



Natural Gas for High Horsepower

# SUMMIT

Jacksonville, FL | Prime Osborn Convention Center

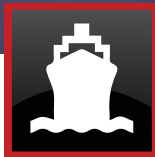
Conference & Tours: November 6-9, 2017

Exposition: November 7-8, 2017

## CONFERENCE PROGRAM



RAIL



MARINE



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Presenting Sponsor:



Pivotal LNG

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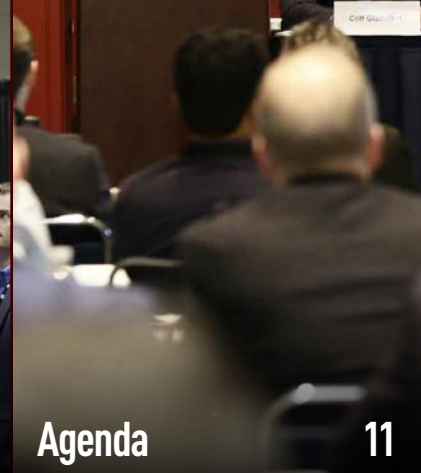
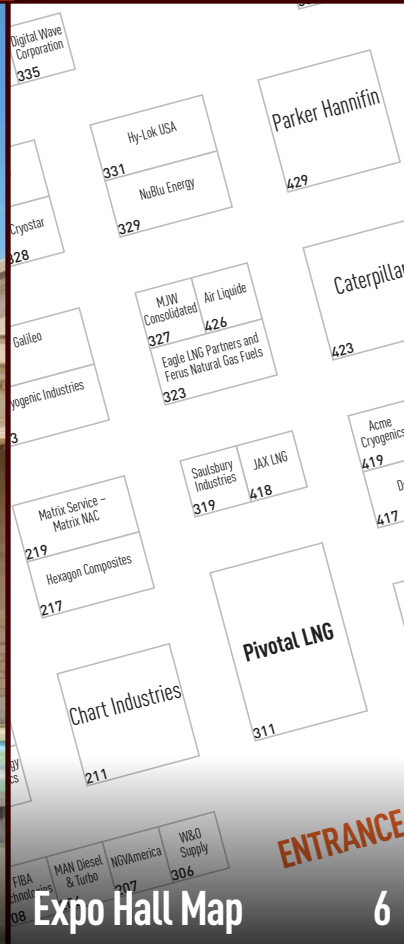


## Event Partner





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## Welcome to the 2017 High Horsepower Summit.

We are excited to be here with you in Jacksonville, the absolute epicenter of LNG market development! This week will bring a wealth of insight on the latest natural gas market momentum across North America.

Over the next few days we will hear about the long-term business case for natural gas in the HHP sector, and about the array of incredible success stories taking place in the market every day. We'll learn how natural gas provides fuel price stability, predictability, risk mitigation, and improved environmental performance. We will visit Jacksonville's operational natural gas marine, rail, and on-road trucking projects, as well as several brand new natural gas infrastructure and bunkering projects. Real assets and real projects!

With a growing global base of fueling infrastructure, increased market momentum, and the IMO low-sulfur fuel regulation set for full implementation in 2020, there has never been a better time for operators to make the switch to natural gas. We have seen significant growth and transformative change in the commercial marine sector, with over 230 LNG-powered commercial marine vessels in operation or on order. The North American rail sector has several years of early-stage market development now complete, with LNG and CNG locomotive projects, new LNG tender car specifications, and efforts to move LNG as a commodity well underway. The use of natural gas in remote markets for power generation, industrial and commercial applications, and other heat and power needs has dramatically increased in the last five years. Mining operations have successfully deployed natural gas projects from haul trucks to onsite power generation. In each market segment we are seeing growth and opportunity, a story line that will continue here at the HHP Summit and in the years ahead.

To our sponsoring companies, we applaud your commitment to delivering more value and better performance to end-users through ongoing improvements to your engines, tanks, compressors, valves and other technologies. Our presenting sponsor, Pivotal LNG, has worked with us and other industry sponsors and exhibitors along with leaders throughout the industry to shape an HHP Summit program that is timely, relevant and provides value to each of our attendees. Our event partner, the Jacksonville Chamber of Commerce, has worked diligently with local businesses to ensure their representation. A heartfelt thank you to all for your participation.

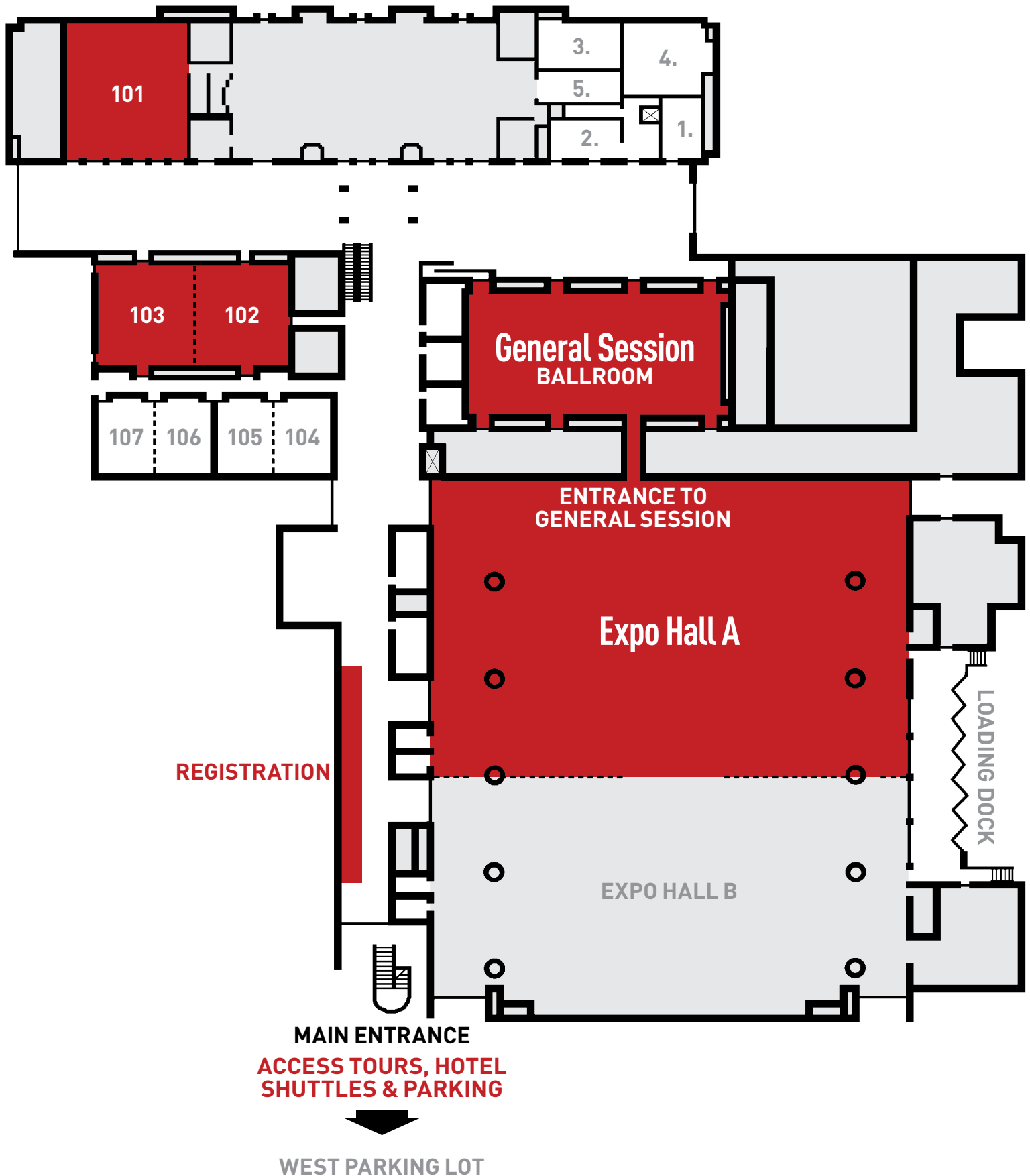
I offer my sincere welcome to everyone. See you on the show floor!

Erik Neandross  
Chief Executive Officer  
Gladstein, Neandross & Associates



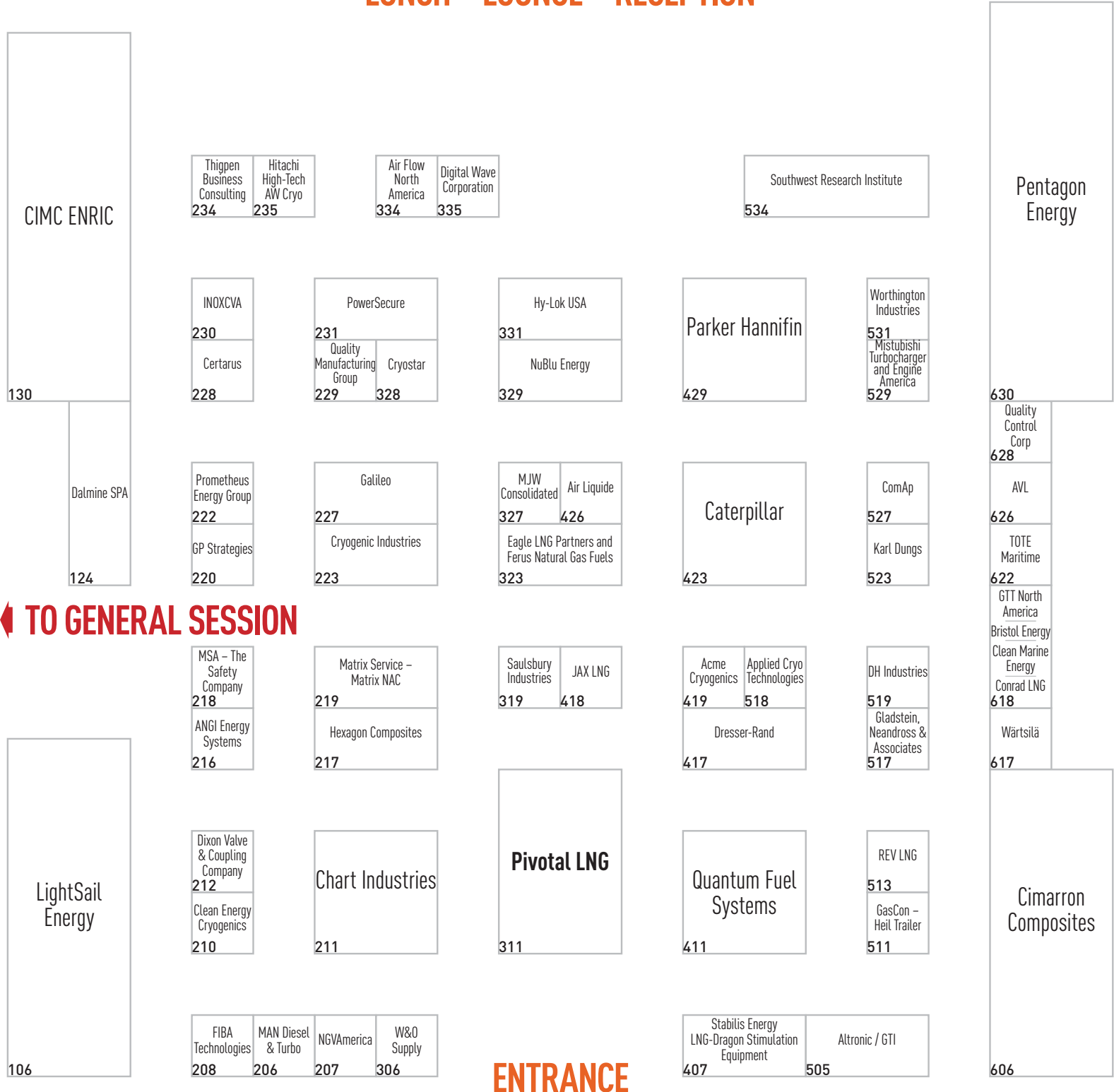


# Prime F. Osborn III Convention Center



# Expo Hall Map

## LUNCH – LOUNGE – RECEPTION





# Exhibitor List

## Expo Hall Schedule

<b>Tuesday, November 7</b>	4:00 p.m. – 7:00 p.m.	<b>Expo Hall Grand Opening Reception</b>
<b>Wednesday, November 8</b>	8:00 a.m. – 6:00 p.m. 12:00 noon – 1:30 p.m. 4:15 p.m. – 6:00 p.m.	<b>Expo Hall Open Expo Hall Lunch Expo Hall Reception</b>

Exhibitor	Booth	Exhibitor	Booth
Acme Cryogenics	419	Hitachi High-Tech AW Cryo, Inc.	235
Air Flow North America Corp	334	Hy-Lok USA	331
Air Liquide	426	INOXCVA	230
Altronic, LLC / GTI	505	JAX LNG	418
ANGI Energy Systems	216	Karl Dungs, Inc.	523
Applied Cryo Technologies	518	LightSail Energy	106
AVL Powertrain Engineering	626	MAN Diesel & Turbo	206
Bristol Harbor	618	Matrix Service-Matrix NAC	219
Caterpillar	423	Mitsubishi Turbocharger And Engine America, Inc.	529
Certarus Ltd.	228	MJW Consolidated	327
Chart Industries	211	MSA - The Safety Company	218
Cimarron Composites	606	NGVAmerica	207
CIMC ENRIC	130	NuBlu Energy	329
Clean Energy Cryogenics	210	Parker Hannifin	429
Clean Marine Energy	618	Pentagon Energy	630
ComAp	527	Pivotal LNG	311
Conrad LNG	618	PowerSecure, Inc.	231
Cryogenic Industries	223	Prometheus Energy Group, Inc.	222
Cryostar	328	Quality Control Corp	628
DH Industries	519	Quality Manufacturing Group	229
Digital Wave Corporation	335	Quantum Fuel Systems LLC	411
Dixon Valve & Coupling Company	212	Rev LNG, LLC	513
Dresser-Rand	417	Saulsbury Industries	319
Eagle LNG Partners and Ferus Natural Gas Fuels	323	Southwest Research Institute	534
FIBA Technologies	208	Stabilis Energy LNG-Dragon Stimulation Equipment	407
Galileo	227	Tenaris	124
GasCon	511	Thigpen Business Consulting	234
Gladstein, Neandross & Associates	517	TOTE Maritime	622
GP Strategies	220	W&O Supply, Inc.	306
GTT North America	618	Wärtsilä	617
Heil Trailer International	511	Worthington Industries	531
Hexagon Composites	217		

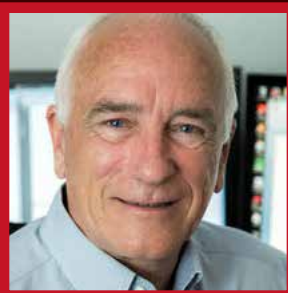
# Featured Speakers



**Thomas Crowley**  
Chief Executive  
Officer & Chairman  
**CROWLEY®**

## KEYNOTE ADDRESS: Wednesday, November 8, 10:15 a.m.

Thomas Crowley Jr. has served as chief executive officer and chairman of the board of directors at Crowley Maritime Corporation since 1994. Under his leadership, the company has sold non-core and underperforming businesses while making a series of acquisitions to allow Crowley Maritime Corporation to expand into areas of opportunity such as logistics, petroleum transportation and distribution, ship management, marine salvage and wreck removal, naval architecture and engineering, project management and liquefied natural gas (LNG) services. Crowley has guided the company through the largest, most technically demanding marine salvage project in history—the refloating and removal of the Italian cruise ship Costa Concordia. Crowley has invested billions of dollars during his tenure in the construction of American-built tugboats, heavy-lift flat-deck barges, articulated tug barges (ATBs), tankers and now, LNG-powered container/roll-on/roll-off (ConRo) ships for use in the U.S.-Puerto Rico trade, utilizing best-available technology with a focus on safety, environmental protection, performance and efficiency. Crowley holds a business finance degree from the University of Washington. He is on the board of directors of the World Shipping Council, an advisory board member at the University of Washington's Foster School of Business, and a longstanding member of the Young Presidents Organization.



**Martin Tallett**  
President



## AFTERNOON ADDRESS: Wednesday, November 8, 2:30 p.m.

Martin Tallett, president and founder of EnSys Energy, is an established advisor to industry and government and a developer of decision support software and services. He is chemical engineer with operational, supply planning, management and systems experience with Exxon and Amoco proceeding the current thirty plus years in international consulting. Among Mr. Tallett's main activities has been his development of, and leadership, in integrated global supply industry modeling in the form of the EnSys WORLD oil model. This approach, continuously evolved and adapted to real world developments and issues, has established a proven and unique means to tackle important, strategic questions that are national, international and global in nature. Studies for clients as varied as the US Departments of Energy and State, EPA, EIA, American Petroleum Institute, OPEC Secretariat, International Maritime Organization, major oil companies, and technology providers have ranged from reference outlooks through 2040 to oil disruptions to marine fuel, ULS fuel and climate change regulatory impacts to technology and catalyst market outlooks. Recent studies led by Mr. Tallett have focused on North American supply and logistics issues, notably the potential refining and market impacts of Keystone XL and other pipeline and rail projects, and of allowing US crude oil exports. Mr. Tallett has also been named annually as a "main contributor" to each OPEC Secretariat World Oil Outlook published since 2007.



**Pete Tumminello**  
Group President of  
Commercial Businesses



## OPENING ADDRESS: Wednesday, November 8, 9:00 a.m.

Peter Tumminello is group president of commercial businesses for Southern Company Gas. In this role, he is responsible for all operations outside of the regulated entities, including wholesale services, retail energy, retail services, and all midstream businesses including pipeline investments, gas storage, and liquefied natural gas (LNG) operations. He also serves on the Southern Company Gas Management Council. Tumminello brings more than 30 years of experience to the energy industry in his current position. He joined the executive management team of Sequent in August 2003 as vice president of asset management and origination and has held several positions that have increased his roles and leadership responsibilities throughout the organization. Prior to joining Southern Company Gas, Tumminello was vice president of energy supply for Green Mountain Energy Company, and he worked for TPC Corp and ARCO Oil and Gas Company in various capacities in energy marketing, storage and transportation asset management, petroleum engineering, finance and planning, and project evaluation. Tumminello earned his masters of business administration degree from the University of Southwestern Louisiana and his bachelor of science in petroleum engineering from Louisiana Tech University. He serves on the advisory board for Tulane University's Energy Institute, as well as the Board of Trustees for Cristo Rey Jesuit High School in Houston.



# Featured Speakers



**Guillaume Brossard**  
Director LNG Market  
Development  
 **GazMétro**



**Glenn Edvardsen**  
Chief Executive Officer  
 **UECC**



**Paul Evans**  
Executive Vice President  
 **ferus**  
Natural Gas Fuels



**Tim Hermann**  
President  
 **Pivotal LNG**



**Jim Hertwig**  
Chief Executive Officer  
 **FEC Florida East Coast**  
RAILWAY



**David Kailbourne**  
Chief Executive Officer  
 **REV LNG**  
REVOLUTIONARY LNG



**Peter Keller**  
Executive Vice President  
 **TOTE**



**Marcel LaRoche**  
Director LNG Engineering  
 **BCFerries**



**Andrew Moriarty**  
President, Energy &  
Chemicals Group  
 **CHART**



**John Nadeau**  
Assistant Commandant  
for Prevention Policy  
 **U.S. COAST GUARD**  
1790



**Sarah Smith**  
Vice President Development  
& External Relations  
 **FORTIS BC**



**Frank Starke**  
Global Product Manager  
Medium Speed Engines  
 **CATERPILLAR**



**Tom Strang**  
Senior Vice President,  
Maritime Affairs  
 **Carnival**



**David Stubbs**  
Director of Properties &  
Environmental Compliance  
 **JAXPORT**  
JACKSONVILLE PORT AUTHORITY



**Amy Sweeney**  
Director, Division of  
Natural Gas Regulation  
 **U.S. DEPARTMENT OF ENERGY**



**Chad Verret**  
Executive Vice President  
 **HARVEY GULF**  
INTERNATIONAL MARINE



**Luca Volta**  
LNG Venture Manager  
 **ExxonMobil**



**Lauran Wetemans**  
General Manager  
Downstream LNG  
 **Shell LNG**



**Momoyo Yuki**  
Senior Manager,  
Business Development Group  
 **JAPEX**

# Project & Technology Showcase

Explore the HHP Summit Project & Technology Gallery to learn about the innovative LNG and CNG marine, rail, E&P, mining, and power gen projects, technologies, and fueling solutions that will be showcased in the expo hall, agenda sessions, and off-site tours.

★ Featured Sponsor

⚙️ Expo Hall

📅 Agenda

🚌 Tours



**FortisBC – LNG Marine Bunkering for North America's West Coast**



**JAX LNG Production Plant**



**CIMC ENRIC – 40ft LNG ISO Tank**



**Caterpillar – G3520H Natural Gas Generator Set (Powering the JAX LNG Production Facility)**



**Eagle LNG – Maxville LNG Plant**



**LightSail Energy – 53ft ISO LightStore Gas Transport Module**



**Indiana Harbor Belt – Dual Fuel Locomotive Engine Systems**



**TOTE – LNG-Powered Container Ship and On-Dock ISO-Tank LNG Bunkering**



**Cimarron Composites – 20' CNG Jupiter Tube Trailer**



**Quantum Fuel Systems – Virtual Pipeline Trailer**



**Florida East Coast Railway – LNG Locomotives, Tender Car & LNG Tender Fueling Operation**



**Cosmodyne – Natural Gas Liquefaction Equipment (Selected for Eagle LNG Plant)**





# Agenda – Monday, November 6

## OFF-SITE TOURS & PARTNER EVENTS

## GENERAL SESSION & WORKSHOPS

## NETWORKING EVENT

8:00 a.m. - 5:00 p.m.

**Expo Hall Move-In  
and Registration Open**

9:00 a.m. - 5:00 p.m.

**Partner Events\*\***

*\*\* By invitation only*

# Tuesday, November 7

9:00 a.m. - 12:00 noon

OFF-SITE TOURS

**JAX LNG Plant and  
TOTE LNG Terminal  
Tour**

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This "tour of many firsts" will showcase the pioneering work of TOTE and Pivotal LNG, two of the earliest market movers in the North American LNG marine market. Attendees will get a comprehensive look at the entire LNG fuel supply chain, starting with the JAX LNG production facility, a newly constructed small-scale coastal LNG facility which is the first in North America and a joint venture between Pivotal LNG and NorthStar Midstream. This facility will load North America's first LNG bunkering barge, which will then maneuver to TOTE's berth to provide LNG bunkering services to its two first-in-the-world LNG-powered container ships. From the JAX LNG plant, the tour will continue to TOTE's Blount Island Terminal where attendees will get an up-close look the innovative on-dock ISO-tank LNG bunkering facility that has served TOTE's vessels for more than a year. This on-dock tour will provide an overview of the TOTE LNG container ship that will be at the dock, as well as its LNG bunkering operation.

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MATRIX SERVICE



COSMODYNE  
A Cryogenic Industries Company

9:00 a.m. - 4:00 p.m.

TECHNICAL WORKSHOP

**On-Road Natural Gas  
Workshop**

Natural gas is the most effective and efficient option when it comes to a low emission and cost-effective alternative fuel for on-road heavy-duty truck operations. With 10 years of continued market growth, today's heavy-duty natural gas trucks are proven, reliable, powerful, robust, and super clean. Leading fleet operators throughout North America have converted some or all of their operations to run on natural gas, with continued consistent investment happening even in a low petroleum price environment.

Hear from UPS, Saddle Creek, and other leading fleets about their experiences running large numbers of natural gas trucks, how and why they made the switch, challenges they encountered, solutions they employed, and the real-world cost differences. Learn about today's natural gas trucks, engines, and fueling infrastructure, as well as funding options (including VW funds) available to help support their purchase.

**9:00 a.m. - 10:30 a.m. ► Learning by Example: Case Studies and Success Stories**

MODERATOR: **David Jaskolski**, Manager, Fuels, Pivotal LNG

- **Mike DelBovo**, President, Saddle Creek Transportation
- **Mario Vila**, Ground Fleet Maintenance Director, UPS
- **Stephen Silverman**, President, Raven Transport Holding Inc.

**10:30 a.m. - 12:00 noon ► Critical Considerations: Equipment, Fuel, and Funding**

MODERATOR: **Dan Bowerson**, Director, Technology & Development, NGV America

- **Michael O'Hearn**, Vocational Sales Manager, Natural Gas Sales, Daimler Trucks North America
- **Mike Mackey**, Senior Vice President, GP Strategies
- **David Jaskolski**, Manager, Fuels, Pivotal LNG
- **Joe Annotti**, Senior Programs Manager, Gladstein, Neandross & Associates

**12:00 noon - 1:00 p.m. ► Lunch**

**1:00 p.m. - 4:00 p.m. ► UPS LNG and Jacksonville Transit Authority CNG Station Tour**

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AGC  
A Cryogenic Industries Company



Join HHP Summit on a tour of two high-volume natural gas fueling stations. Begin with an inside look at UPS's LNG fueling facility, one of the largest in the world, and supporting a 125+ truck operation. The tour will continue at Jacksonville Transit Authority's public access CNG station which provides fast-fueling for the Authority's own fleet of 100 natural gas buses in a six hour period and includes a separate public access fueling station capable of fueling passenger, mid-duty, and heavy-duty vehicles.



## Firm supply. Flexible solutions.



Pivotal LNG and JAX LNG are committed to providing customers with liquefied natural gas supply 24 hours a day, 365 days a year. Contact us to design a flexible, cost-effective fueling solution for your application.



9:00 a.m. - 5:00 p.m.

## TECHNICAL WORKSHOP Clean Low-Cost Energy for Remote Markets

The use of natural gas in remote markets for power generation, industrial and commercial applications, and other heat and power needs has dramatically increased in the last five years. End-users are seeing increased reliability and improvements to their cost, operational, and environmental performance. With these early successes, innovative supply chains are being built and the market is poised for more significant growth in the year ahead.

This workshop will provide those considering the use of natural gas for their power or thermal needs with the information and tools needed to evaluate such a transition. Real-world case studies will be presented, including end-users from markets in the Caribbean, northern Canada, and remote locations in North America. This will be followed by a session on supply chain solutions, including an in-depth look at various on-site bulk storage technologies and options. A third session will cover key project implementation, operations, maintenance and HSE (health, safety, environmental) considerations. Finally, an off-site tour will take attendees by bus to see one of the three LNG production plants in Jacksonville, Florida—a plant that provides LNG fuel for export to the Caribbean and Latin American markets. Following the LNG plant tour, the bus will return to the convention center where attendees are encouraged to visit the opening reception of the HHP Summit Expo Hall to see the latest technology available in the market today and interact with equipment, engine, and fuel suppliers and other industry leaders.

### 9:00 a.m. – 9:20 a.m. ► Welcome and Background

- **Matt Jackson**, Vice President LNG Business Development, Crowley LNG

### 9:20 a.m. – 10:40 a.m. ► Heat & Power Case Studies

MODERATOR: **Sam Thigpen**, Founder, Managing Director, and Senior Consultant, Thigpen Business Consultants

- **Jose Fernandez**, Area General Manager, Aggreko
- **George Nemeth**, Director, LNG Business Development, AES
- **Kevin Frantz**, Senior Vice President, Distributed LNG Solutions, New Fortress Energy

### 10:40 a.m. – 12:00 noon ► Supply Chain & Bulk Storage

MODERATOR: **Sam Thigpen**, Founder, Managing Director, and Senior Consultant, Thigpen Business Consultants

- **Erik Langeteig**, Global Business Development Manager for Energy Solutions, Chart Industries
- **Greg Denton**, Business Development Manager, GTT North America
- **Richard Insull**, Director of Business Development, Engineering, Matrix PDM Engineering, Inc.
- **David Barr**, Executive Director North American Operations, CIMC

### 12:00 noon – 1:00 p.m. ► Lunch

### 1:00 p.m. – 2:30 p.m. ► Key Considerations for Natural Gas Project Planning Implementation, and Daily Operations

MODERATOR: **Sam Thigpen**, Founder, Managing Director, and Senior Consultant, Thigpen Business Consultants

- **Mike Moris**, Director of HSE, Chart
- **Sam Thigpen**, Founder, Managing Director, and Senior Consultant, Thigpen Business Consultants
- **Greg Buffington**, Vice President, Crowley LNG/Carib Energy
- **Louis James**, Director, Business Development, UGI Energy Services

### 2:30 p.m. – 5:00 p.m. ► Eagle LNG Maxville Plant and Crowley LNG Bunker Terminal Tour

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LNG PARTNERS

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**MATRIX SERVICE**

**COSMODYNE**  
A Cryogenic Industries Company

Crowley's innovative on-dock LNG storage and bunkering operation will be front and center of this tour. The two 1,000 cubic meter LNG storage tanks from Chart are each 170-feet long and truly a sight to see up close. These tanks hold more than 500,000 liters of LNG, which is stored on site and delivered to Crowley's LNG-powered ConRo ships via a cutting-edge pumping and bunkering system. Fuel for this storage and bunkering facility will be provided by the nearby Maxville LNG production plant, a brand new state-of-the-art facility which includes a high-efficiency nitrogen-cycle Cosmodyne liquefier and a 1,000,000 gallon cryogenic tank provided by Matrix Service being constructed by Eagle LNG. The LNG plant and on-dock bunkering installation will give tour attendees a comprehensive look at the entire supply chain for modern LNG-powered vessel operations and other high horsepower customer segments.

12:00 noon - 5:00 p.m.

### TRAINING SESSION

#### Leveraging Personnel Training, Safety, and Stakeholder Engagement for Project Success + Live LNG Demonstrations

From code-required personnel training to permitting and working with emergency first responders, community and media engagement, proactive planning, and effective communication has proven critical in the successful implementation of natural gas HHP projects. Find out how such strategies can be used to streamline permitting and approval processes, achieve employee and community support, and help to avoid project delays and increased costs. Hear from those who have successfully developed and implemented comprehensive training programs, safety demonstrations and other strategies for stakeholder engagement. Several live demonstrations of the properties of liquefied natural gas (LNG) will be a part of this valuable training session. Seeing is believing with this invisible fuel!

*Note: This training session is an off-site engagement.*

12:00 noon – 12:15 p.m. ► Board Bus at Prime Osborn Convention Center

12:30 p.m. – 1:00 p.m. ► Lunch at Florida State College at Jacksonville (FSCJ) Fire Academy of the South

1:00 p.m. – 1:20 p.m. ► Welcome, Safety Briefing, and Overview of FSCJ Fire Academy of the South

- **Sheldon Reed**, Executive Director, Florida State College at Jacksonville

1:20 p.m. – 2:00 p.m. ► End-User Case Studies on Personnel Training and Community Engagement

- **Marcel LaRoche**, Director, LNG Engineering, BCFerries
- **Rod Keefe**, Assistant VP of Advanced Technology, Florida East Coast Rail

2:00 p.m. – 2:20 p.m. ► Q&A Session and Break

2:20 p.m. – 3:20 p.m. ► Key Elements for Personnel Training, HSE and Code Compliance

- **Ray Kroll**, HSSE & Facilities Manager LNG, Shell
- **Jorge Lobo**, LNG Industrial Applications Manager, FortisBC
- **Bobby Bailey**, LNG Logistics, Pivotal LNG
- **Randy Jenkins**, Commander, USCG, Detachment Supervisor, Cruise Ship National Center of Expertise

3:20 p.m. – 3:30 p.m. ► Q&A Session and Wrap Up

3:30 p.m. – 4:30 p.m. ► Live LNG Demonstration at the FSCJ LNG Burn Pit

4:30 p.m. – 4:45 p.m. ► Board Bus at FSCJ and Return to Prime Osborn Convention Center

5:00 p.m. – 7:00 p.m. ► Expo Hall Grand Opening Reception

1:00 p.m. - 4:00 p.m.

### PARTNER EVENT

#### SGMF Environmental Committee Meeting\*\*

HOSTED BY



\*\* By invitation only

4:00 p.m. - 7:00 p.m.




#### Expo Hall Grand Opening Reception

# Wednesday, November 8

## OFF-SITE TOURS & PARTNER EVENTS

## GENERAL SESSION & WORKSHOPS

## NETWORKING EVENT

8:00 a.m. - 6:00 p.m.	<b>Expo Hall Open</b>	Expo Hall will remain open during general session programming.
9:00 a.m. - 9:15 a.m.	<b>GENERAL SESSION</b> <b>Conference Welcome and Opening Address</b>	 <b>Pete Tumminello</b> , Group President of Commercial Businesses, Southern Company Gas  Southern Company Gas
9:15 a.m. - 10:15 a.m.	<b>GENERAL SESSION</b> <b>Facilitating Natural Gas Market Development for HHP Applications</b>	<p>Hear how industry stakeholders are facilitating the development of natural gas infrastructure projects throughout North America, resulting in environmental gains, economic development, job creation, and the growth of domestic energy markets.</p> <ul style="list-style-type: none"> <li>• <b>Lauran Wetemans</b>, General Manager Downstream LNG, Shell</li> <li>• <b>Rear Admiral John Nadeau</b>, Assistant Commandant for Prevention Policy, U.S. Coast Guard</li> <li>• <b>Amy Sweeney</b>, Director, Division of Natural Gas Regulation, Department of Energy</li> <li>• <b>David Stubbs</b>, Director of Properties &amp; Environmental Compliance, JAXPORT</li> </ul>
10:15 a.m. - 10:45 a.m.	<b>GENERAL SESSION</b> <b>Keynote Address</b>	 <b>Thomas Crowley Jr.</b> , Chief Executive Officer, Crowley Maritime <b>CROWLEY</b>
10:45 a.m. - 12:00 noon	<b>GENERAL SESSION</b> <b>A Sea Change for Marine Fuels</b>	<p>Nowhere has the natural gas high horsepower sector seen more significant growth and transformative change than in the commercial marine sector. In the last 5 to 10 years, the global market has gone from virtually no LNG-powered commercial marine vessels to now 230 units in operation or on order; vessels that will serve a wide range of applications. This significant growth has been witnesses in Europe, Asia, and throughout North America. Hear from a diverse group of global maritime executives and pioneers when it comes to the advancement of LNG-powered vessels around the world. Learn what has made their projects work well, why they have made the investment decisions they have, and what they expect to see in the continued aggressive growth of this sector.</p> <p>MODERATOR: <b>John Grubic</b>, Business Development Team Lead (LNG for Transport – Americas), Shell</p> <ul style="list-style-type: none"> <li>• <b>Marcel LaRoche</b>, Director, LNG Engineering, BCFerries</li> <li>• <b>Peter Keller</b>, Executive Vice President, TOTE</li> <li>• <b>Glenn Edvardsen</b>, Chief Executive Officer, United European Car Carriers (UECC)</li> <li>• <b>Tom Strang</b>, Senior Vice President Maritime Affairs, Carnival</li> <li>• <b>Chad Verret</b>, Vice President, Alaska &amp; LNG Operations, Harvey Gulf and Chairman Elect, Society for Gas as a Marine Fuel (SGMF)</li> </ul>
12:00 noon - 1:30 p.m.	<b>Expo Hall Lunch</b>	



# Wednesday, November 8

## OFF-SITE TOURS & PARTNER EVENTS

## GENERAL SESSION & WORKSHOPS

## NETWORKING EVENT

1:30 p.m. - 2:30 p.m.

### GENERAL SESSION

#### Building the Foundation for Today's HHP Natural Gas Market

Hear from industry leaders on how they have leveraged innovative partnerships and strategies to build some of the most critical natural gas supply projects for the North American HHP market to date. These executives will discuss how their companies have been able to successfully navigate customer demand, regulatory approvals, capital investment, and other critical-path issues to build this foundational infrastructure in key locations in the US and Canada. Hear how this infrastructure will serve not only North American markets but regional international markets as well as the industry continues to grow the use of natural gas in a variety of downstream high horsepower applications.

- **Tim Hermann**, President, Pivotal LNG
- **Paul Evans**, Executive Vice President, Ferus Natural Gas Fuels
- **Sarah Smith**, Vice President Development & External Relations, FortisBC
- **Guillaume Brossard**, Director LNG Market Development, Gaz Métro

2:30 p.m. - 3:00 p.m.

### GENERAL SESSION

#### Afternoon Address: A Focus on Energy Supply, Reliability, and Pricing

While the impacts of the 2020 International Maritime Organization (IMO) low sulfur fuel requirements are widely discussed when it comes to the blue water marine market, the impacts outside of the marine market have not been widely considered. In 2020, the North American demand for mid-level distillates from the blue water marine market will be significant, dwarfing the current demand of nearly all land-based applications aside from on-road trucking. This will be 100% incremental demand growth in a market with nearly maximized production capacity. Without much hope for expanding the current North American refining capacity, classic supply and demand forces can cause availability and price disruptions in the market for refined product. How long could such disruptions occur? How severe might they be? What are the unknowns here? Other large consumers of mid-level distillates (i.e. diesel fuel) will not want to miss this afternoon address as they consider their energy procurement plans for the next few years.



**Martin Tallett**, President, EnSys Energy



3:00 p.m. - 4:15 p.m.

### GENERAL SESSION

#### Accelerating the Market: Spotlight on Key Areas of Market Growth

With tremendous momentum in several HHP market segments and a growing network of natural gas fuel supply in all four corners of North America, hear from leading industry experts and end-users about the best and most strategic opportunities for near-term market acceleration. Gain an understanding of the best growth opportunities being spurred by environmental drivers, reliability, fuel cost predictability, cost savings, and/or business risk mitigation.

- **Frank Starke**, Global Product Manager Medium Speed Engines, Caterpillar
- **Jim Hertwig**, Chief Executive Officer, Florida East Coast Rail
- **David Kailbourne**, Chief Executive Officer, REV LNG
- **Andrew Moriarty**, President, Energy & Chemicals Group, Chart Industries
- **Luca Volta**, LNG Venture Manager, ExxonMobil

4:15 p.m. - 6:00 p.m.

#### Expo Hall Networking Reception

## 9:00 a.m. - Technical Session #1

9:00 a.m. - 10:30 a.m.

### TECHNICAL SESSION 1.1 LNG Bunkering Case Studies and Best Practices

With the global growth of the LNG-powered marine sector, various strategies have emerged to supply these vessels with the necessary fuel. This session will explore the different methods employed by several operators and the processes they underwent in designing the most favorable system for their operations. The development and imminent launch of North America's first LNG bunkering barge will be highlighted in this session. Panelists will help attendees navigate LNG production, fuel sourcing and delivery, regulatory and safety requirements, as well as other key considerations in the development of a natural gas fueling plan.

MODERATOR: **Arvind Ramakrishnan**, Senior Manager, FortisBC

- **Margaret Doyle**, Marine Business Development, Eagle LNG Partners
- **Dallas Smith**, Detachment Chief, U.S. Coast Guard
- **Richard Rogers**, Managing Director Storage & Peaking, Southern Company Gas
- **Brett Wolbrink**, Vice President, Conrad LNG
- **Aziz Bamik**, General Manager, GTT North America

9:00 a.m. - 10:30 a.m.

### TECHNICAL SESSION 1.2 Spotlight on Rail: The Indiana Harbor Belt CNG Locomotive Program

This session will provide a comprehensive overview of the Indiana Harbor Belt (IHB) CNG rail project, including details on the dual-fuel engine system, onboard CNG fuel storage design and integration into the overall locomotive, the CNG refueling approach and design, natural gas safety analysis, and more. Representatives from IHB and all of IHB's key suppliers for this project will present on this panel.

MODERATOR AND PROGRAM INTRODUCTION: **Wolfgang Fengler**, Senior Program Manager, Hexagon RailGas

- **Scott Myers**, President, Optifuel Systems, LLC
- **David Benner**, Executive Manager, ECO Vehicle Systems, and  
**Dave Myers**, Sales Manager North America – Mobile Pipeline Products, Hexagon Lincoln
- **Scott Myers**, President, Optifuel Systems, LLC
- **Ted Barnes**, R&D Manager, Gas Technology Institute
- **Tim Boyle**, Director of International Sales & Business Development, ANGI Energy Systems

9:00 a.m. - 10:30 a.m.

### TECHNICAL SESSION 1.3 Unearthing Savings and Opportunity

Fuel for mining operations is often a significant portion of ongoing costs. With the volatile nature of the global oil market, this can also be an unpredictable expense. Natural gas has the potential to save on both costs and emissions as well as deliver price stability for many facets of mining operations. From haul trucks to onsite power generation, listen in on case studies from operators who have successfully deployed natural gas projects and learn about the latest technology developments in the sector.

MODERATOR: **Randy Hull**, Vice President, Business Development, Prometheus Energy Group

- **Timothy Callahan**, Staff Engineer Large Engine R&D, SWRI
- **Steve Igoe**, Commercial Manager, LPSD Gas Engine Business Unit, Caterpillar
- **Travis Balaski**, Vice President, Ferus Natural Gas Fueling Solutions (Canada)
- **Reid Larson**, Product Manager, Chart Industries

## 10:45 a.m. - Technical Session #2

10:45 a.m. - 12:15 p.m.

### TECHNICAL SESSION 2.1 Full Steam Ahead: Best Practices and Technology Considerations for Launching LNG Marine Operations

With a growing global base of fueling infrastructure, increased market momentum, and the IMO low-sulfur fuel regulation set for full implementation in 2020, there has never been a better time for operators to make the switch to natural gas. This panel will highlight key areas for growth in the LNG-powered marine market and provide key insights into forward project development on issues such as engine selection, on-board fuel storage considerations, planning timelines for natural gas project development, and strategies for fuel procurement, as well as other operational, environmental, regulatory and cost considerations every vessel owner should know.

MODERATOR: **Mark Bell**, General Manager, Society for Gas as a Marine Fuel (SGMF)

- **Magnus Tangen**, Director of Operations, Clean Marine Energy
- **Les Gingell**, Vice President Marine Sales, MAN Diesel & Turbo
- **Jeff Sherman**, Senior Sales Manager, Commercial Marine, MTU America
- **Volker Possoegel**, Chief Executive Officer, Zeppelin Power Systems

10:45 a.m. - 12:15 p.m.

### TECHNICAL SESSION 2.2 Sector Update: Natural Gas Locomotives

With several years of early-stage market development now complete across multiple LNG and CNG locomotive projects, new LNG tender car specifications, and efforts to move LNG as a commodity now underway, the North American rail sector is positioned for growth. Leading rail executives will provide details on their companies' natural gas locomotive project efforts including use of natural gas as a fuel and movement as a commodity, strategies, key lessons learned thus far, and important forward considerations critical for the growth of this market. Attend this session to understand key forces that can drive this market forward.

MODERATOR: **Eric Kuenzil**, Director, Fuels, Pivotal LNG

- **Momoyo Yuki**, Senior Manager, Business Development Group, JAPEX
- **Fran Chinnici**, Senior Vice President, Engineering & Mechanical, Florida East Coast Rail
- **Scott Nason**, Product Manager – Rail Products Group, Chart Industries
- **David Willauer**, Senior Freight Transportation Project Manager; Freight & Logistics Business Line, Cambridge Systematics, Inc.

10:45 a.m. - 12:15 p.m.

### TECHNICAL SESSION 2.3 A Spotlight on the Growing Use of Compressed Natural Gas (CNG) Delivery Systems for HHP Applications

With dramatic improvements in recent years to high pressure gas compression technologies and innovative storage systems, compressed natural gas (CNG) has been making steady forward progress in multiple HHP segments as an extremely cost-effective and operationally reliable diesel displacement strategy. With these improved logistics and supply chain options, the low cost benefits of CNG are increasingly being delivered to the bottom line of the end-user. This panel discussion will highlight a number of examples where CNG has provided reliable and low-cost energy to a number of remote power generation projects, tier 4 engine solutions, and other applications looking for a price advantage, even in a low diesel cost environment. Attendees will also learn about supply chain and sourcing considerations, operational needs, and how to decide if CNG is the fuel for an operation.

MODERATOR: **Dave Myers**, Sales Manager North America – Mobile Pipeline Products, Hexagon Lincoln

- **Nathan Ough**, Vice President, Certarus (USA) Ltd
- **Hernan Henriquez**, Executive Director of Sales & Marketing, Quantum Fuel Systems
- **Tom DeLay**, President, Cimarron Composites
- **David Barr**, Executive Director North American Operations, CIMC



# Thursday, November 9

## OFF-SITE TOURS & PARTNER EVENTS

## GENERAL SESSION & WORKSHOPS

## NETWORKING EVENT

12:45 p.m. - 4:00 p.m.

### OFF-SITE TOUR **Florida East Coast Railway LNG Operations Tour**

HOSTED BY



In November 2014, Florida East Coast Railway (FECR) initiated the deployment of 24 new LNG-powered locomotives. These 4400 HP Tier 3 emissions compliant locomotives now make up FECR's entire mainline thru-haul fleet operating between Jacksonville and Miami. With the conversion project just recently completed, join fellow HHP attendees on the first-ever tour of LNG operations at FECR's Bowden Yard in Jacksonville. This is a unique opportunity to see firsthand this pioneering LNG locomotive project. On display will be an LNG-powered locomotive and tender car, an ISO container used to transport the gas, and an LNG tanker delivery trailer hauled by an LNG-powered truck.

1:00 p.m. - 4:00 p.m.

### PARTNER EVENT **NGV America - LNG Technical Forum and Working Group**

HOSTED BY



Join NGV America and other natural gas stakeholders in an important discussion on advancing the state of the industry and the roles the public and private sector must play. Topics will include the development of codes and standards, upstream emissions for liquefaction and delivery, real time gas composition measurements, LNG fuel specifications, as well as the role of safety standards and odorization. Explore key areas for potential market growth and opportunities for strategic policy engagement on the federal and state level to effectively advocate for the high horsepower NGV industry.

# Friday, November 10

8:30 a.m. - 5:00 p.m.

### PARTNER EVENT **SEA\LNG Members Meeting\*\***

HOSTED BY



**\*\* By invitation only**



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HHP Summit is organized by Gladstein, Neandross & Associates (GNA), a leading US-based consulting firm specializing in market development for alternative fuels, vehicles, and equipment. For more than 20 years, GNA has been actively involved in the development of the markets we serve via both its consulting practice and its conference production experience. GNA has produced many of the nation's leading clean and advanced technology events that have brought together tens of thousands of attendees. Prior events include the national Faster Freight – Cleaner Air conference series, the Advanced Clean Transportation (ACT) Expo, the Low Carbon Fuels Expo, the National Biomethane Summit, the Rethink Methane Summit, the NGV Fleet Summit, and more. GNA has teamed up with leaders throughout the North American natural gas industry to create and produce this summit as a forum for discussions on this critical topic. [www.gladstein.org](http://www.gladstein.org)

# Addendum – Wednesday, November 8

9:00 a.m. - 9:15 a.m. | GENERAL SESSION

## Conference Welcome and Opening Address



**Pete Tumminello**, Group President of Commercial Businesses, Southern Company Gas



9:15 a.m. - 10:15 a.m. | GENERAL SESSION

## Facilitating Natural Gas Market Development for HHP Applications

- **Lauran Wetemans**, General Manager Downstream LNG, Shell
- **Rear Admiral John Nadeau**, Assistant Commandant for Prevention Policy, U.S. Coast Guard
- **Amy Sweeney**, Director, Division of Natural Gas Regulation, U.S. Department of Energy
- **David Stubbs**, Director of Properties & Environmental Compliance, JAXPORT

10:15 a.m. - 10:45 a.m. | GENERAL SESSION

## Keynote Address



**Thomas Crowley Jr.**, Chief Executive Officer, Crowley Maritime  
**CROWLEY**

10:45 a.m. - 12:00 noon | GENERAL SESSION

## A Sea Change for Marine Fuels

- **MODERATOR: John Grubic**, Downstream LNG – Americas Manager, Shell
- **Marcel LaRoche**, Director, LNG Engineering, BCFerries
- **Peter Keller**, Executive Vice President, TOTE
- **Glenn Edvardson**, Chief Executive Officer, United European Car Carriers (UECC)
- **Tom Strang**, Senior Vice President Maritime Affairs, Carnival
- **Chad Verret**, Vice President, Alaska & LNG Operations, Harvey Gulf

1:30 p.m. - 2:30 p.m. | GENERAL SESSION

## Building the Foundation for Today's HHP Natural Gas Market

- **Tim Hermann**, President, Pivotal LNG
- **Paul Evans**, Executive Vice President, Ferus Natural Gas Fuels
- **Sarah Smith**, Vice President Development & External Relations, FortisBC
- **Guillaume Brossard**, Director LNG Market Development, Gaz Métro

2:30 p.m. - 3:00 p.m. | GENERAL SESSION

## Afternoon Address: A Focus on Energy Supply, Reliability, and Pricing



**Martin Tallett**, President, EnSys Energy



3:00 p.m. - 4:15 p.m. | GENERAL SESSION

## Accelerating the Market: Spotlight on Key Areas of Market Growth

- **Frank Starke**, Global Product Manager Medium Speed Engines, Caterpillar
- **Jim Hertwig**, Chief Executive Officer, Florida East Coast Rail
- **David Kailbourne**, Chief Executive Officer, REV LNG
- **Andrew Moriarty**, President, Energy & Chemicals Group, Chart Industries
- **Luca Volta**, LNG Venture Manager, ExxonMobil



# Addendum – Thursday, November 9

## 9:00 a.m. - Technical Session #1

9:00 a.m. - 10:30 a.m. | TECHNICAL SESSION 1.1

### LNG Bunkering Case Studies and Best Practices

MODERATOR: **Arvind Ramakrishnan**, Senior Manager, FortisBC

- **Dallas Smith**, Detachment Chief, U.S. Coast Guard  
*LNG Bunkering and Simultaneous Operations Policy*
- **Margaret Doyle**, Marine Business Development, Eagle LNG Partners  
*Where LNG Ship Bunkering is Today*
- **Richard Rogers**, Managing Director Storage & Peaking, Southern Company Gas  
*JAX Port LNG Bunkering*
- **Beau Berthelot**, Business Development Manager, Conrad LNG  
*Development of LNG Bunkering in the US – a Shipyard Perspective*
- **Aziz Bamik**, General Manager, GTT North America  
*Developing LNG Bunkering Solutions and a Bunker Barge Training Program*

9:00 a.m. - 10:30 a.m. | TECHNICAL SESSION 1.2

### Spotlight on Rail: The Indiana Harbor Belt CNG Locomotive Program

MODERATOR AND PROGRAM INTRODUCTION: **Michael Nicoletti**, Owner, JRA Consulting

- **Scott Myers**, President, Optifuel Systems, LLC  
*IHB CNG Locomotive Systems Design*
- **David Benner**, Executive Manager, ECO Vehicle Systems, and
- **Dave Myers**, Sales Manager North America – Mobile Pipeline Products, Hexagon Lincoln  
*On-Board CNG Storage System*
- **Scott Myers**, President, Optifuel Systems, LLC  
*IHB CNG Locomotives Design and Integration*
- **Ted Barnes**, R&D Manager, Gas Technology Institute  
*Safety Analysis of On-Board CNG Systems*
- **Tim Boyle**, Director of International Sales & Business Development, ANGI Energy Systems  
*Refueling Systems Design and Installation*

9:00 a.m. - 10:30 a.m. | TECHNICAL SESSION 1.3

### Unearthing Savings and Opportunity

MODERATOR: **Randy Hull**, Vice President, Business Development, Prometheus Energy Group

- **Steve Igoe**, Commercial Manager, LPSP Gas Engine Business Unit, Caterpillar  
*Cat Dual Fuel DGB Mining Truck*
- **Travis Balaski**, Vice President, Ferus Natural Gas Fueling Solutions (Canada)  
*Virtual Pipelines for Remote Mines and Local Communities*
- **Reid Larson**, Product Manager, Chart Industries  
*Fueling LNG Mine Trucks*
- **Timothy Callahan**, Staff Engineer Large Engine R&D, SWRI  
*Dual-Fuel Engines: An Elegant Alternative for Tier 4F Compliance*

## 10:45 a.m. - Technical Session #2

10:45 a.m. - 12:15 p.m. | TECHNICAL SESSION 2.1

### Full Steam Ahead: Best Practices and Technology Considerations for Launching LNG Marine Operations

MODERATOR: **Mark Bell**, General Manager, Society for Gas as a Marine Fuel (SGMF)

- **Les Gingell**, Vice President Marine Sales, MAN Diesel & Turbo  
*ME-GI Engine*
- **Harald Wilms**, General Manager Business Development, Zeppelin Power Systems  
*Innovative LNG-powered Solutions for the Marine Industry*
- **Jeff Sherman**, Senior Sales Manager, Commercial Marine, MTU America  
*Diesel or Gas – Tomorrow's Commercial Vessel*
- **Magnus Tangen**, Director of Commercial Development, Clean Marine Energy  
*Clean Marine Energy*

10:45 a.m. - 12:15 p.m. | TECHNICAL SESSION 2.2

### Sector Update: Natural Gas Locomotives

MODERATOR: **Eric Kuenzli**, Director, Fuels, Pivotal LNG

- **Momoyo Yuki**, Senior Manager, Business Development Group, JAPEX  
*LNG on Rail – JAPEX's Experience in Japan*
- **Fran Chinnici**, Senior Vice President, Engineering & Mechanical, Florida East Coast Rail  
*The Nation's First Commercial Mainline LNG Rail Project*
- **Scott Nason**, Product Manager – Rail Products Group, Chart Industries  
*An Update on Natural Gas Rail Policies and Regulation*

10:45 a.m. - 12:15 p.m. | TECHNICAL SESSION 2.3

### A Spotlight on the Growing Use of Compressed Natural Gas (CNG) Delivery Systems for HHP Applications

MODERATOR: **Dave Myers**, Sales Manager North America – Mobile Pipeline Products, Hexagon Lincoln

- **Clint Eaves**, Southern USA Sales Manager, Certarus (USA) Ltd  
*CNG as the Dominant On-Shore Based Fuel*
- **Hernan Henriquez**, Executive Director of Sales & Marketing, Quantum Fuel Systems  
*Oh the Places CNG Will Go*
- **Tom DeLay**, President, Cimarron Composites  
*The Development Process of Large Composite Tubes for Gas Transport*
- **David Barr**, Executive Director North American Operations, CIMC  
*World's First CNG Delivery Ship and Peak Energy Solution*