18 offices in the United States. He is a graduate of Colorado College and earned a BA in Political Science and graduated with a Masters Degree from the Yale School of Management in MPPM.

Mr. Ellis has a long and distinguished history of development and funding throughout North America and the Caribbean. For example, as head of marketing for Kenetech Corp, the nation’s pioneering wind and gas-fired independent company in the early 1990’s, he led the development and successful permitting of a 250MW wind project in western Maine. Mr. Ellis was part of the marketing and development team that ultimately won the right to build EcoElectrica, the 500MW combined-cycle plant plus LNG facility in Puerto Rico, partnering with Enron International.

In 2001, Mr. Ellis and six partners founded RockPort Capital Partners, a venture fund focused on energy technologies. RockPort Capital raised roughly $835MM over three funds and invested broadly across alternative energy technologies, oil & gas-focused technologies, and the interplay between energy providers and mobile technologies. He and two partners then led the development and permitting, with partner Duke Energy, of a 540MW combined-cycle power plant in Veazie, ME (operating as “Maine Independence”). He and two partners later teamed up with EDPR-US (the Houston-based, US-renewables arm of the Portuguese national utility, EDP) to develop a 400MW wind project in Aroostook County. Mr. Ellis served on the board of BayCorp Energy which ultimately purchased 17% of New England’s largest nuclear plant, Seabrook Nuclear Generating Station. NextEra eventually purchased the station for a significant premium.

For many years, Mr. Ellis has continued to analyze, evaluate, plan, develop and fund innovative energy opportunities throughout North America. Mr. Ellis is Chairman of the George and Barbara Bush Foundation, which supports the Bush School of Government and Public Service and President Bush’s Library at Texas A&M in College Station, Texas.

# Keys to Project Success

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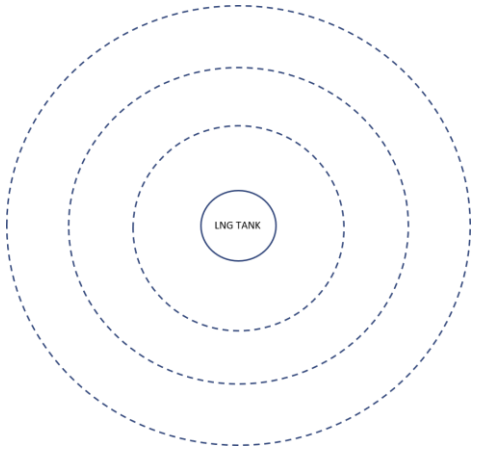
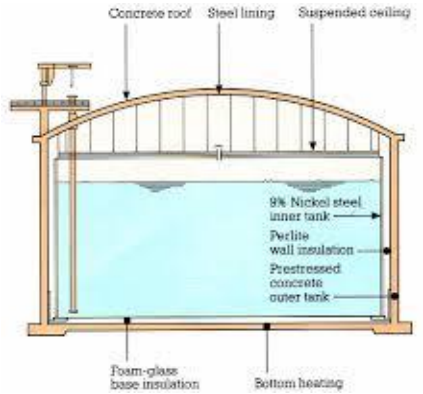
- **Strong Customer and Regulatory Support**
  - ✓ Demonstrated Need
  - ✓ Long term contracts
  - ✓ Risk sharing
  - ✓ Early Stakeholder Engagement
  - ✓ Code Compliant, Least Cost, Least Environmental Impact Solution
- **LNG Site Selection**
  - ✓ Meet or exceed siting requirements
  - ✓ Over-sized site to limit exclusions on site
  - ✓ Site the facilities in communities that support the project
- **Development Plan to Include**
  - ✓ Safe, Reliable, and Cost-Effective Technical Design Baseline
  - ✓ Engagement of Stakeholders including First Responders
  - ✓ A Robust Development Plan from Concept to Adjudication and Commercial Ops.
- **Proven Development Team**
  - ✓ To Minimize Risk and Enhance Confidence of Stakeholders

CONSERVATIVE EXCLUSION ZONES




FULL CONTAINMENT STORAGE

BIRD'S EYE VIEW RENDERING

## LNG Facility Rendering

LNG Pretreatment, Liquefaction, Field Fabricated Storage, Vaporization,
Trailer Load/Unload, and Renewable Energy Components

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# This is How We Do It

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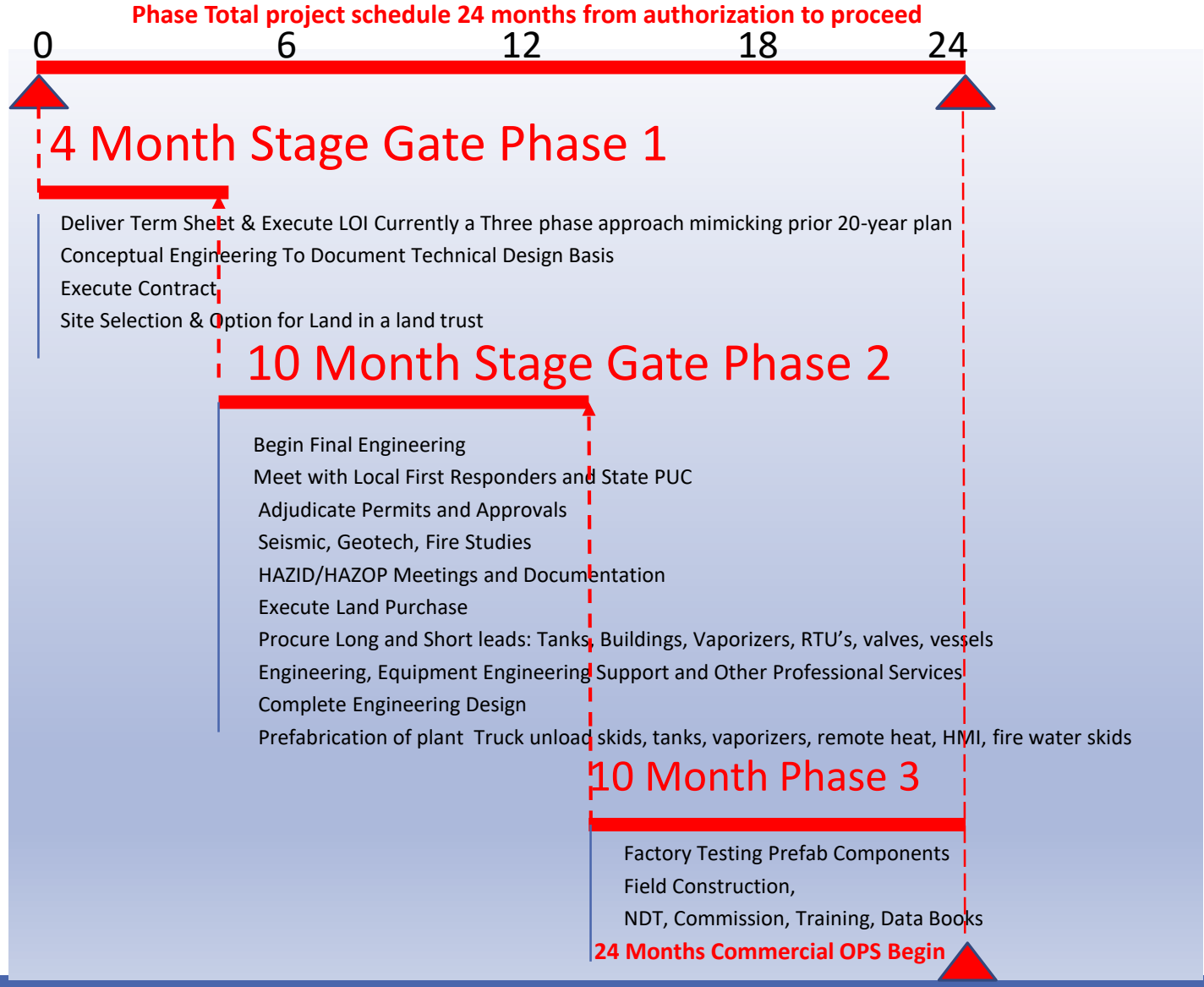
## 24-Month Stage Gate Project Management and Control Plan - Typical LNG Plant






PROPRIETARY AND CONFIDENTIAL

# Low Risk Stage Gate Project Management and Approval System – FERC Plant

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| Months | 0 | 6 | 12 | 18 | 24 | 30 | 36 | 42 | 48 |
|---|---|---|---|---|---|---|---|---|---|
| Project Initiation | | | | | | | | | |
| Conceptualize Facilities & Services: | 6 Mos | | | | | | | | |
| Anchor Customer Agreement(s): | 6 Mos | | | | | | | | |
| Pre-Engineering/Site Selection: | 6 Mos | | | | | | | | |
| Pre-Filing Meet Prep and Pre-Filing: | 8 Mos | | | | | | | | |
| Pre-Feed & Feed Engineering | 12 Months | | | | | | | | |
| FERC Filing, Adjudication, Approval | 12 Months | | | | | | | | |
| Final Eng., Procure, Prefab. and FAT | 36 Months | | | | | | | | |
| Field Construct, Comm., Train., Doc. | 30 Months | | | | | | | | |
| Commercial Operations Begin | | | | | | | | | |

For more information, see www.newenergydev.com

# LNG Facility Site Layout: Shop Fabricated Storage, Gas Pre-treatment, Liquefaction, Trailer Loading, Vaporization, Green Power

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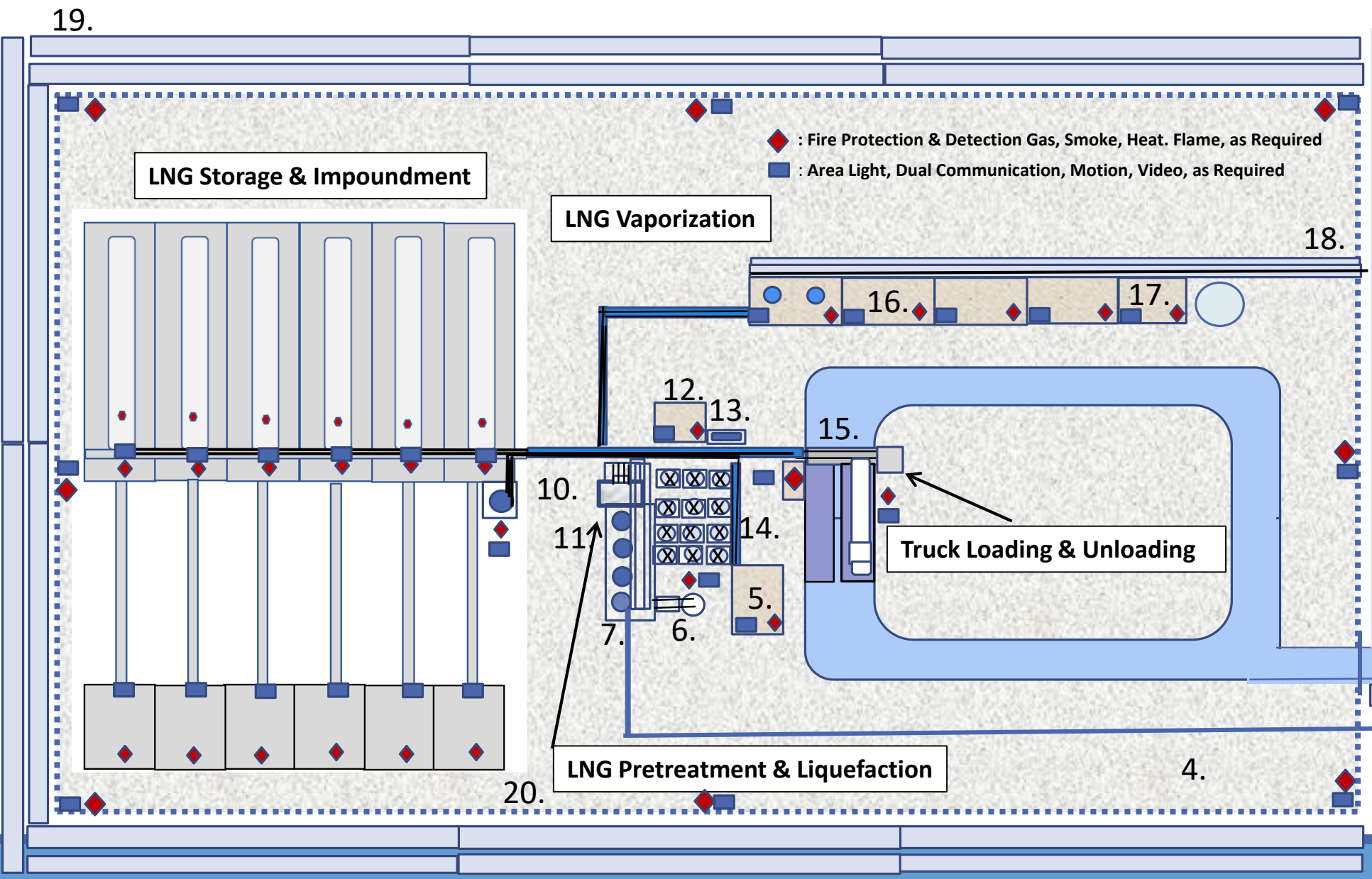
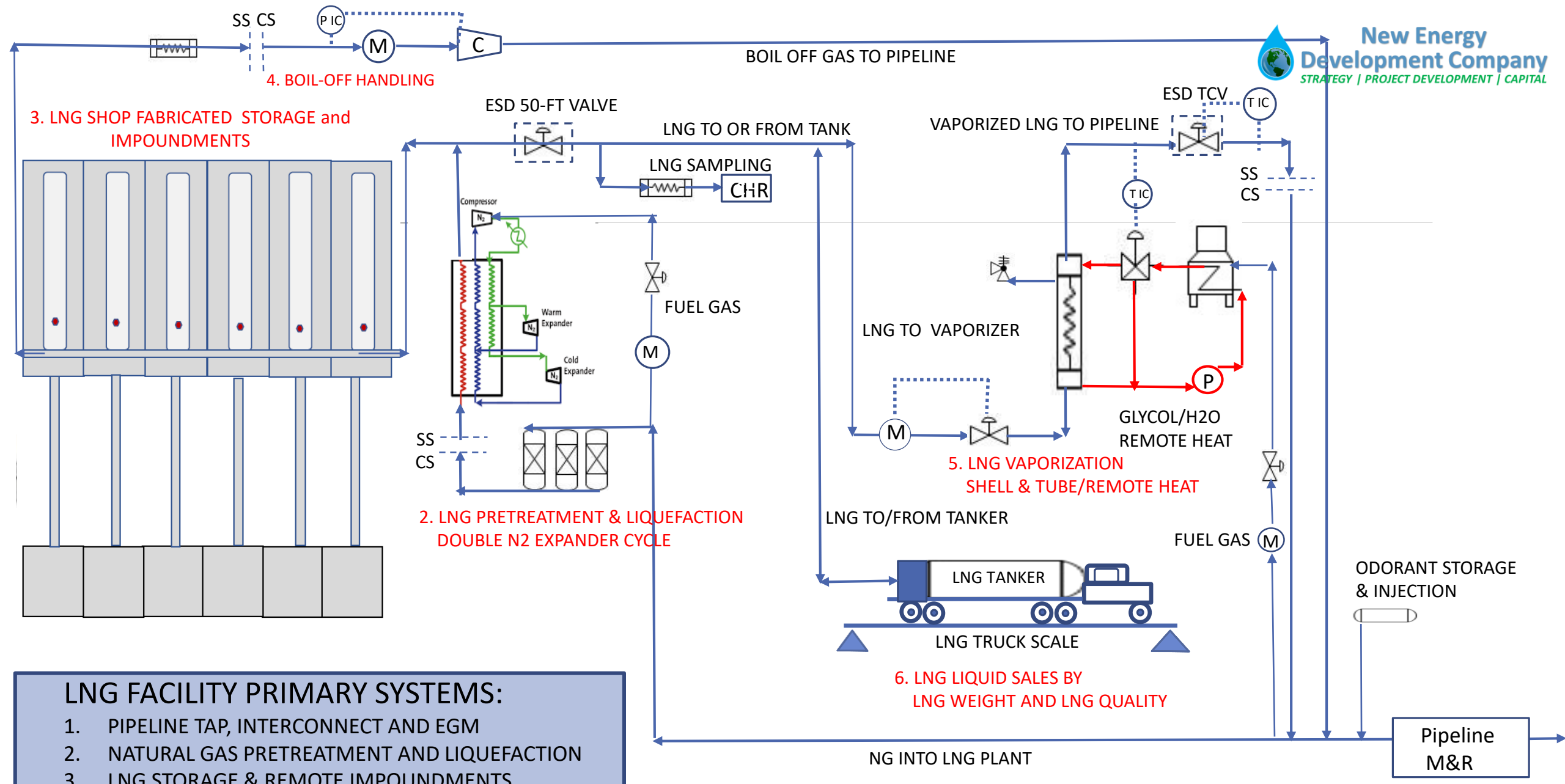



**LNG FACILITY MAJOR EQUIPMENT LIST**

1. Natural Gas Pipeline To/From Source
2. M&R Facility and EGM Building
3. Security Gate Checkpoint Via Access Rd
4. NG Connecting plant Pipe
5. N2 Refrigeration Compressor
6. LN2 Storage Tank and Vaporizer
7. LNG Pretreatment
8. LNG Remote Impoundments
9. LNG Shop Fabricated Storage Tanks
10. LNG Vaporizer and Impoundment
11. Cold Box, Expander Skid, Impoundment
12. Boil off Handling
13. Odorant Storage and injection system
14. LNG Refrigeration Cooling Fans
15. LNG Load Rack, Scales, Sub-imp., Shelter
16. Control Rm, Heaters, Elect/MCC, IA, Aux
17. Fire Prot. Water tank and Pump House
18. Utilities ROW: Water, Elec., Comm, Sewer
19. Solar Electric Generation Array
20. Security/Vapor Fence with Emergency Egress Gates as Required.




## LNG FACILITY PRIMARY SYSTEMS:

1. PIPELINE TAP, INTERCONNECT AND EGM
2. NATURAL GAS PRETREATMENT AND LIQUEFACTION
3. LNG STORAGE & REMOTE IMPOUNDMENTS
4. LNG CUSTODY TRANSFER VAPORIZATION
5. LNG CUSTODY TRANSFER LIQUID SALES

# LNG Facility Site Layout: Shop Fabricated Storage, Gas Pre-treatment, Liquefaction, Trailer Loading, Vaporization, Green Power

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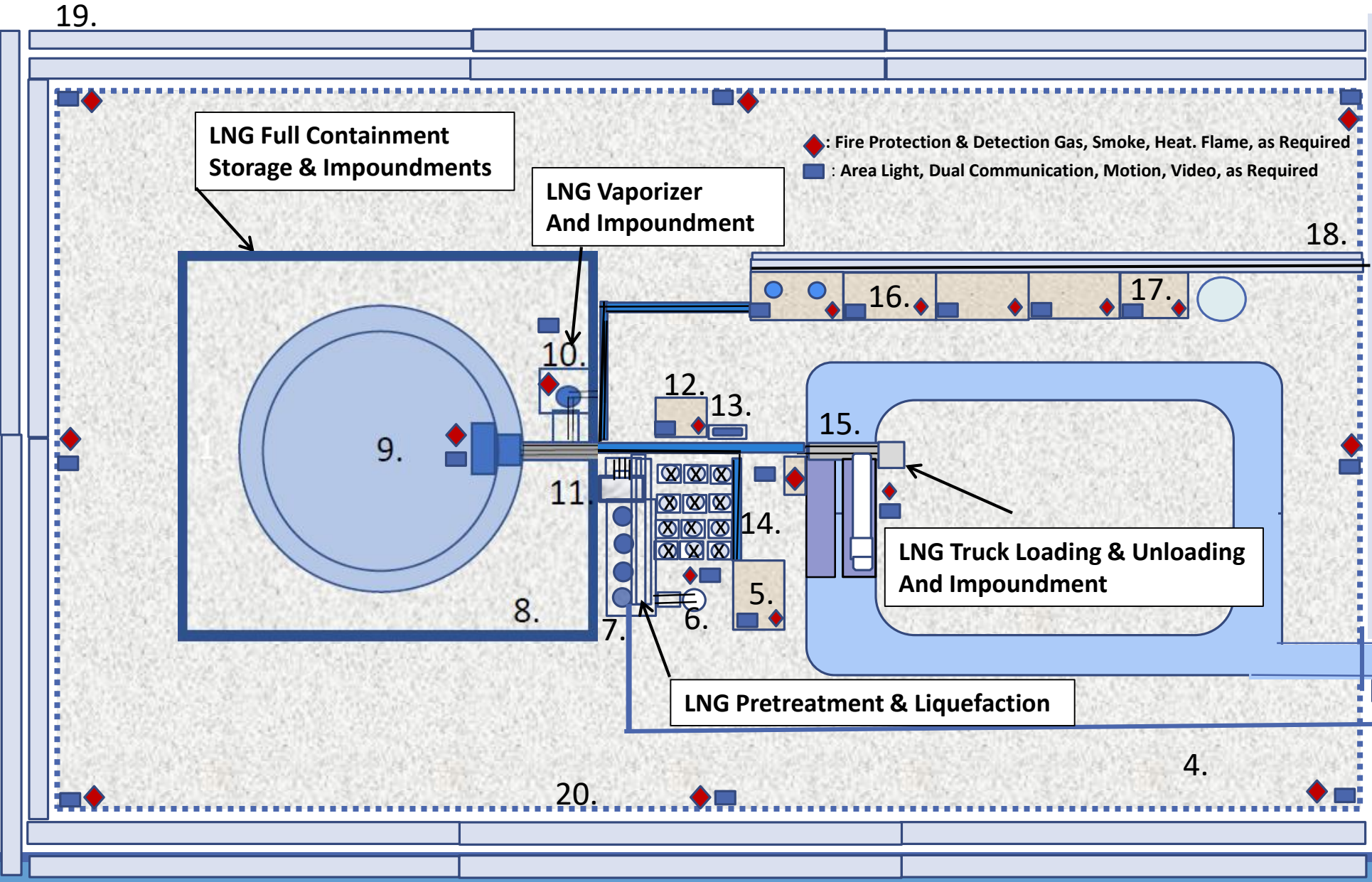


## FACILITY MAJOR EQUIPMENT LIST

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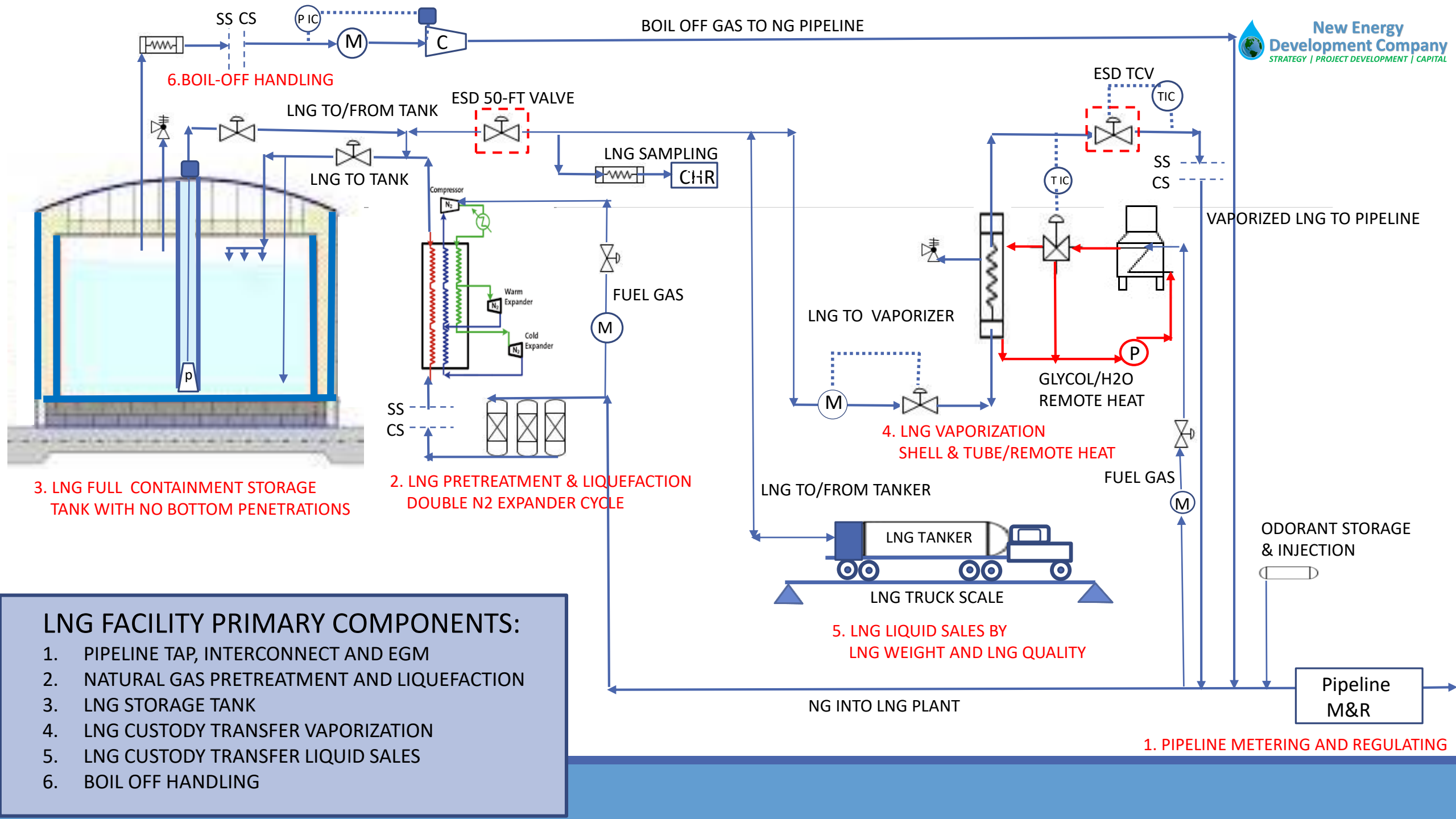


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## LNG FACILITY PRIMARY COMPONENTS:

1. PIPELINE TAP, INTERCONNECT AND EGM
2. NATURAL GAS PRETREATMENT AND LIQUEFACTION
3. LNG STORAGE TANK
4. LNG CUSTODY TRANSFER VAPORIZATION
5. LNG CUSTODY TRANSFER LIQUID SALES
6. BOIL OFF HANDLING