

LNG WRAP-UP

NARUC LNG GROUP

Friday, October 30, 2015

Dear Friends of NARUC's LNG Working Group

One of the goals of the NARUC LNG Working Group is to keep State Commissioners informed regarding LNG matters. To that end, the LNG Working Group has arranged for Patricia Outtrim, V.P. of Governmental and Regulatory Affairs, Cheniere Energy, to make a presentation at NARUC's 127th Annual meeting in Austin, Texas. Ms. Outtrim will discuss the ongoing activities at Cheniere and give her perspective on the international LNG market. Her presentation is on the agenda of the Gas Staff Subcommittee and will take place on Sunday, November 8, 2015 at 3:00 p.m. in Salon 5 at the JW Marriott Hotel, Austin, Texas.

We hope to see as many of you there for this undoubtedly informative session.

Thank you

Jolette Westbrook

Chair, NARUC LNG Working Group

Previous issues of the LNG Wrap-Up can be found on the LNG Working Group's page at the following link:

<http://www.naruc.org/Grants/programs.cfm?page=60>

DOMESTIC NEWS (NORTH AMERICA)

FERC-Related (2015)

(10/5) FERC issued a notice of its intent to prepare an EIS for Venture Global LNG, LLC's proposed project in Plaquemines Parish, LA.

<http://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=14004145>

(10/7) FERC released an update on the status of its prefiling environmental review of the Downeast LNG import/export project in Robbinston, ME.

<http://elibrary-backup.ferc.gov/idmws/common/opennat.asp?fileID=14007286>

(10/15) The FERC issued a notice that it intends to issue an EIS for the Elba Island export terminal on February 5, 2016.

<http://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=14014244>

(10/21) FERC issued an order approving Transco feeder pipeline to Chenier's Sabine Pass LNG terminal.

<http://elibrary-backup.ferc.gov/idmws/common/opennat.asp?fileID=14020654>

(10/21) Texas LNG Brownsville LLC submitted its Draft Resource Report 1 (General Project Description) as part of its environmental review of the proposed 2 million tonnes per annum LNG facility.

<http://elibrary.ferc.gov/idmws/common/OpenNat.asp?fileID=14020339>

(10/22) Cheniere's Sabine Pass LNG LP files its monthly Construction Progress Report.

<http://elibrary-backup.ferc.gov/idmws/common/opennat.asp?fileID=14021041>

The newsletter is compiled for NARUC's LNG Working Group using open-source resources, by Andreas Thanos. The information provided is for situational awareness and neither represents nor reflects any particular views of the LNG Working Group, NARUC, or its members. Mentions are not endorsements. For comments/corrections please email andreas.thanos@state.ma.us

(10/23) In response to Port Dolphin Energy LLC's motion to vacate the FERC certificates issued in 2009 (see October 2015 issue), FERC issued an order granting the applicant's request.

<http://www.ferc.gov/CalendarFiles/20151023150243-CP07-191-000.pdf>

(10/21) The FERC issued a certificate approving Transcontinental's application to construct and operate the Gulf Trace Expansion Project to provide Sabine Pass 1,200,00 Dth/d of incremental firm transportation capacity to Cheniere's Sabine Pass LNG terminal in Cameron Parish, LA. <http://elibrary-backup.ferc.gov/idmws/common/opennat.asp?fileID=14020654>

(10/26) The Tennessee Gas Pipeline Company filed an application to build a pipeline to supply the Cameron LNG export terminal. (Cameron LNG is a joint effort by Sempra, Mitsui, Mitsubishi, Engie and NYK Line) <http://elibrary.ferc.gov/idmws/common/OpenNat.asp?fileID=14025023>

(10/27) FERC issued an order approving Dominion Cove Point's request to proceed with the construction of the heavy hydrocarbons removal unit structural steel. <http://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=14025694>

(10/28) Cheniere's Corpus Christi Liquefaction LLC, filed its monthly construction Report for September 2015. <http://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=14030187>

Washington, D.C. (9/28) ConocoPhillips Alaska Natural Gas Corp. filed a US DOE application for blanket authorization to export up to 40 Bcf of LNG from Alaska to FTA and non-FTA nations over a 2 year period. http://energy.gov/sites/prod/files/2015/10/f27/ConocoPhillips15_149_LNG.pdf

Anchorage, AK (9/30) According to Black and Veatch Alaska's buyout of TransCanada's share in the LNG project will lead to an increase of state revenue of app. \$7 billion over a 20 year period.

http://dnr.alaska.gov/commis/Presentations/TC_Participation_Report.pdf

Vancouver, B.C. (10/2) According to Steelhead LNG Canada's NEB has approved its five applications for licenses to export up to a total of 30 million tonnes of LNG per year, for 25 years, from the proposed facilities on Vancouver Island.

<http://www.steelheadlng.com/steelhead-lng-export-licences-for-malahat-lng-and-proposed-project-at-sarita-bay-approved-by-national-energy-board/#more-1245>

Honolulu, HI (10/3) According to public documents, Hawaii Gas projects that LNG imports will lead to savings in excess of \$2 billion over other fuel types for the period 2019-2033.

<http://www.bizjournals.com/pacific/news/2015/10/03/hawaii-gas-projects-lng-to-save-the-islands-more.html>

Baton-Rouge, LA (10/5) Baton-Rouge-based G2 LNG LLC, announced that it intends to develop a 14 mmta LNG export facility in Cameron Parish, LA, with an estimated commencement of delivery by early 2020. G2 LNG LLC received DOE approval to export to FTA nations on July 17, 2015.

<http://blog.mysanantonio.com/atlarge/2015/10/company-announces-plans-for-major-lng-facility-in-cameron/>

Houston, TX (10/13) According to Bechtel Corp., Cheniere's Sabine Pass terminal, in Cameron Parish, Louisiana is on track to begin production by the end of the year.

<http://www.bloomberg.com/news/articles/2015-10-13/cheniere-commissioning-sabine-pass-lng-plant-bechtel-says>

Fairbanks, AK (10/13) According to the website newsminer.com, the Alaska Railroad has become the first railroad in the nation to receive permission to transport LNG.

http://www.newsminer.com/news/local_news/alaska-railroad-ok-d-for-lng-transport/article_da2e37c8-7248-11e5-b9f9-abc9a0a52711.html

Washington, D.C. (10/13) The US DOE issued an order vacating Excelsior's authorization to export LNG (FE 12-61-LNG) and granting the withdrawal of Excelsior's application to export LNG to non-FTA nations.

<http://energy.gov/sites/prod/files/2015/10/f27/vac3128a.pdf>

Englewood, CO (10/14) According to HIS Maritime, the slow demand for LNG and project delays cause as many as 40 LNG carriers to remain idle in Malaysia and South Africa.

<http://www.ihsmaritime360.com/article/19550/idle-lng-carrier-fleet-growing>

Vancouver, B.C. (10/15) Michael Culbert, Pacific Northwest LNG's president, claims that the project is "shovel ready" once it receives the final approvals and permits. <http://www.theglobeandmail.com/report-on-business/industry-news/energy-and-resources/pacific-northwest-planning-2016-lng-start-despite-legal-challenge/article26832419/>

Washington, D.C. (10/16) The U.S. Coast Guard released its final EIS for the proposed Liberty Natural Gas' Port Ambrose Deepwater LNG import terminal offshore New York and New Jersey.

<http://www.regulations.gov/contentStreamer?documentId=USCG-2013-0363-2154&disposition=attachment&contentType=pdf>

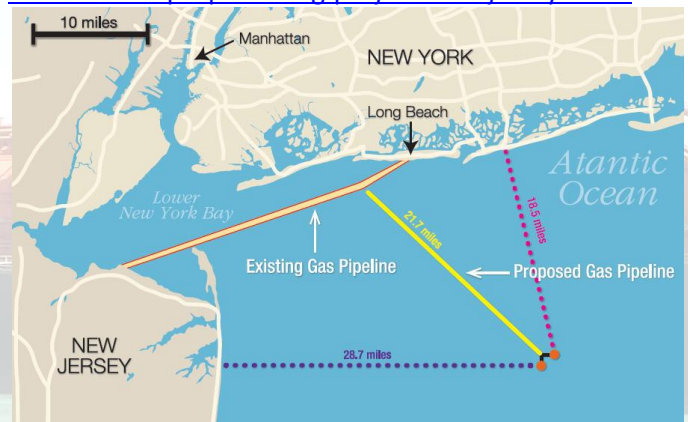
San Diego, CA (10/16) General Dynamic's NASSCO delivered the Isla Bella, claimed to be the world's first LNG powered container ship to TOTE Maritime, on October 16. <http://www.nassco.com/news-center/news-releases/2015/101615.html>



Source: General Dynamics NASSCO (click on image for larger view)

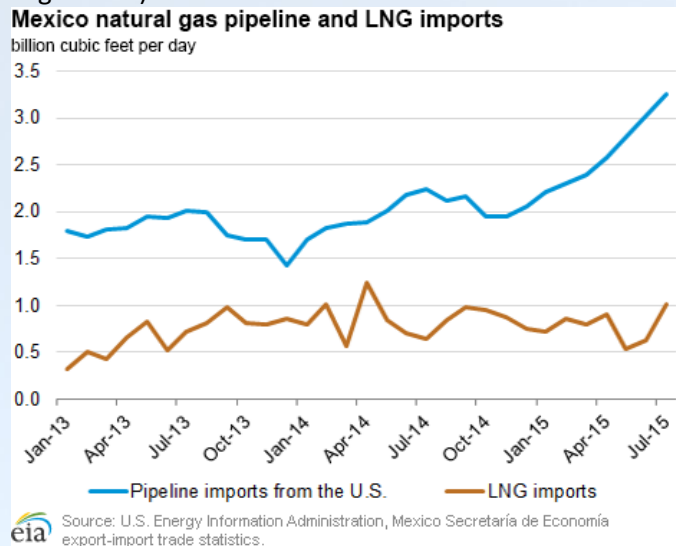
Washington, D.C. (10/19) U.S. Representative Frank Pallone, Jr. (D-NJ) sent a letter to N.J. Governor Chris Christie urging him to use his executive powers to veto the proposed Port Ambrose deepwater LNG terminal offshore New Jersey and New York.

<http://pallone.house.gov/press-release/pallone-urges-christie-veto-proposed-lng-project-new-jersey-coast>



Source: Portambrose.com (Click on image for larger view)

Washington, D.C. (10/22) According to the U.S. DOE, Increasing U.S. natural gas pipeline exports to Mexico begin to gradually displace LNG. (Click on chart for larger view)



Anchorage, AK (10/23) Alaska Governor Bill Walker announced that ConocoPhillips and BP have provided written assurances of their commitment to the Alaska LNG project. <http://gov.alaska.gov/Walker/press-room/full-press-release.html?pr=7307>

Houston, TX (10/26) According to Cheniere CEO Charif Souki, Cheniere's entry into the LNG market will not make the company Europe's leading gas supplier. <http://www.cnbc.com/2015/10/26/cheniere-we-wont-compete-with-russia.html>

Squamish, B.C. (10/26) Woodfibre LNG received approval from the B.C. Environmental Assessment Office for its proposed export terminal near Squamish, B.C. <http://www.woodfibrelng.ca/woodfibre-lng-receives-environmental-approval-in-british-columbia/>

Vancouver, B.C. (10/27) The B.C. Oil and Gas Commission has granted TransCanada regulatory approval for the construction and operation of the Prince Rupert Gas Transmission pipeline. <http://www.transcanada.com/news-releases-article.html?id=1996301&t=>

Vancouver, B.C. (10/27) The proposed Douglas Channel LNG facility in Kitimat, B.C. is facing a major hurdle and is delaying a final investment decision. According to media reports, the FLNG is being assessed and taxed as a ship with the potential to increase projected final costs by 15%.

<https://www.biv.com/article/2015/10/offshore-lng-infrastructure-facing-heavy-duty-fees/>

Houston, TX (10/27) Bechtel and Chart Industries have entered into a long-term agreement to design and build Floating LNG process facilities.

<http://www.bechtel.com/newsroom/releases/2015/10/bechtel-chart-partner-floating-lng/>

Houston, TX (10/28) Cheniere Energy and Engie entered into a 5-year Sale and Purchase Agreement for delivery of LNG cargoes on an ex-ship basis, primarily to the Montoir de Bretagne LNG regasification terminal in France. <http://phx.corporate-ir.net/frame.zhtml?c=101667&p=irol-newsArticle&ID=2103378>

Houston, TX (10/30) With exports about to begin within the next few months, Cheniere reported a loss in the third quarter ending September 30, 2015.

<http://phx.corporate-ir.net/frame.zhtml?c=101667&p=irol-newsArticle&ID=2104665>

INTERNATIONAL NEWS

Singapore (9/30) In its effort to advance LNG bunkering, Singapore has created a \$12 million fund for the building of LNG-fueled vessels – up to \$2 million per vessel.

http://www.mpa.gov.sg/sites/global_navigation/news_center/mpa_news/mpa_news_detail.page?filename=nr150930.xml

Rotterdam, The Netherlands (10/5) Dutch towing company KOTUG and Germany's Becker Marine Systems, signed an MOU to launch an LNG hybrid barge in the port of Rotterdam effective June 2017.

http://www.kotug.com/en-GB/news-media/135_kotug-and-becker-marine-systems-signed-mou-to-introduce-a-lng-hybrid-barge.html

Singapore (10/6) A combination of factors, including a cooler than normal summer, contributed to a slight decline in Asian LNG imports for September.
<http://www.platts.com/latest-news/natural-gas/singapore/asian-september-lng-imports-fall-12-on-year-to-26230513>

Zeebrugge, Belgium (10/6) In testimony of the safety of LNG carriers, cargo ship sinks off the coast of Belgium after it collided with Q-Flex LNG tanker Al Oraiq.
<http://www.seatrade-maritime.com/news/europe/cargo-ship-sinks-after-collision-with-lng-tanker.html>

Sarajevo, Croatia (10/6) Croatia's LNG Hrvatska has extended a deadline for investors to express interest in building a terminal on the island of Krk.
<http://af.reuters.com/article/commoditiesNews/idAFL8N12629L20151006>

Milano, Italy (10/6) According to JP Morgan analysts the LNG market is already experiencing significant changes that may lead to spot prices below \$6/MMBtu during 2016.
<http://uk.reuters.com/article/2015/10/06/global-gas-lng-jp-morgan-idUKL8N1262WC20151006>

Tokyo, Japan (10/9) Preliminary pricing figures for LNG imported into Japan, show that the prices remain steady for the 4th month in a row.
<http://www.meti.go.jp/english/statistics/sho/slng/result/pdf/201509-e.pdf>

Warsaw, Poland (10/12) After an almost two-year delay, Poland's first LNG import terminal was opened, with the goal of ending the country's dependence on Russian natural gas.
<http://www.bloomberg.com/news/articles/2015-10-12/poland-opens-lng-terminal-pledges-to-end-russian-gas-dependence>

Moscow, Russia (10/13) Responding to pressure from the European Union and its European partners, Gazprom is preparing to sell gas via the Nord Stream II project at spot prices.
<http://af.reuters.com/article/commoditiesNews/idAFL8N12C28X20151013?sp=true>

Vilnius, Lithuania (10/14) Lithuania's energy minister indicated that the Baltic nation is in talks with Cheniere regarding LNG imports. Lithuania's contract with Gazprom ends at the end of 2015.
<http://uk.reuters.com/article/2015/10/14/lithuania-lng-interview-idUKL8N12E43820151014>

Vancouver, (10/15) According to Santosh Yadav, Indian Oil Corporation's (IOC) Deputy General Manager, the IOC will pursue flexibility on various terms in its long-term LNG contracts. <https://www.platts.com/latest-news/natural-gas/vancouver/indias-ioc-will-seek-pricing-flexibility-for-27883046>

The Hague, Netherlands (10/15) Shell opens its fourth LNG truck fueling station in the Dutch town of Pinjacker in collaboration with Albert Heijn – one of the largest supermarket chains in the country.
<http://www.shell.com/global/future-energy/natural-gas/natural-gas-transport/shell-collaborates-with-dutch-supermarket-chain.html>

Kyoto, Japan (10/16) Kyoto's provincial government in cooperation with Kansai Electric and Osaka Gas are studying the possibility of adding an LNG import facility at the port of Maizuru in the Sea of Japan.
<http://www.ihsmaritime360.com/article/19588/kyoto-looks-to-build-lng-import-terminal>

London, U.K. (10/16) Despite a sharp decline in LNG consumption in Japan, global LNG prices remained steady on N. African and Middle Eastern demand.
<http://af.reuters.com/article/energyOilNews/idAFL8N12G31420151016?sp=true>

Adelaide Australia (10/16) Santos GLNG announced that the first LNG cargo shipped from the Curtis Island facility for South Korea.
<http://www.santoslng.com/media-centre/media-releases/first-cargo-shipped-from-glmg.aspx>

Sendai, Japan (10/19) In a move that reflects today's LNG markets Japan's Tohoku Electric Power Company, entered into a 20-year, Henry Hub-based, agreement with Engie (formerly GDF-Suez) for Cameron LNG commodity. The contract also provides delivery and resale flexibility. <http://www.platts.com/latest-news/natural-gas/tokyo/japans-tohoku-inks-flexible-20-year-sales-deal-27888214?hootpostid=2ed70ecca07f67ab24b2f15c68c5706e>

Copenhagen, Denmark (10/19) Indonesia's cabotage laws are what is keeping Denmark's Maersk Group from investing over \$3 billion in Indonesia. <http://splash247.com/maersk-willing-to-invest-billions-in-indonesia-if-cabotage-laws-change/>

Moscow, Russia (10/19) High-cost Chinese financing and Western European sanctions, are proving to be significant obstacles in Novatek's efforts to secure financing for Russia's Yamal LNG plant. <http://www.cnbc.com/2015/10/19/reuters-america-financing-for-russias-yamal-lng-plant-stalls--sources.html>

Seoul, Korea (10/20) Korea Gas Corp., is interested in participating in Woodside Petroleum's Browse FLNG project. (note: The project comprises Woodside, Shell Australia, BP Developments Australia, Japan Australia, and PetroChina Australia). <http://www.smh.com.au/business/energy/korea-gas-mulls-interest-in-woodsides-browse-floating-lng-venture-20151020-gkdbnj.html>

Port Moresby, Papua New Guinea (10/20) Oil Search which has a 29% interest in PNG LNG says that the project has exported 77 cargoes in the first 9 months of the year (the project exported 100 cargoes in its first 12 months of production). PNG LNG is on track to deliver up to 27-29 million barrels of oil equivalent. <http://www.lngworldnews.com/oil-search-77-cargoes-loaded-at-png-lng-in-first-nine-months/>

Hong-Kong, China (10/20) Hong-Kong-based Noble Group Ltd., has been awarded new slots for LNG deliveries to Egypt. According to the Company, it will shortly reach the 1 million tonnes of LNG deliveries in one year. <http://www.thisisnoble.com/noble-news/2639-noble-group-awarded-new-slots-for-lng-delivery-to-egypt.html>

London, U.K. (10/21) BP and China Huadian Corp., have entered into a 20-year/\$10billion/1 mtpa agreement for the delivery of LNG. <http://www.bp.com/en/global/corporate/press/press-releases/bp-and-china-huadian-corporation-sign-multibillion-dollar-lng-de.html>

Seoul, Korea (10/21) Korea Gas Corp., South Korea's state-run company and the world's largest LNG importer, has entered into an agreement with Cheniere's Sabine Pass for the purchase of 2.8 million tons of LNG annually starting in 2017. <http://www.koreaherald.com/view.php?ud=20151021001197>

Adelaide, Australia (10/22) Within two days of receipt, Australian oil and gas explorer Santos rejected a takeover bid by Scepter Partners. Santos' first LNG cargo shipped from the Curtis Island GLNG facility for South Korea <https://www.santos.com/media-centre/announcements/santos-rejects-indicative-acquisition-proposal/>

London, U.K. (10/23) The recently awarded slots in the Egypt tender have caused a slight increase to global LNG prices. <http://af.reuters.com/article/energyOilNews/idAFL8N12N3KB20151023?sp=true>

Kyoto, Japan (10/25) With a goal of ending nuclear dependence by 2040 the Kyoto Prefectural Government has signed an agreement for Alaskan LNG. <http://www.japantimes.co.jp/news/2015/10/25/national/kyoto-advances-nuclear-free-agenda-alaska-lng-pact/#.Vi5oSberRpi>

Singapore (10/26) According to Cheniere CEO Charif Souki, the Company expects to ship its first LNG cargo in January 2015. <http://www.reuters.com/article/2015/10/26/us-lng-cheniere-energy-idUSL3N12Q2JA20151026>

Singapore (10/26) S. Iswaran, Singapore's Minister for Trade & Industry, announced plans to develop a Secondary Gas Trading Market where sellers and buyers can trade gas on a short-term basis domestically.
<http://splash247.com/singapore-to-become-lng-trading-hub/>

Singapore (10/26) Fatih Birol, the IEA's Executive Director, told the audience at the Singapore International Energy Week that LNG will continue to face competition from coal in the Asian markets.
<http://www.platts.com/latest-news/natural-gas/singapore/iea-warns-lng-continues-to-face-strong-headwinds-27909636?hootpostid=c9633534eae6aa60bd62f44cc1f58323>

Moscow, Russia (10/27) Gazprom Marketing & Trading Singapore, a unit of Russia's Gazprom has entered into a 10-year agreement with Singapore-based Pavilion Gas. Details of the agreement have not been disclosed.
<http://www.gazprom.com/press/news/2015/october/article250038/>

Helsinki, Finland (10/27) Wärtsilä is developing a concept FSRU barge to provide fuel for small-scale generation.
<http://www.wartsila.com/media/news/27-10-2015-wartsila-mobile-lng-to-enable-small-and-medium-scale-lng-power-generation>

Oslo, Norway (10/28) DNV-GL in cooperation with GTT, CMA and CGM released a technical and feasibility study for a new LNG-powered ship powered by a combined gas and steam turbine and is electrically driven.
<https://www.dnvgl.com/news/power-without-pistons-gtt-cma-cgm-and-dnv-gl-present-lng-fuelled-turbine-powered-mega-box-ship-study-45289>

Seoul, Korea (10/29) According to Bloomberg Business, Daewoo Shipbuilding & Marine Engineering Co., expects that demand for LNG carriers will return in 2016. Daewoo's net profits were \$398 million on approximately \$13 billion of revenues for the year 2014.
<http://www.bloomberg.com/news/articles/2015-10-30/daewoo-shipbuilding-expects-lng-carrier-orders-to-revive-in-2016>

Moscow, Russia (10/29) The Chairman of Russia's Gazprombank said that financing for the Novatek Yamal LNG project is almost complete.
<http://www.reuters.com/article/2015/10/29/us-russia-yamal-gazprombank-idUSKCN0SN29B20151029>

Analysis-Opinion-OTHER

Toronto, ON (9/11) "*Commercial Shipping Looks to LNG to Curb Emissions*" A discussion on how shippers use LNG to address the International Maritime Organization's rules to reduce emissions.
<https://gereports.ca/commercial-shipping-looks-lng-curb-emissions/>

Washington, D.C. (October) "*LNG and Coal Life Cycle Assessment of Greenhouse Gas Emission*" According to the Pace Global study sponsored by the Center for Liquefied Natural Gas, greenhouse gas emissions associated with the LNG lifecycle from wellhead to power generation are about half of those associated with the coal lifecycle in several export markets.
factsheet: http://lnginitiative.org/wp-content/uploads/2015/10/PACE_Fact-Sheet.pdf
study: http://lnginitiative.org/wp-content/uploads/2015/10/PACE_Report.pdf

London, U.K. (10/2) "*Has Europe's gas market priced in the impending arrival of US LNG cargoes*" video presentation/analysis by Desmond Wong of Platts.
<http://www.platts.com/videos/2015/october/europe-gas-trading-us-lng?hootpostid=3a47fd2f14a20ceff87d4bb49b96a350>

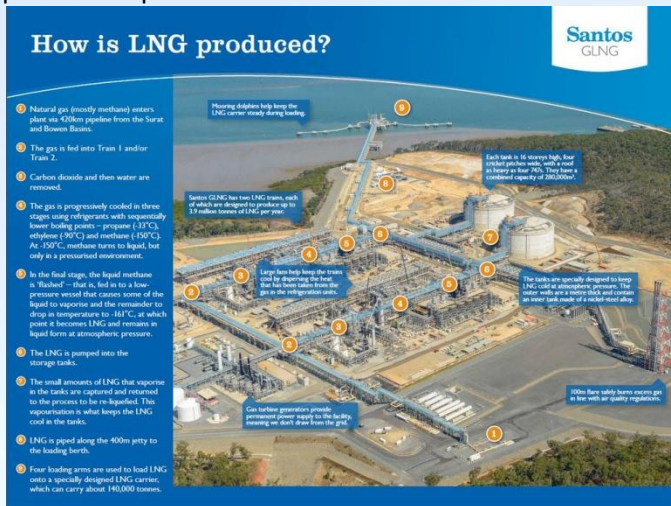
Philadelphia, PA (10/5) "*How the Trans-Pacific Partnership could impact LNG exports*" Analysis by Susan Phillips on State Impact, an NPR/Public Broadcasting affiliate.
<https://stateimpact.npr.org/pennsylvania/2015/10/05/how-the-trans-pacific-partnership-could-impact-lng-exports/>

Moscow, Russia (10/6) "*Gazprom in Asia: Worried About Nothing*" a discussion, by Marina Zvonareva, on Gazprom's strategy in Asia on Natural Gas Europe.
<http://www.naturalgaseurope.com/gazprom-in-asia-worried-about-nothing-25724>

London, U.K. (10/8) “Iran to trigger natural gas race with Qatar in Persian Gulf” by Andrew Critchlow, of the Daily Telegraph.

<http://www.telegraph.co.uk/finance/newsbysector/energy/oilandgas/11920043/Andrew-Critchlow-Iran-to-trigger-natural-gas-race-with-Qatar-in-Persian-Gulf.html>

Adelaide, Australia (10/21) Click on the infographic, below, for a step-by-step description of the LNG production process



(infographic courtesy: Santos Ltd., Australia -- Click on image for larger view)

Anchorage, AK (10/22) Alaska Public Media developed a two part primer on the Alaska LNG Project.

Part 1: <http://www.alaskapublic.org/2015/10/22/what-is-the-alaska-lng-project-we-break-it-down-part-1/>

Part 2: <http://www.ktoo.org/2015/10/25/alaska-lng-part-2-meet-liquifaction-plant/>

Mumbai, India (10/28) The website Marine Insight compiled a list of the “10 Noteworthy LNG-Powered Vessels” (note 1: some are in service, while others are being built; note 2: RoRo: Roll on/Roll Off; ConRo: combination container and Roll-on/Roll-off)

<http://www.marineinsight.com/tech/10-noteworthy-lng-fueled-vessels/>

Links to some entities mentioned in this issue

LNG HRVATSKA	http://www.lng.hr/en
G2 LNG LLC	http://www.g2lngllc.com/
CLNG	http://www.lngfacts.org/
KOTUG	http://www.kotug.com/en-GB/home/
Browse FLNG	http://www.woodside.com.au/Our-Business/Developing/Browse/Pages/Browse.aspx
Port Ambrose	http://portambrose.com/
PNG LNG	http://pnglng.com/
Korea Gas Corp.	http://www.kogas.or.kr/en/main.action
Santos	https://www.santos.com/
Texas LNG	http://www.txlng.com/
Cameron LNG	http://cameronlng.com/
Douglas Channel LNG	http://douglaschannellng.com/
Daewoo	http://www.dsme.co.kr/epub/main/index.do