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Received DOE/FE 3/23/16 via email w/
Schaaf Family's Motion

December 9, 2015

Ms. Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street N.E.
Washington, D.C. 20426

**Re: Pacific Connector Pipeline,
Docket No. CP13-492
§ 375.308(x)(3)**

Dear Ms. Bose:

I am writing on behalf of landowners that will be directly impacted and harmed by the proposed Pacific Connector Gas Pipeline including Robert Barker (FERC Intervenor), John Clarke (FERC Intervenor), Oregon Women's Land Trust (FERC Intervenor), Evans Schaaf Family LLC, Stacey McLaughlin and Craig McLaughlin. I am writing to respond to the recent disclosures by Pacific Connector Gas Pipeline LP ("Pacific Connector LP") in its November 4, 2015 Data Response to FERC's October 14, 2015 Data Request for information relating to Pacific Connector's application for a certificate of public convenience and necessity ("certificate") for the Pacific Connector Pipeline.

We believe that Pacific Connector LP's admission that it does not have a single confirmed customer and has only obtained 4.7% of the right-of-way easement acreage and 2.8% of the construction easement acreage is very significant. These factors should be considered by FERC along with the recent crash of the Pacific Rim LNG market that the Jordan Cove and Pacific Connector projects were specifically designed to serve. In light of this evidence and the impact that authorizing eminent domain would have on approximately 630 landowners along the pipeline route, we believe that FERC lacks an evidentiary basis to find the Pacific Connector Pipeline is in the public interest. Consistent with § 7 of the NGA and FERC's certificate policy statements, FERC should therefore deny Pacific Connector LP's request for a certificate.

- 1. Sect. 7 of Natural Gas Act and FERC's own certificate policies require an affirmative showing the Pacific Connector Pipeline is in the public interest and this showing cannot be satisfied merely by meeting the standard applicable to Sect. 3 LNG terminal approvals.**

The Office of Energy Projects' October 14, 2015 Data Request was right to question Pacific Connector LP's assumption that it could avoid meeting the criteria in § 7 of the NGA for issuance of a certificate by showing that the Jordan Cove LNG terminal would not be inconsistent with the public interest under § 3 of the NGA. 15 U.S.C. § 717(b), (f). As FERC



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has explained when it rejected a requested certificate for the Turtle Bayou Gas Storage and pipeline project, “[t]he Commission will approve an application for a certificate of public convenience and necessity only if the public benefits from a proposed project outweigh any adverse effects.” Turtle Bayou Gas Storage Company, LLC, Order Denying Application for Certificate Authorizations, Docket No. CP10-481-000, June 16, 2011 (“Turtle Bayou Denial”) citing FERC Certificate Policy Statement, 90 FERC at 61,389, 61,396.

FERC’s balancing test for considering a certificate must consider the very minimal efforts Pacific Connector has made to acquire pipeline easements along the Pacific Connector route along with the lack of evidence of market demand for the project and the substantial impacts on landowners along the pipeline route who would face eminent domain actions should FERC approve the requested certificate. *Id.* As FERC’s Statement of Policy, Docket No. PL99-3-000 observes, “[l]andowners should not be subject to eminent domain for projects that are not financially viable and therefore may not be viable in the marketplace.” At 20. “The interests of these groups is to avoid any unnecessary construction, and any adverse effects on their property associated with a permanent right-of-way.” At 24.

Pacific Connector LP has made no more than a token effort to mitigate the pipeline impacts to landowners that would result if FERC issues a certificate and gives Pacific Connector the right of eminent domain against approximately 340 private landowners for construction easements and 289 private landowners for permanent right-of-ways. FEIS, Appendix A. As disclosed in Pacific Connector LP’s November 4, 2015 Data Response, Pacific Connector LP has only negotiated permanent right-of-way on 4.7% of the acreage it needs for permanent right-of-way and a mere 2.8% of the acreage it needs for construction right-of-way. Such a minimal number of easements demonstrates that Pacific Connector LP has not made a good faith effort to negotiate easements.

Under FERC’s balancing test for deciding upon a certificate request FERC has explained that a pipeline applicant:

[M]ight minimize the effect of the project on landowners by acquiring as much right-of-way as possible. In that case, the applicant may be called upon to present some evidence of market demand, but under this sliding scale approach the benefits needed to be shown would be less than in a case where no land rights had been previously acquired by negotiation. Certificate Policy Statement, 88 FERC at 61,749.

Conversely, where a pipeline applicant, such as Pacific Connector LP, has made only a *de minimis* effort to obtain negotiated right-of-ways the applicant’s need to demonstrate a market demand is substantial.

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Pacific Connector's factually unsupported and conclusory assertion that there is a market demand for its pipeline and that it will be in the public interest falls flat in the absence of even a single customer. The failure of either Pacific Connector or Jordan Cove to secure any contracts or precedent agreements, let alone hold an open season, belies its claim of public benefit. This failure also has to be considered in conjunction with the recent crash of the Pacific LNG market. Against this new market reality and the dramatic recent changes in the international LNG market, Pacific Connector LP's vague assurances of market demand that its claimed public benefits all depend upon, is not credible.

Pacific Connector asserts:

While the execution of precedent agreements on Pacific Connector has been delayed, Pacific Connector remains confident that these customers will enter into binding long-term liquefaction tolling service agreements (LTSAs) with Jordan Cove. Once customers have executed LTSAs, Pacific Connector expects to conclude negotiations and execute precedent agreements with those same customers. Pacific Connector will then hold an open season and provide the Commission with copies of the open season notices and the results of the open season within five days after the end of the open season.

But as FERC explained in denying a certificate for the Turtle Bayou project, "vague assertions of public benefits are not sufficient to establish need for a particular project, especially in the face of identified adverse impacts." Turtle Bayou Gas Storage Company, LLC, Order Denying Application for Certificate Authorizations, Docket No. CP10-481-000, June 16, 2011("Turtle Bayou Denial") *citing* FERC Certificate Policy Statement, 88 FERC at 61,748.

Pacific Connector provides no evidence to support its claims of market demand and its "confident" assertions conflict with compelling evidence that the primary market the project was designed to serve has vanished in the wake of a flood of international LNG supply, decreased market demand by key Pacific Rim LNG customers such as Japan, and the plunge in global oil prices. Against these market realities, Pacific Connector LP points only to its own project sponsors' continued investment in the project as evidence of demand claiming, "[t]he sponsors of Pacific Connector and Jordan Cove continue to be committed to their projects and are optimistic that definitive agreements will be executed with customers, as evidenced by the fact that they continue to expend very substantial development costs." Pacific Connector letter to FERC, Nov. 4, 2015.

In that regard, it is important to recognize that Pacific Connector made similar hollow assurances that contracts and binding precedent agreements would be entered into this past year in its December 10, 2014 Data Response. Presumably, it was concerns about

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the veracity of Pacific Connector's assurances, that helped prompt the Office of Energy Project's October 14, 2015 Data Request.

What appear to be questionable decisions by Pacific Connector's investors should not be used by FERC as a proxy for evidence of genuine market demand. This is especially true when FERC is balancing the project's claimed benefits against the legitimate interests of landowners who would be subject to eminent domain actions if FERC issues a certificate. In addition to the substantial impacts to landowners supported by testimony in the record, issuance of the requested certificate would translate into years more of uncertainty for landowners regarding the fate of their property, and, then if the pipeline was in fact constructed, the impacts of construction and operation.

It is also important to recognize that the public interest review for the Pacific Connector Pipeline is different in key respects from many pipeline projects FERC considers. This pipeline would not, for example, lower prices for domestic consumers or increase gas supplies to a U.S. community facing a gas shortage. Instead, the project is principally designed to export natural gas for the primary benefit of corporations producing natural gas and transporting it to international buyers. In the absence of true "public" benefits, Pacific Connector attempts to justify the project's benefits primarily by pointing to the temporary construction jobs it would create. Pacific Connector LP's November 4, 2015 Data Response at 2. But any gas infrastructure project will obviously create at least some temporary construction jobs. As a result, were such a consideration given substantial weight in FERC's certificate decision making, it would undermine the purpose and value of FERC's public interest review in deciding on certificate decisions.

Pacific Connector LP also claims that, "[c]ommunities along the Pacific Connector pipeline will have access to a new source of gas supply, which will provide an additional benefit." *Id.* But such a claim ignores the fact the Pacific Connector Pipeline is not intended or being permitted as a distribution pipeline nor is there any evidence to support the contention that it will actually be used to provide gas to communities along its route that have an unmet need for gas.

2. Pacific Connector's failure to secure a single pipeline or terminal customer highlights the need for FERC to consider the crash of the Pacific LNG market and fundamental changes in the international LNG market when weighing demand for the project, project benefits and impacts to landowners.

The FEIS for the Pacific Connector Pipeline and Jordan Cove LNG terminal explains that, "Jordan Cove would like to be the first LNG export terminal to be approved, constructed, and operated on the West Coast of the continental United States, and thus positioned to mainly serve markets around the Pacific Rim." FEIS 1-13 (emp. added).

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Pacific Connector's investors have clearly designed and marketed the project to serve the Pacific Rim market with promotion documents such as, "Serving the Asia Pacific LNG Market Through Jordan Cove LNG." See Exhibit 1. But the Pacific Rim LNG market has radically changed since Pacific Connector LP's project was proposed for export.

There is now a global glut of LNG and shrinking demand from key Asian buyers such as Japan. Asian LNG spot prices fell more than 60% in the last year triggering energy news headlines reporting on the Asian LNG price drop such as: "Asian LNG price faces steep fall," "Asian LNG Prices Expected to Sink as Low as \$4 in 'Ugly' Market," "LNG Bust Could Last For Years," and "Most U.S. LNG projects won't cross the finish line, new study says." Exs 2, 3, 5, 6, 7. FERC's own data shows October 2015 landed LNG prices in Japan and South Korea were just \$ 6.78 which is almost certainly below a viable price point for the Jordan Cove/Pacific Connector project. Ex. 4. The combination of major global supply increases due to increased LNG exports from countries such as Australia combined with demand decreases in Asia following Japan's restart of its nuclear plants and the economic slowdown in China are among some of the factors leading to what is projected to be a sustained decrease in Asian LNG prices. Ex. 5.

Despite the already glutted international LNG market, global liquefaction capacity is expected to increase by another 40% in the next several years as facilities that are already under construction and capable of producing 128 million tonnes per annum come on line. Ex. 5. In light of these key market changes recent studies by the Brookings Institute and others have seriously questioned the market viability of projects like the Jordan Cove/Pacific Connector project.

As the Brookings Institute report explained:

Meanwhile, spot prices in Asia (roughly \$6-7/mmBtu for 2015-2016)²¹ and Europe have tumbled over the course of 2014 (because they have been tied to world oil prices, which declined precipitously, because of a slowdown in economic growth, and because natural gas faces stiff competition from other fuel sources, negatively impacting demand) to levels where it would be increasingly difficult for North American LNG to be considered profitable. Ex. 6 at 7.

We believe that the U.S. LNG projects that are currently under construction, totaling close to 10 Bcf/d in capacity, will make it to the market by 2020, but additional projects are at this point increasingly un-certain. *Id.* at 14.

Sinking spot and long-term contract prices are relevant to consider in the context of Jordan Cove's market viability given that Jordan Cove's main investor has identified

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\$11/mmBtu as its expected price point for shipping LNG to Japan. Ex. 8, “Veresen talking to Japanese buyers for Jordan Cove LNG.” Furthermore, because Jordan Cove is a greenfield development the costs at which the project could provide LNG will likely be significantly higher than the U.S. brownfield terminals it will compete against. Ex. 9, “A Reality Check for Natural Gas Ambitions.” As one recent industry article reporting on the plunge in LNG prices stated, “[o]ther brownfield sites could also proceed, owing to their lower costs. But new greenfield projects in North America are as good as dead.” Ex. 10, “North American LNG Export Dream Evaporating.”

Against this bleak market picture for U.S. LNG exporters it is not surprising that Pacific Connector acknowledges in its November 4, 2015 filing that it has not made a “final investment decision on the pipeline.” At 1. Pacific Connector LP explains that:

Given the significant capital costs associated with this project, Pacific Connector and Jordan Cove must have committed customers with executed agreements in place before making the ultimate decision to move forward on construction of this project. (emph. added)

This statement is understandable given the unfavorable market conditions, but it also highlights the fact that while Pacific Connector LP is unwilling to put its own development assets at risk until it has committed customers, it asks FERC to put the property interests of hundreds of landowners at risk despite the lack of evidence of a market demand and a related public benefit. Pacific Connector downplays the impact that would result if FERC grants it a certificate and the weighty threat of eminent domain that would loom over hundreds of landowners. This is exactly why the Natural Gas Act and FERC Policy Statements put the burden on the applicant to provide clear evidence a market demand before FERC can grant a private corporation the power to take landowners property against their will. FERC Policy Statements 90 FERC ¶ 61,128; 88 FERC ¶ 61,227; 92 FERC ¶ 61,094.

3. The Impacts of the Pacific Connector Pipeline on landowners would be substantial especially in light of Pacific Connector’s failure to obtain easements by negotiation.

There is no factual basis to support Pacific Connector’s suggestion that the approximately 630 landowners in the path of the Pacific Connector pipeline would not face serious adverse impacts should the proposed pipeline be constructed. These impacts have been amply described and supported in landowner testimony submitted to FERC that are part of the record and further supported by the Douglas County Board of Commissioners. Ex. 11, Ex. 15. A brief summary of how my clients would be impacted is also attached. Ex. 12.

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Moreover, anyone who has observed the actual construction process associated with a 36" diameter pipeline, is well aware that the impacts on the landowners whose properties would be crossed by such a pipeline would be significant. There is no basis to support that construction impacts -- ranging from the clearing of private forest and farm land, noise, and construction traffic to the operation of horizontal directional drilling rigs, industrial scale earthmoving equipment and the management of drilling mud pits -- would not impact landowners along the pipeline route in a very profound way.

These impacts are only magnified for the current project given a pipeline route that includes some of the steepest and most unstable terrain in the Pacific Northwest, a very large number of stream and river crossings, and direct impacts to a significant percentage of privately owned high-value farm and forest lands. Given the numerous private properties that depend on surface water withdrawals from nearby creeks and streams, the potential for adverse impacts to private water supplies is substantial. Even under best construction practices, risks also exist both from erosion-related impacts as well as the contamination risks from directional drilling muds that can reach surface waters during subsurface stream crossings.

Additionally, landowners and communities along the pipeline route would face substantial post-construction impacts such as use restrictions within the permanent right-of-way and the need for ongoing safety management efforts by landowners to minimize risks for landowners, their employees, guests and contractors. The risk of a catastrophic accident, and a dramatic fire that would likely follow any such accident along the highly fire-prone pipeline route is a significant risk for the landowners and communities that would live along the pipeline route. *See* letter from Douglas County Commissioner Chris Boice at Ex. 16. This is especially true since the pipeline planned for the vast majority of the route would be Class I pipe, which, as FERC is aware, is the least protective pipeline class. Dramatic pipeline failures and accidents are common enough that landowner families living in close proximity to the pipeline will suffer an inevitable loss in the sense of safety and security they currently enjoy in their homes and on their properties. Williams, which would construct the Pacific Connector, record of pipeline accidents only adds to these concerns. Ex. 13.

Furthermore, FERC's issuance of a certificate and the conveyance of eminent domain powers to Pacific Connector LP would significantly damage landowners regardless of whether the Pacific Connector Pipeline is actually built. The threat of losing one's property rights against their will in the face of an eminent domain action is itself an adverse impact on landowners. Already, just the threat of a potential pipeline has meant that a number of affected landowners have been unable to sell their properties. Such realities should not be surprising especially for rural residential properties, but the magnitude of impacts and uncertainty would only increase should FERC issue the



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requested certificate. The threat of eminent domain would hang large over the hundreds of landowners with property that would be impacted by the Pacific Connector pipeline.

4. FERC should prepare a Supplemental Environmental Impact Statement to consider the impacts of the Jordan Cove/Pacific Connector project in light of the significant changes in Pacific Rim and international LNG markets.

In addition to considering the changes in the Pacific and international LNG markets as a part of FERC's evaluation of the project under § 7 of the NGA, we also request that FERC treat this dramatic change as "significant new information" under the National Environmental Policy Act. 42 U.S.C. § 4321; 40 CFR § 1502.9(c). Since the Jordan Cove and Pacific Connector Pipeline project's impact evaluations were all based upon the assumption that the central purpose and need for the project was to provide gas to the Pacific Rim LNG market, both the public and FERC deserve an opportunity to consider the impacts of the project, as well as alternatives to it, in light of the new market realities demonstrating the lack of demand for west coast LNG exports to the Asian market.

In addition to my clients identified above, a number of additional landowners along the pipeline route whom I do not represent have signed a statement in support of this comment and their names are included at Exhibit 14.

Thank you for considering these issues. We welcome any opportunity to further discuss them with your office or staff.

Sincerely,

A handwritten signature in blue ink that reads "Thane W. Tienson".

Thane W. Tienson, P.C. *1/23*

Exhibit 1

VERESEN

Jordan 
Cove LNGSM

 **Pacific Connector**
GAS PIPELINE

**Serving the Asia Pacific
LNG Market through
Jordan Cove LNG**

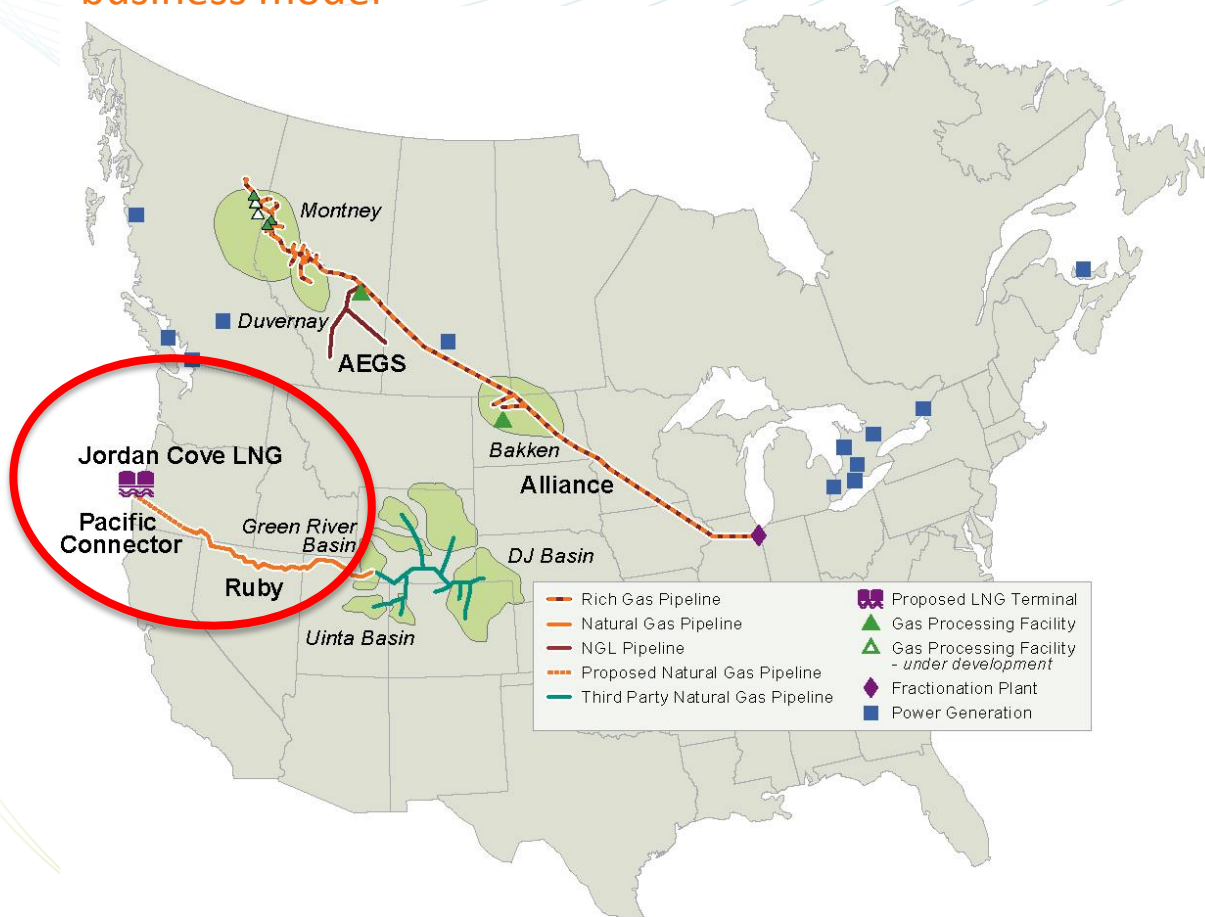
Vern A. Wadey
Vice President

Pacific North West Economic Region
25th Annual Summit Big Sky, Montana
Monday, July 13, 2015



Veresen Inc.: A strong, diversified portfolio of energy infrastructure assets

Publically traded (TSX: VSN), with a market cap of \$7 billion and earnings and cash flow reflecting the reliable, consistent performance of an energy infrastructure business model



Pipelines

- 6,000+ km of regulated gas transmission
- 1,300+ km of NGL transportation

Midstream

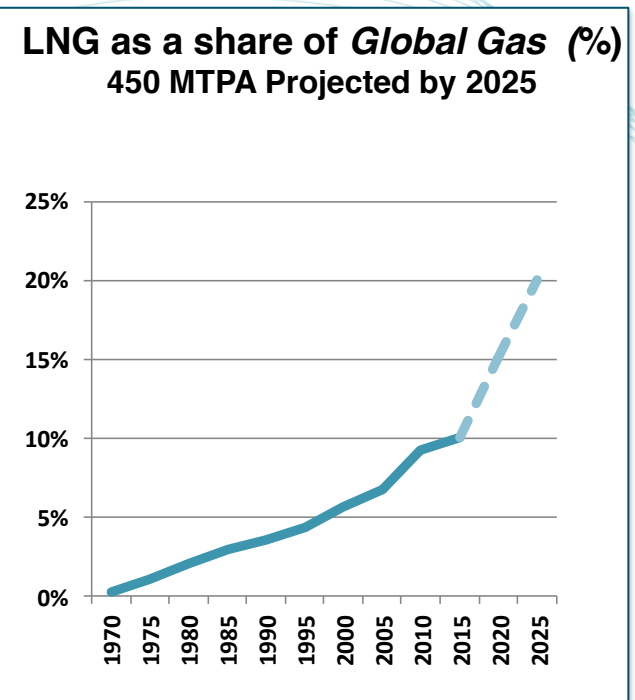
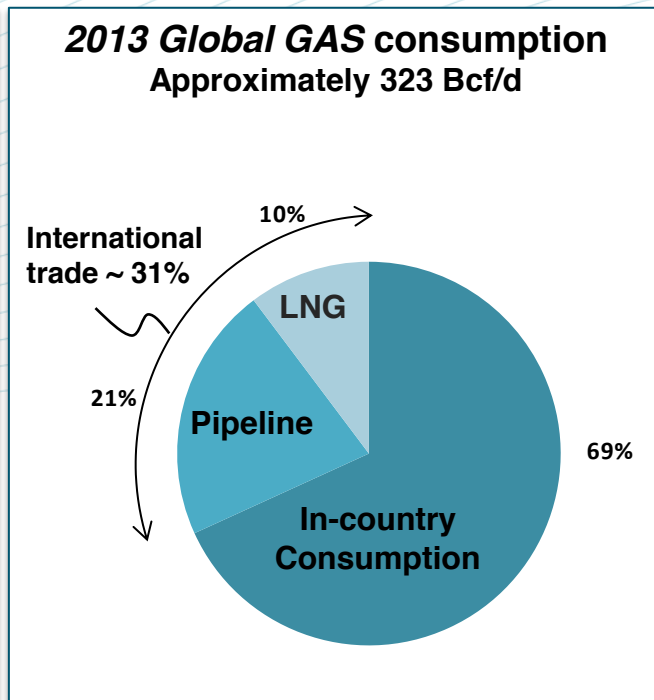
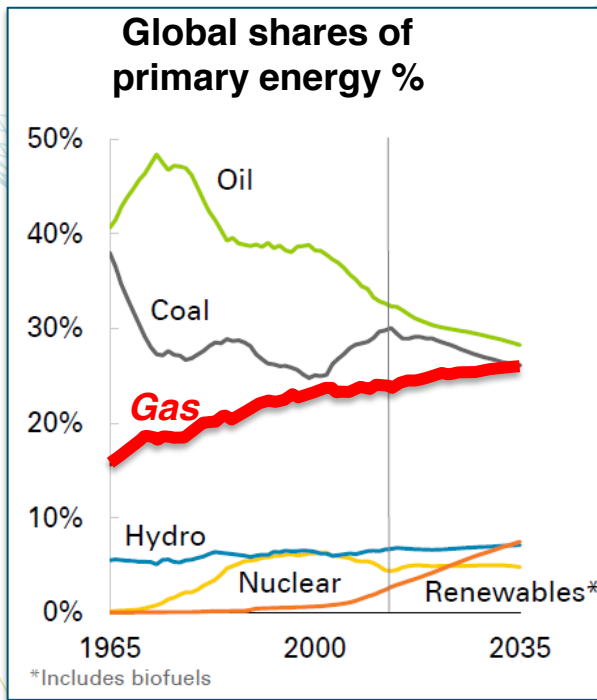
- 900 km of gathering systems
- 670 mmcf/d of processing
- 100,000 HP of compression
- 100,000+ bbls/d of fractionation

Power

- 13 plants
- 830 MW of generation
- 17 years average PPA

Globally, natural gas is becoming the dominant energy for power generation, industry, and residential use

LNG is outpacing global gas industry growth and justifying new, large scale capital expenditures LNG liquefaction facilities

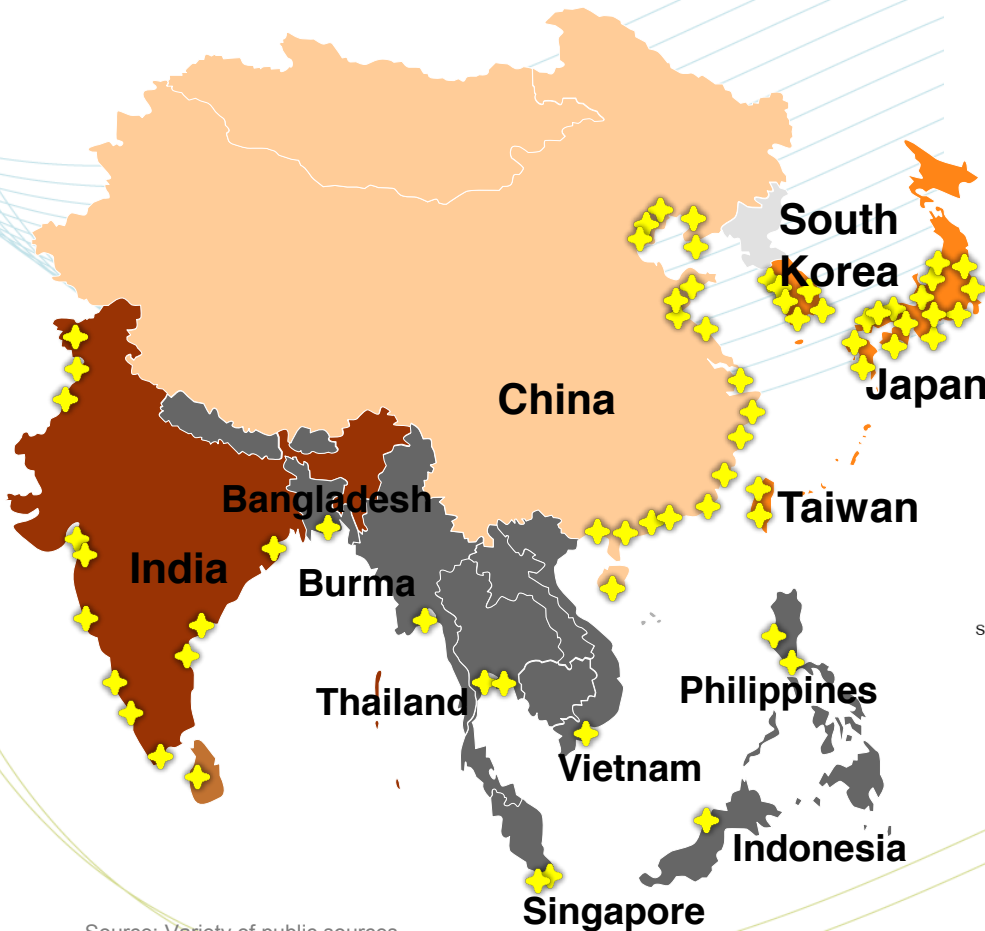


Source: Actuals: BP Statistical Review of World Energy 2014
 Outlook: Wood Mackenzie (2015)

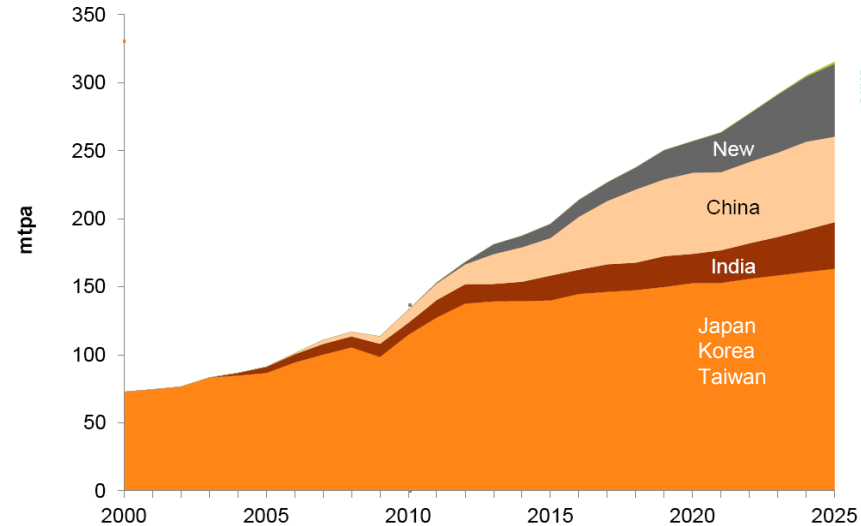
Asia Pacific LNG markets are growing rapidly and competing for new long-term supply sources

Growing LNG Market Demand

✦ existing & proposed import facilities



Asian LNG imports (2000 to 2025)

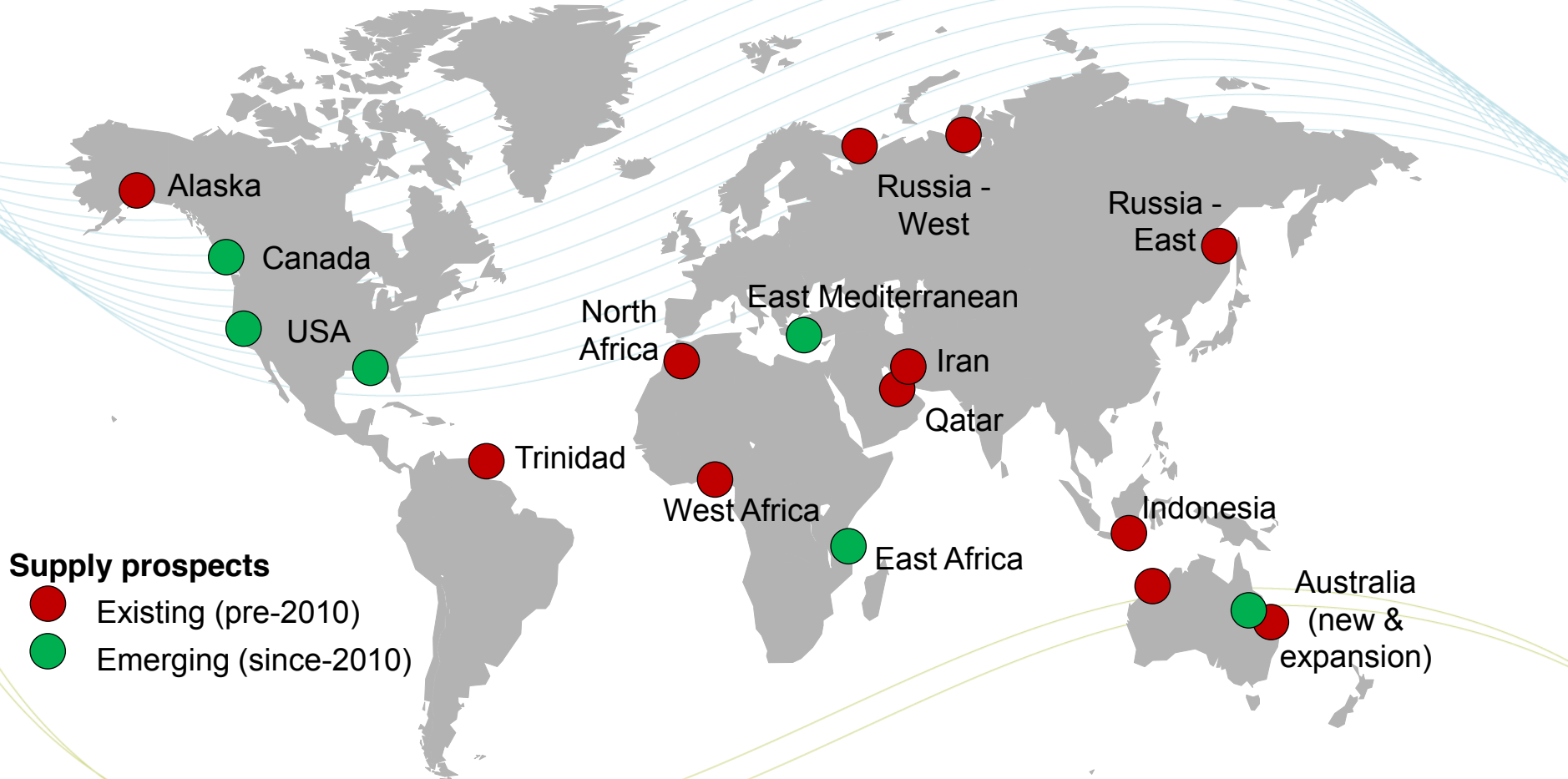


Source: BG Group



New LNG supply sources are entering the global LNG marketplace to meet expected demand growth

Significant LNG export plans are proposed to export natural gas supplies from Canada and the United States



Supply prospects

- Existing (pre-2010)
- Emerging (since-2010)

LNG buyers are assessing project risks associated with new and existing LNG suppliers

Long-term issues such as geopolitical, judicial, and price transparency are also highly important considerations

	Long-term Diversity of Supply	Labor	Permitting/Regulatory	Geopolitical Environment	Existing Infrastructure	New Infrastructure Cost
US	●	●	●	●	●	●
Canada	●	●	●	●	●	●
Australia	●	●	●	●	●	●
East Africa	●	●	●	●	●	●
Russia	●	●	●	●	●	●
Qatar	●	●	●	●	●	●

Note: Risk evaluations based on evaluative discussions

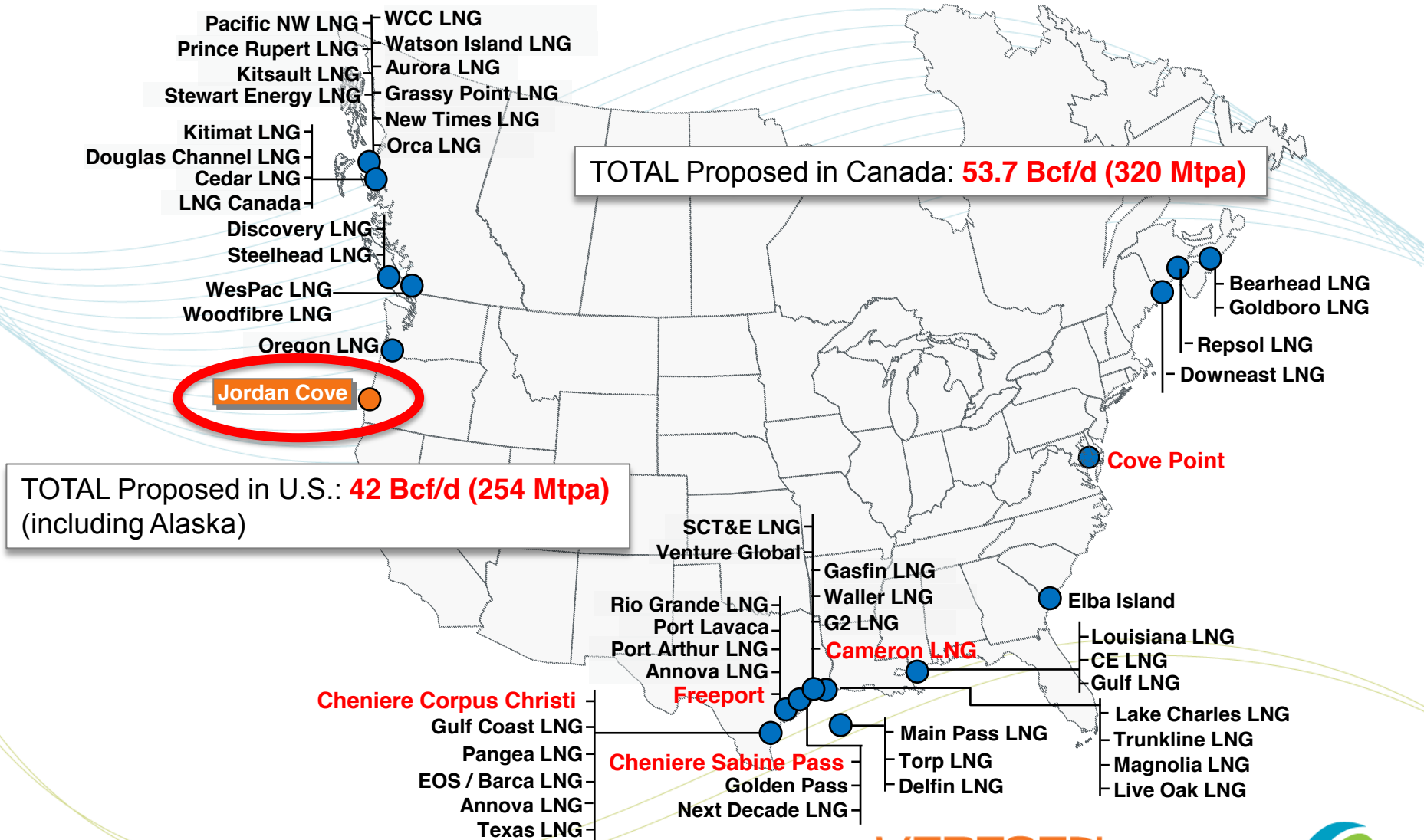
Global LNG buyers seeking new, price competitive, reliable LNG sources from North America

Plentiful amounts of natural gas, sourced from all regions of North America



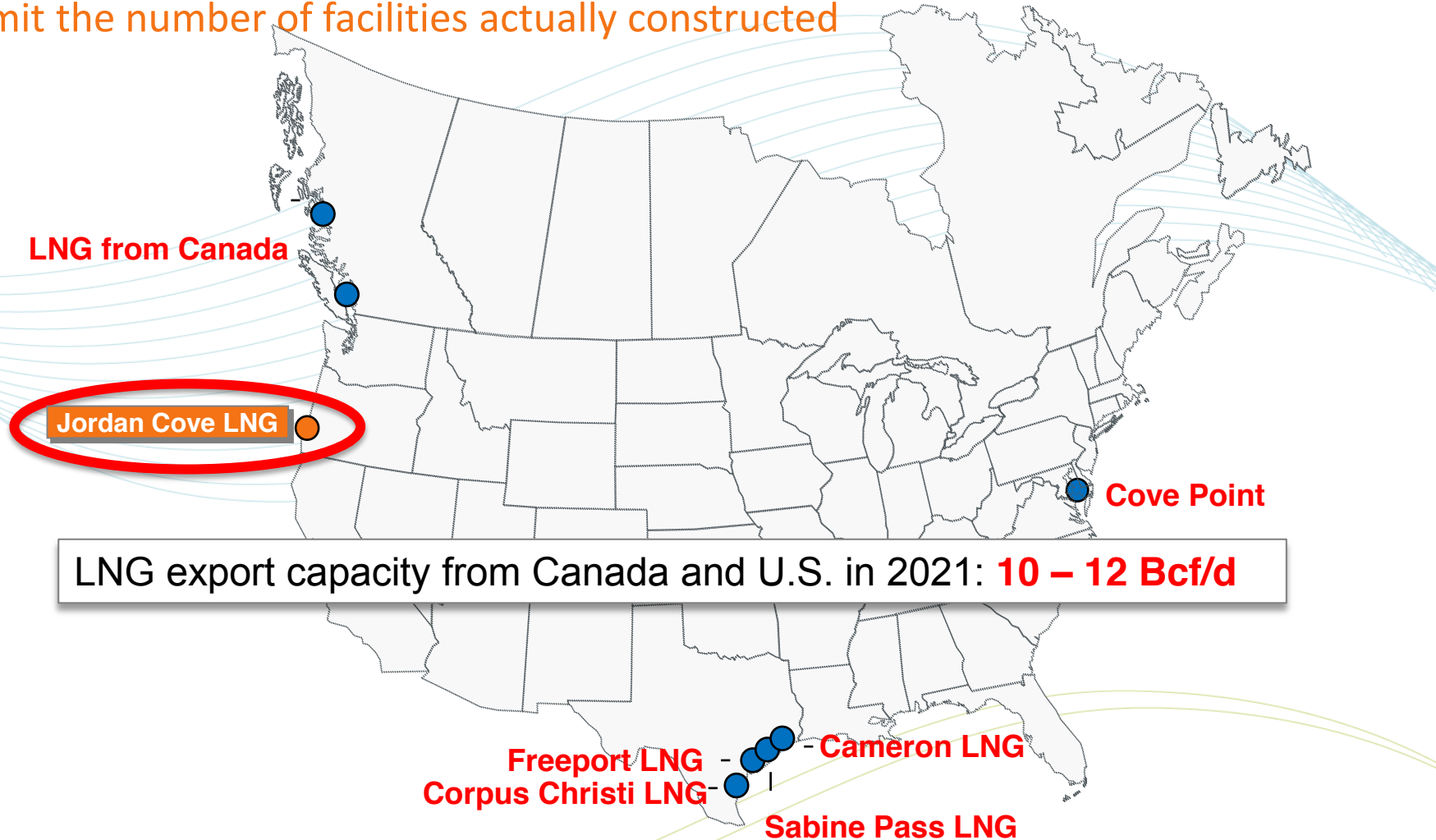
Multiple LNG facilities proposed within North America....

Development optimism has driven a significant number of proposed facilities



... with only a few likely in-service between 2016 – 2021

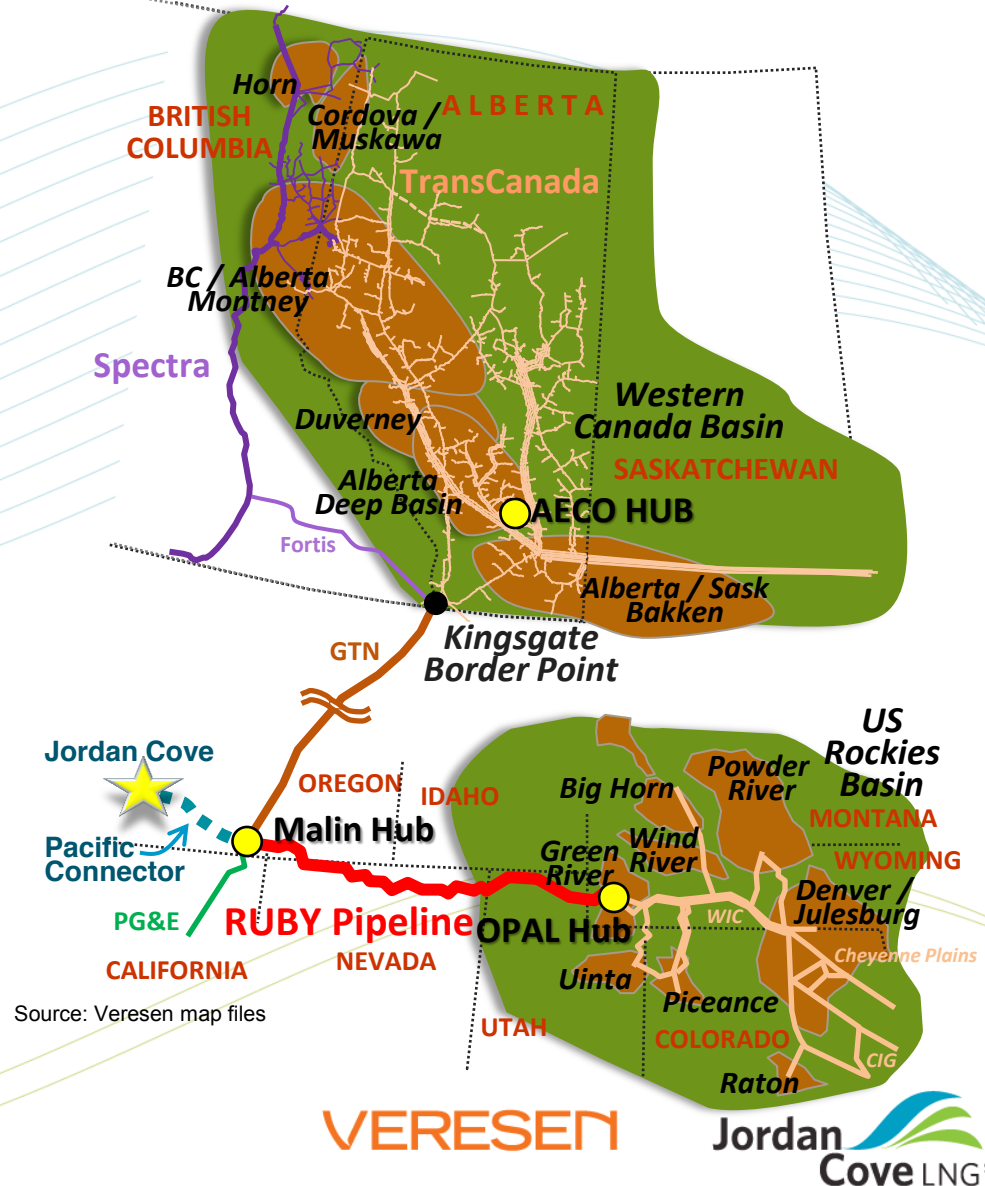
Regulatory timelines, economic viability, and community acceptance will limit the number of facilities actually constructed



Supply diversity and direct access to North American gas commodity prices via AECO and OPAL Hubs

Gas supplies to Jordan Cove are primarily transported by existing pipeline infrastructure

- Complete access to the Western Canada Sedimentary Basin and US Rockies, each with multiple major producing basins
- Proven natural gas resources capable of lasting hundreds of years
- Flexibility in gas purchases through marketing entities, contract purchases, and or JV for gas purchases in the ground.



International Port of Coos Bay, Oregon

U.S. west coast export location with strong community and political support



Southwest Oregon welcomes Jordan Cove!

Coos Bay, Oregon, is an ideal port for exports of high-value LNG to Asia Pacific markets

- Jordan Cove has an established 10-year history in Oregon
- Local land use permits for terminal and pipeline are in hand
- Development is supported by elected federal and state political representatives, community and business leaders
- Project Labor Agreements in place
- **Grassroots community support – visit: www.boostsouthwestoregon.com**

“I urged DOE to consider this application without delay, and I am pleased the department decided that Jordan Cove deserves to move forward.”

Senator Wyden – Oregon (Mar 2014)

**Senator Ron Wyden
Town Hall in Coos Bay, Oregon
November 2013**



Jordan Cove LNG: Competing in the global LNG market

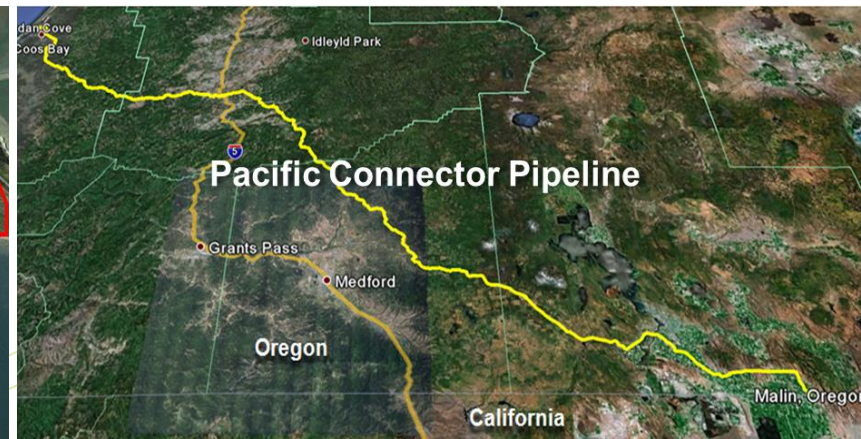
Terminal and pipeline facilities filed for construction with FERC

Terminal: Jordan Cove LNG

- 6 mtpa facility (phase 1)
 - expandable to 9 mtpa (later date)
- 400+ acre site includes:
 - marine facility;
 - two 160,000 m³ LNG tanks;
 - four – 1.5 mtpa liquefaction trains;
 - two gas treating facilities; and,
 - 420 MW power plant.
- Ownership: 100% Veresen

Pipeline: Pacific Connector

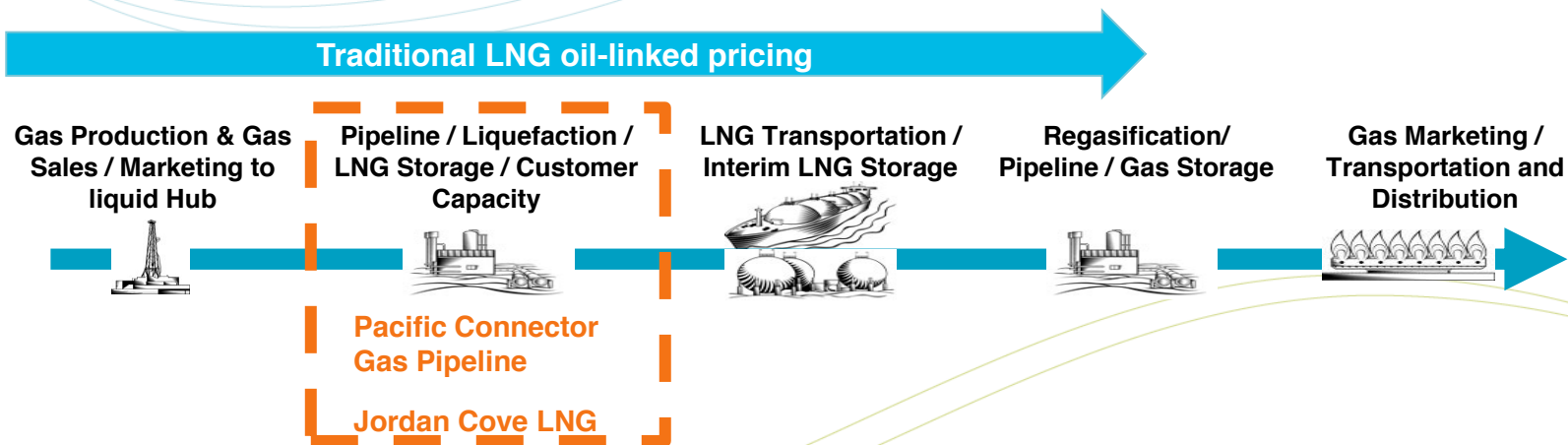
- Design capacity of ~1 Bcf/d for 6 mtpa LNG terminal requirements
 - expandable to 1.5 Bcf/d (later date)
- 232-mile, 36-inch diameter pipeline (1,440 psig MAOP)
- Ownership: 50% Veresen; 50% Williams



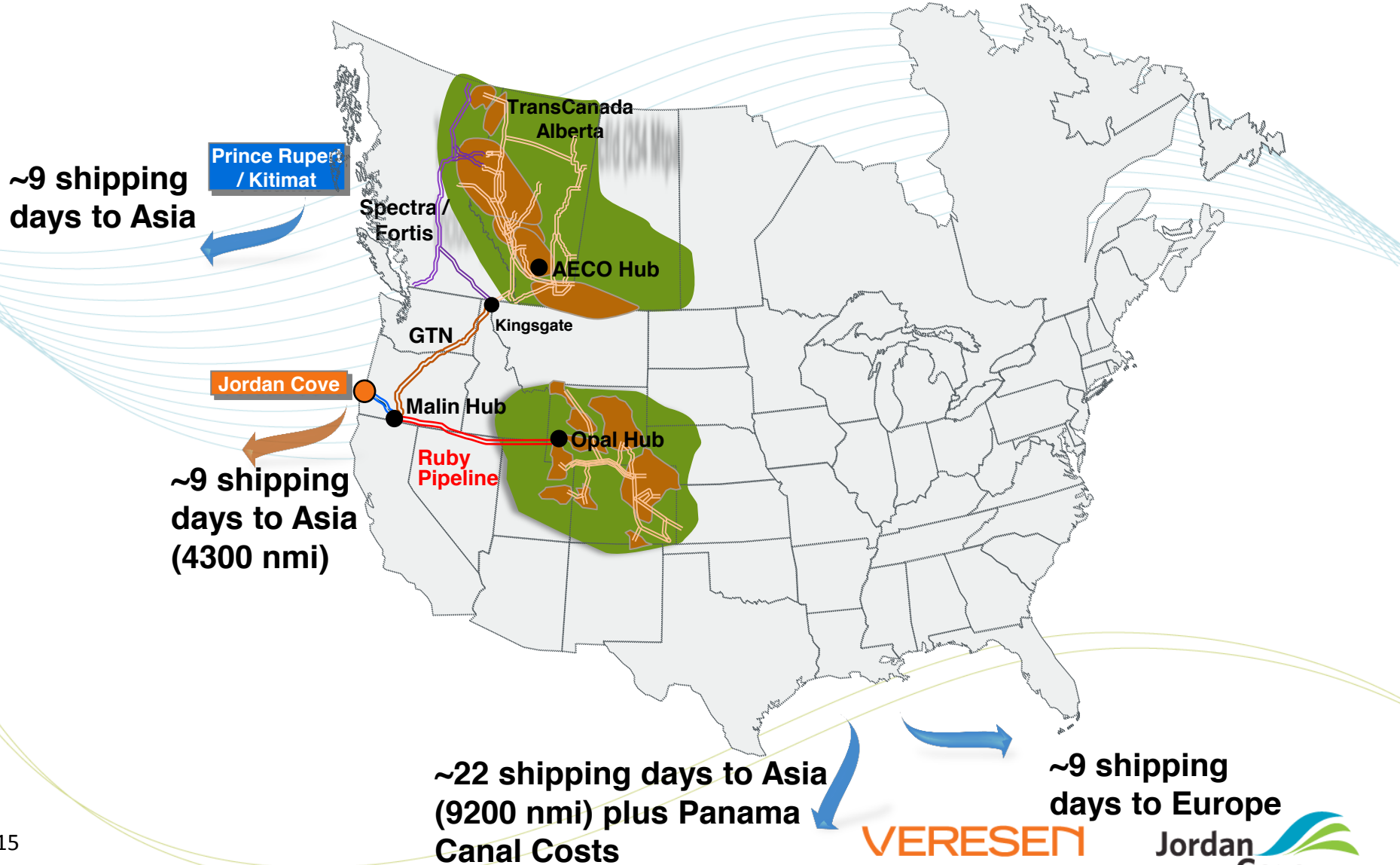
Asia Pacific Buyers are attracted to the characteristics and price of U.S. tolling models

Jordan Cove LNG customers will procure their own gas supply and pipeline transportation

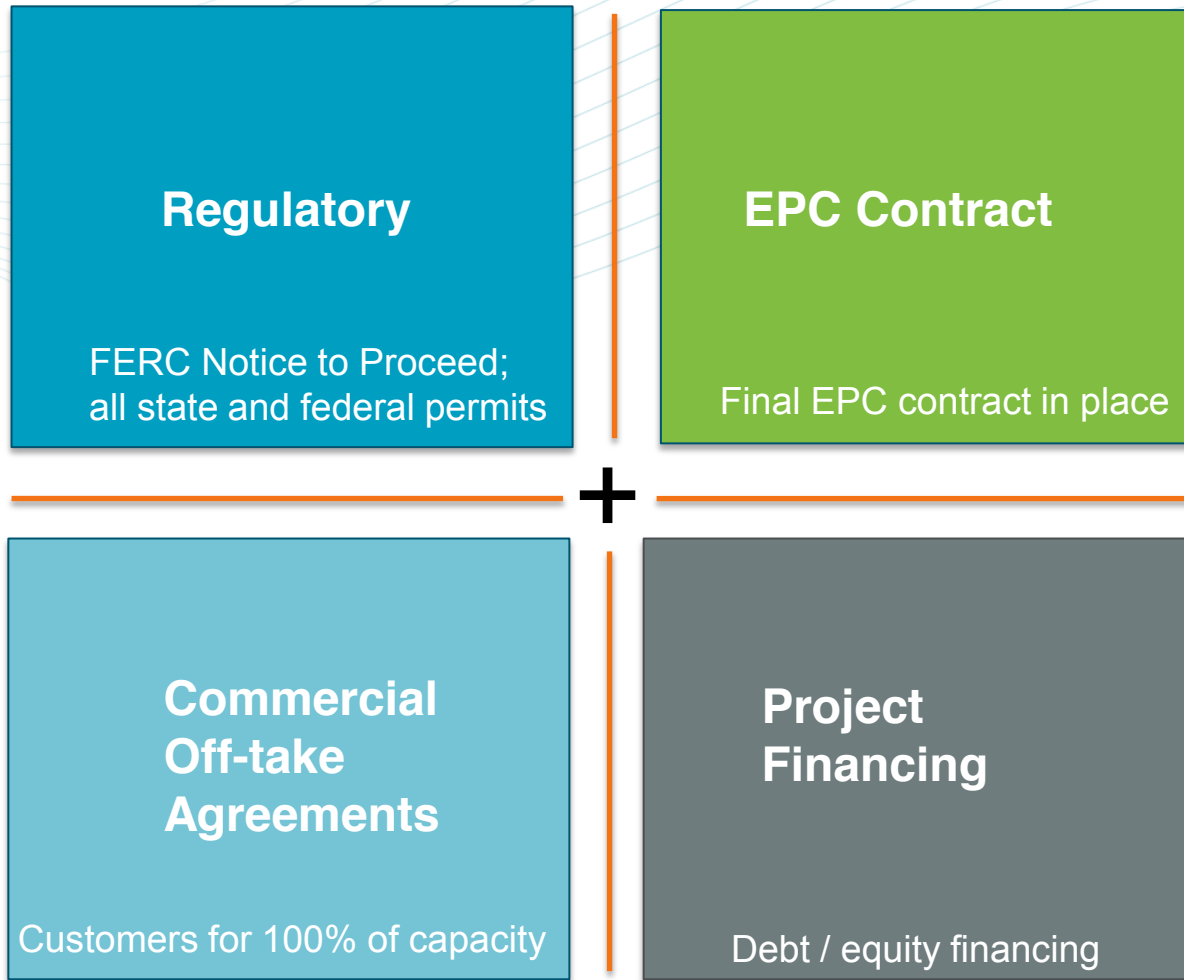
- Tolling arrangements lock in the cost of infrastructure:
 - About 60% of overall costs are locked-in, with only gas commodity costs floating
 - Traditional JCC and / or LNG Sales Agreements have 100% of infrastructure and commodity costs floating with oil prices
- Provides a direct connection to North American gas prices



Shipping distance and logistics from the U.S. west coast is a competitive advantage over the U.S. Gulf Coast



Key work streams to reach a Final Investment Decision



The Jordan Cove LNG advantage

- Competitive with U.S. Gulf Coast brownfield LNG facilities and other global LNG options into Asia
- 9 days shipping from Coos Bay, Oregon to Tokyo
 - No Panama Canal risk, no hurricane risk
- Gas supply from two large distinct gas basins
 - Western Canada and U.S. Rockies
 - Limited local competition for natural gas supply
- Strong local and political support
- Advanced permitting/regulatory status
- Building strong project management team to take Jordan Cove and Pacific Gas pipeline through to FID and to in-service

VERESEN

Jordan 
Cove LNGSM

 **Pacific Connector**
GAS PIPELINE

Thank you!

www.vereseninc.com

www.jordancovelng.com

Exhibit 2

Asian LNG price faces steep fall

Monday, 31 Aug 2015 | 9:25 PM ET Reuters

<http://www.cnbc.com/2015/08/31/asian-lng-price-to-plunge-as-local-demand-wanes-supply-jumps.html>

Asian liquefied natural gas (LNG) prices could fall a further 25 percent in coming months as new supply, falling demand and weaker oil prices put it on par with iron ore and coal as the worst performing commodity of recent years.

Asia's LNG market has already fared worse than slumping oil markets, with spot prices LNG-AS down 60 percent since 2014 to \$8 per million British thermal units (mmBtu), ending half a decade of high prices.

Australia's biggest energy firm, [Woodside Petroleum](#), in August reported a 40 percent slide in first-half profits and said it expected LNG prices to remain low into 2016.

Ratings agency Moody's said on Monday it expected Woodside's credit metrics "to deteriorate substantially from its previously very strong levels."

LNG prices look to have further to fall.

While crude demand remains strong, research group Energy Aspects estimates Asian LNG imports fell 8.5 percent in the first half of 2015 from the same time last year, as the region's economies slow.

Add to the mix El Nino, which usually means milder winters in northern Asia, and a unique cocktail for falling prices may appear.

"The traditional power houses in north Asia are all showing signs of (demand) weakness at a point when there is lots of supply coming on to the market," said Neil Beveridge of Bernstein Research.

China's LNG imports have slumped from double digit growth in recent years to a three percent fall in the first half of 2015 from a year earlier.

For Japan, the world's top LNG importer, the restart of its nuclear power plants is eating away at LNG's market share in an environment of generally falling energy demand.

Imports into South Korea have also fallen due to a slowing economy and rising nuclear power output.

Read More [Eni 'supergiant' gas field discovery a gamechanger: CEO](#)

The slowing demand comes just as output soars. Following \$200 billion of investments into LNG projects, Australia's exports are soaring, tripling its capacity to 86 million tonnes before 2020, which would make it the world's biggest LNG exporter ahead of Qatar.

Australia's soaring output comes at the same time as the United States starts exporting for the first time towards the end of this year.

A 25 percent fall in oil prices since June is adding to LNG weakness.

"The latest leg down in oil prices is in the process of feeding through into gas prices," consultancy Timera Energy said, as oil-indexation in LNG contracts meant crude movements would be priced into LNG with several months delay.

Analysts and traders said Asian LNG prices could fall to \$6 per mmBtu, representing a 70 percent price drop since 2014 and putting it in the same league as coal and iron ore.

Exhibit 3

Asian LNG Prices Expected to Sink as Low as \$4 in 'Ugly' Market

[James Paton Bloomberg News](#)

September 21, 2015

<http://www.bloomberg.com/news/articles/2015-09-21/asian-lng-prices-expected-to-sink-as-low-as-4-in-ugly-market>

The slump in liquefied natural gas prices still has further to go, even after a plunge of 60 percent from last year's peak, according to FGE, an energy consultant.

LNG prices may sink as low as \$4 per million British thermal units by 2017 because of a glut and probably won't rise above \$8 before 2020, FGE Chairman Fereidun Fesharaki said in a phone interview. That compares with the latest spot price of \$7.10 for LNG shipped to northeast Asia, according to New York-based Energy Intelligence Group.

"It's an ugly environment," Fesharaki said.

While the International Energy Agency four years ago [envisioned](#) the possibility of a golden age of gas, Japan's return to nuclear power after the 2011 Fukushima disaster and cheaper alternatives are threatening demand. LNG producers, meanwhile, are forecast to add 50 million metric tons of new capacity next year, the largest single annual increase and equivalent to a fifth of current global demand, according to Sanford C. Bernstein & Co.

The bulk of the new supply is coming from Australia, where companies including ConocoPhillips, Origin Energy Ltd., Chevron Corp. and Royal Dutch Shell are spending more than \$150 billion on export ventures. Most LNG projects have long-term contracts with customers linked to the price of crude oil, which has slumped about 50 percent in the past year.

Spot LNG prices in Asia have declined for six straight weeks with buyers "on the sidelines," and have now slumped more than 60 percent from a record \$19.70 in February 2014, according to Energy Intelligence Group. LNG projects condense gas into liquid form at about minus 160 degrees Celsius (minus 256 Fahrenheit) so it can be shipped to overseas markets.

"But as we go forward, the outlook looks better and better in the early 2020s," said Fesharaki, whose firm advises big oil companies and banks. "The challenge is to persuade your board to go forward and put the money up. Nobody wants to spend that kind of money in this environment."

Australia & New Zealand Banking Group Ltd. said in July LNG prices could fall as low as \$7 over the next six months due to weaker demand in Japan and South Korea before stabilizing in a range of about \$8 to \$10.

Exhibit 4

World LNG Estimated October 2015 Landed Prices



Source: Waterborne Energy, Inc. Data in \$US/MMBtu. Landed prices are based on a netback calculation.

Note: Includes information and Data supplied by IHS Global Inc. and its affiliates ("IHS"); Copyright (publication year) all rights reserved. Prices are the monthly average of the weekly landed prices traded during the prior month.

Updated: November 2015

Exhibit 5

LNG Bust Could Last For Years

<http://oilprice.com/Energy/Gas-Prices/LNG-Bust-Could-Last-For-Years.html>

By James Stafford

Posted on Wed, 07 October 2015 20:51 | 2

Commodity prices have crashed over the past year, and the market for LNG is no different.

Over the past five years or so, there has been a flurry of construction for LNG export terminals, as natural gas exporters hoped to take advantage of the sky-high prices for LNG in Asia. LNG prices jumped following the Fukushima meltdown in Japan – Japan was by far the world’s largest LNG importer before it was forced to shut down more than fifty nuclear reactors in 2011, and its dependence on imported natural gas spiked immediately after the disaster.

China, despite voracious demand for all sorts of commodities, has not been a huge consumer of natural gas. It uses coal for most of its electricity generation. Nevertheless, due to an effort to clean up its terrible air pollution, China has been central to corporate forecasts for huge annual increases in global LNG demand. As a result, LNG export projects proliferated around the world.

Related: A Key Indicator Low Oil Prices Are Lifting Demand

But a funny thing has happened along the way. LNG prices have crashed, with landing prices in Asia dropping from a high of \$20 per million Btu (MMBtu) in early 2014 to around [\\$8/MMBtu today](#). The bonanza for LNG exporters is not playing out due to a variety of factors. First is the collapse in oil prices. LNG prices are still largely linked to the price of crude, so plummeting oil prices have dragged down LNG as well.

However, it isn’t all the fault of oil markets. There are also the underlying fundamentals, which are not favorable to LNG exporters. For example, China’s slowing economy has put a dent in its demand for imported LNG, with imports [down](#) 3.5 percent in 2015 compared to a year earlier. That comes after a 10 percent jump in demand in 2014. Other sources of energy are cheaper than gas in China. Even solar and wind are [beating natural gas on price](#) in China.

Also, Japan is slowly returning to nuclear power. It brought its first [nuclear reactor back online](#) in August. More nuclear power generation will cut down on the need to import LNG.

Related: Most Of BP’s \$20.8 Billion Deepwater Horizon Fine Is Tax Deductible

Then there is supply. The scramble to build LNG export terminals in recent years is leading to way too much supply. Companies proposed and broke ground on new facilities in the U.S. Gulf of Mexico, Australia, East Africa, Russia, and more. Global liquefaction capacity stood at 301 million tonnes per annum (mtpa) at the end of 2014, according to the [International Gas Union](#). But there was 128 mtpa under construction – meaning global LNG export capacity will jump by more than 40 percent in the next few years. Demand doesn’t appear to be able to keep up, especially with a slowing economy in China, and a likely decline in Japan’s need for LNG imports.

The result could be oversupply. LNG prices are already down by more than half since 2014, but new sources of supply are hitting the market this year, and they are entering into a bear market. Santos [started up](#) its Gladstone LNG terminal in Australia in September. Cheniere Energy is bringing its Sabine Pass facility online in the next few months in the Gulf of Mexico, a first for the United States. Spot prices [could drop](#) below \$6/MMBtu.

Related: Oil Fundamentals Improve But Inventories Will Keep Prices Low

Citi Research says that there will be 25 mtpa of oversupply by 2018. That supply overhang will balloon over the next decade if all proposed LNG export terminals actually get constructed. Citi Research says capacity could exceed demand by one-third by 2025. In an Oct. 5 article, The Wall Street Journal cites the Arrow Energy project in Australia, a joint venture between Royal Dutch Shell and PetroChina. The companies had to take a AUS\$700 million [impairment charge](#) on the project due to a souring “economic environment,” and the project lost AUS\$1.5 billion in 2014. The companies are scrapping the terminal.

In fact, Bloomberg [reports](#) that the glut of LNG export capacity is creating a “buyers’ market,” giving much more leverage to importers. In Japan, several prominent importers are refusing to sign up to any more long-term contracts, the traditional financial structure that allowed construction of LNG terminal to move forward. Importers want the ability to resell gas, and many are pressuring their suppliers to ease the terms of the contract. Importers signed up to purchase long-term supplies, often at prices much higher than the current spot market. But if buyers no longer want long-term contracts, that would upend the traditional business model.

Many LNG export terminals are still under construction, having been started years ago. But the boom days for LNG suppliers are over for now.

By James Stafford of Oilprice.com

BROOKINGS

BROOKINGS ENERGY SECURITY AND CLIMATE INITIATIVE
NATURAL GAS TASK FORCE

Exhibit 6

NATURAL GAS ISSUE BRIEF #4:

An Assessment of U.S. Natural Gas Exports



JULY 2015

Tim Boersma
Charles K. Ebinger
Heather L. Greenley

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ABOUT THE BROOKINGS ENERGY SECURITY AND CLIMATE INITIATIVE

The Energy Security and Climate Initiative (ESCI) at Brookings is designed to encourage the development, discussion, and dissemination of high-caliber energy security and climate research. ESCI, through its research and convening efforts, seeks to examine three key substantive aspects of energy security: the geopolitics of energy; the economics of energy; and the growing environmental imperative of balancing increasing global economic prosperity in a carbon-constrained context.

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PREFACE

In May 2011, the Brookings Institution Energy Security and Climate Initiative (ESCI) assembled a Task Force of independent natural gas experts, whose expertise and insights inform its research on various issues regarding the U.S. natural gas sector. After the first series of meetings, Brookings released a report in May 2012 analyzing the case and prospects for exports of liquefied natural gas (LNG) from the United States. The Task Force now continues to meet periodically to discuss important issues facing the gas sector more broadly. With input from the Task Force, Brookings will continue to release periodic issue briefs for policymakers.

The conclusions and recommendations of this report are those of the authors and do not necessarily reflect the views of the members of the Task Force.

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An Assessment of U.S. Natural Gas Exports

Tim Boersma
Charles K. Ebinger
Heather L. Greenley¹

Introduction

Increased natural gas production in the United States has fueled a lively debate on the future of natural gas exports. This debate has focused so far predominantly on exports of liquefied natural gas (LNG). At the same time, the debate is clouded with many confusing statements about the regulatory regime related to natural gas exports with many foreign nations and even some domestic observers having the erroneous belief that the United States has severe restrictions on exports, when in fact no project has to date ever been rejected. In addition, estimates about the amount of U.S. natural gas that will be competitive in global markets vary widely, in part because a number of new supply sources are expected to enter the market in the coming years. There are also many uncertainties regarding global demand for LNG going forward. Finally, declining natural gas sales to the United States have incentivized Canada's provincial and federal authorities to search for opportunities to market its product elsewhere in the world, though unconventional gas development in Canada trails U.S. production, and in some parts of the country gas infrastructure is less developed than in most parts of the United States.

This policy brief provides an assessment of U.S. natural gas exports in the coming years, as well as its competitive position vis-à-vis other suppliers that are emerging worldwide. It does so by briefly outlining the existing regulatory framework related to LNG exports from the United States. It then proceeds with a timeline for LNG export projects that are being developed.² The policy brief then turns to what are currently considered major (potential) rivals of U.S. LNG, before it concludes with some final observations regarding the competitive position of U.S. LNG as of June of 2015.

This paper builds on extensive discussions within the Brookings Institution's Natural Gas Task Force (NGTF), along with our analysis of available literature on existing natural gas production trends, price formation, and legal and infrastructural limitations. We are grateful for the rich debates that have occurred in our NGTF. Despite the generosity and valuable contributions of all our speakers and participants, this policy brief reflects solely our views, and any errors remain our own.

¹ The authors are all members of the Energy Security and Climate Initiative at the Brookings Institution. Tim Boersma is a fellow and acting director; Charles K. Ebinger is a senior fellow; and Heather L. Greenley is a senior research assistant.

² We have used data that were available in early June 2015, or before.

The global LNG market

For many years, the outlook for natural gas has been very positive, and the outlook for LNG was similarly optimistic. A golden age for natural gas was near, according to the International Energy Agency in 2011. Today, that same agency reports that the outlook may still be bright, but is not set in stone.³ Falling oil prices have knock-on effects on gas production worldwide, and, perhaps more importantly, demand for natural gas in 2014, particularly in Asia, proved to be substantially more moderate than anticipated.

Recent high regional prices, in both Europe and Asia, have incentivized the construction of significant additional LNG capacity additions. By 2020 additional LNG capacity additions totaling 164 billion cubic meters (bcm) will have come into the market, of which 90 percent will come from Australia and the United States. This, combined with slowing demand, has led to a situation of oversupply, which is expected to last until at least 2017.⁴ It is against this background that we write our report. **Table 1** shows some key characteristics of global LNG markets, before we turn to the U.S. regulatory framework.

United States regulatory framework

The evolution of the U.S. LNG export licensing process

All U.S. LNG export projects must receive approvals from both the Department of Energy's Office of Fossil Energy as well as the Federal Energy Regulatory Commission (FERC) per the statutory provisions of the

1938 Natural Gas Act (NGA) Section 3(15 USC§717b).⁵

Prior to 2014, this process required an initial application to the Department of Energy (DOE) and a national interest determination finding that LNG exports were within the public interest. This process was then followed by a FERC review after which if the project met all regulatory considerations an approval for the construction of an export facility followed.

Exports to countries holding free trade agreements (FTA) with the U.S. are automatically deemed in the public interest, and therefore licensable by the DOE. For exports to countries without an FTA with the United States, the Office of Fossil Energy was still required to issue an export permit unless, after publishing the application in the Federal Register, seeking public comments, and receiving protests against the sale or notices of intervention by parties opposed to the sale, such exports could be detrimental to the public interest. However, a major shortcoming of this process was the very vague grounds used to determine what was meant by the "public interest." Additionally, under the regulatory process, DOE had the ability to issue permits up to a certain cumulative volume of LNG exports and then to deny subsequent applications if it perceived that tight market conditions made such additional exports in contravention of the public interest. Finally, the DOE's low-cost, un-demanding application process soon became bogged down with dozens of export applications.

Following DOE's approval, authorization by FERC was (and still is) also necessary for any LNG export facilities requiring the siting, construction, or operation of those facilities, or to amend an existing FERC authorization. Certain additional regulatory

³ International Energy Agency (IEA), Gas: Medium-Term Market Report 2015, by Costanza Jacazio et al. Paris: OECD/IEA, 2015.

⁴ Ibid., 94.

⁵ For a more in-depth assessment of the process for approval for LNG exports prior to 2014, see: Charles Ebinger et al., "Liquid Markets: Assessing the Case for U.S. Exports of Liquefied Natural Gas," Brookings Institution, May 2012, http://www.brookings.edu/~media/research/files/reports/2012/5/02%20lng%20exports%20ebinger/0502_lng_exports_ebinger.pdf.

TABLE 1. THE GLOBAL LNG MARKET⁶

KEY CHARACTERISTICS OF THE GLOBAL LNG MARKET

LNG has been the fastest growing source of gas supply, averaging 7 percent annual growth since 2000. However, over the last three years, LNG trade has been stable at just below the peak of 241.5 million metric tons per annum (mtpa) reached in 2011. LNG in 2013 met 10 percent of global gas demand.

In 2013, the Middle East supplied 42 percent of global LNG supplies, while the Asia Pacific supplied 30 percent. Around 65 percent of the world's liquefaction capacity is held in just five countries: Qatar, Indonesia, Australia, Malaysia, and Nigeria.

Most LNG demand growth has been in the Asia Pacific region, particularly due to increased consumption in China and South Korea. Japan remains the world's dominant importer, utilizing 37 percent of global imports.

Though interregional trade patterns have intensified in recent years, a single price structure for global LNG does not exist. In fact, current investments in the sector are based largely on the premise that these price differentials will remain in place (and incentivize arbitrage).

Historically, LNG trade was based on long-term contracts and oil-indexation, in order to manage risks associated with high upfront costs of liquefaction, transport in specialized tankers, and regasification. However, in 2013, 33 percent of global trade was not long-term (referring to cargoes that are not supported by 5+ years Sales and Purchase Agreements, cargoes diverted from their original/planned destination, and cargoes above take-or-pay commitments). Several factors have contributed to this trend, including the growth of contracts with destination flexibility, and the lack of domestic production or pipeline imports in Japan, Korea, and Taiwan (as a result, sudden changes in demand following for instance a phase out of nuclear capacity have to be covered in the spot market). In addition, the continued price differentials between various regions, and the fact that LNG volumes have been freed up due to a loss of competitiveness vis-à-vis coal (Europe) and shale gas (United States) has facilitated shorter-term trade.

Re-exports of LNG likely remain an important feature of global LNG markets, as described above. In 2013, re-exports grew for the fourth year in a row, to 4.6 megatons (MT) and continues to grow today. Another market development has been the introduction of new pricing formulas by U.S. firms (based on North American spot market prices, instead of oil-indexation). Even though U.S. pricing formulas are currently unique, and low oil prices may take away the immediate incentive for more widespread change, it seems likely that in due time hub-based pricing will become more common. Next to these developments, a number of technological innovations may drive further changes in global LNG markets going forward, such as floating LNG, small scale LNG, high-efficiency liquefaction plants, and LNG ice breakers which would facilitate Arctic transportation.

approvals for offshore facilities involving the export of LNG are on occasion also needed from the Coast Guard as well as the Department of Transportation. If a favorable verdict was made by these agencies, then applications were issued a Certificate of Public Convenience and Necessity allowing the project to proceed to construction and operation.

Environmental review and assessment

The approval of the Office of Fossil Energy and of FERC additionally required an Environmental Impact Statement (EIS) under the National Environmental Policy Act (NEPA of 1970). All projects were to have an EIS for every proposed major federal action that

⁶ Based on International Gas Union, *World LNG Report - 2014 Edition* (Fornebu, Norway: International Gas Union, 2014), 23, http://igu.org/sites/default/files/node-page-field_file/IGU%20-%20World%20LNG%20Report%20-%202014%20Edition.pdf.

was thought to have a significant impact on the environment, in accordance with NEPA's requirements. Even projects with less significant impacts still required documentation. For example, even if the environmental impacts were indeterminable, an EIS would have to be done in order to conclude if an EIS was necessary. If the ensuing EIS determined that the proposed project had no significant environmental impacts, then a Finding of No Significant Impact (FONSI) report was provided. Finally, projects perceived to have no significant impacts on the environment could be processed as Categorical Exclusions alleviating any requirement to provide either an EIS or a less robust Environmental Assessment (EA). In preparing all the documentation required by NEPA, both the Department of Energy and the FERC were also charged with identifying any other compliance requirements pertinent to the project such as the Clean Air Act, the Clean Water Act, the Endangered Species Act, and the National Historic Preservation Act, as well as any approvals under these or state-related requirements that fell under these federal statutes. In addition to the environmental requirements, LNG export projects can be subject to the oversight requirements of other agencies such as the Department of Transportation's Office of Pipeline Safety, the National Fire Protection Association, and the Federal Emergency Management Agency.

This seemingly simple, but realistically complex regulatory approval process was made more convoluted by the uncertainty of how long it would take,

particularly for those applying to export to non-FTA countries. Again, prior to 2014, the DOE reviewed applications to export LNG to countries without a free trade agreement in the order in which they were received, resulting in a cumbersome and painstakingly time-consuming process. This provided industry with little or no certainty that their projects would be approved if they were way down the applicant list, even if they had excellent technical partners, sound balance sheets, committed customers, and strong prospects for certain financing. While the DOE, per its legal mandate, intended to process these applications in a timely manner (at an average of one every eight weeks), by March 2014 the escalating number of applications had prolonged the approval process by nearly four years, regardless of the project's environmental complexities or lack thereof. "The result was that projects which might make it through the environmental review, led by the Federal Energy Regulatory Commission (FERC) or the U.S. Maritime Administration (MARAD) depending on jurisdiction, might not be considered until they came up in the queue, possibly years later, or might be rejected altogether because they exceeded the soft cap of 12 billion cubic feet per day (Bcf/d)."⁷

On May 29, 2014, the DOE announced a modification of the application process for LNG exports to countries without a U.S. free trade agreement. First, the DOE effectively terminated conditional verdicts to export to non-FTA countries without a NEPA review. "DOE typically issued these conditional authorizations after completion of the notice and

⁷ David L. Goldwyn, "DOE's New Procedure for Approving LNG Export Permits: A More Sensible Approach," Brookings Institution, June 10, 2014, www.brookings.edu/research/articles/2014/06/10-doe-approving-lng-export-goldwyn-hendrix. The existence of the so-called soft cap grew out of a study commissioned in 2012 by the DOE with the goal of determining how much LNG could be exported from the United States within the public interest. Finally issued in 2014, the DOE's study, authored by NERA, found inter alia that the more LNG the United States exports, the greater the public interest, thus in effect depriving the DOE of any stopping point, based on its own required criteria and its own study. Because the highest volume scenario NERA examined was 12 Bcf/d of exports, this justified a "soft cap" of 12 Bcf/d in the eyes of some observers. The cap was, indeed, soft because NERA soon privately updated its study, finding public interest in a 19 Bcf/d scenario.

comment process, but before completion of NEPA review.”⁸ As discussed earlier, prior to this time many projects had to wait in queue in the order in which they were received; some of these were still undergoing environmental review because this assessment could be highly complex, while other projects that had no environmental impact still waited in line. Following the change in policy, the DOE only issues public interest approval for projects that have secured their NEPA requirement, streamlining the DOE approval process. Furthermore, the DOE eliminated the queue system and now approves applications based on when an application “has completed the pertinent NEPA review process and when DOE has sufficient information on which to base a public interest determination.”⁹

Despite this attempt to clarify and streamline the approval process, industry still remains a bit concerned over how the changes will work in actuality. Moreover, the issue of what criteria DOE uses and what weight each criterion is given in determining what constitutes the “public interest” is not fully guaranteed by the issuing of an export permit. The United States government still reserves the full right to withdraw export permits determined not to be in the public interest.¹⁰ Unfortunately, this determination is outside the DOE’s jurisdiction and can only be changed or clarified by an act of Congress. Nonetheless, with the change in policy, DOE has made a vast improvement in the approval process providing industry with noticeably more confidence in the approval timeline, once they have undergone their NEPA review.

Current trade flows and North American export projects under construction

Since 2007, Canadian gas pipeline exports to the United States have been in a sluggish decline as new U.S. domestic supplies, largely from unconventional gas, and the construction of new pipelines to distribute them are quickly obviating the need for Canadian gas imports. In 2013, virtually all U.S. imports of natural gas came from Canada, totaling 2,785 Bcf.¹¹ Given these market trends and the absence of new export markets, Canadian gas production likely will remain stagnant, serving only the domestic economy and some select niche U.S. regional markets. It is worth noting however, that those niche markets also may evaporate for two reasons. First, U.S. domestic infrastructure investments continue to expand, bringing previously stranded gas supplies to market. To give an example, in 2013 Canadian imports into the northeastern United States dropped by almost 12 percent, due to the increase in production from the Marcellus shale and expanded pipeline capacity.¹² Second, gas market growth in California, a highly important niche market for Canadian gas, is in decline as large renewable energy projects increasingly dominate electricity generation capacity, gradually pushing out gas.

In response to this Canadian “existential” gas market crisis and the perception that the United States is a “low cost” gas producer, the Canadian gas industry has embarked on ambitious schemes

⁸ Procedures for Liquefied Natural Gas Export Decisions, 79 Fed. Reg. 32262 (proposed June 4, 2014), <https://federalregister.gov/a/2014-12932>.

⁹ Ibid.

¹⁰ The right to withdraw export permits due to the determination of not being in the public interest is unlikely to be exercised. This issue becomes moot once natural gas export prices reach the point of no longer being in the public interest, the price of exporting U.S. natural gas becomes too expensive and therefore uneconomic.

¹¹ U.S. Energy Information Administration, “U.S. Natural Gas Imports & Exports 2013,” May 28, 2014, <http://www.eia.gov/naturalgas/importsexports/annual/>.

¹² Ibid.

to ship Canadian gas to Asian markets where gas prices have historically been high. Currently, there are no fewer than 19 proposed LNG projects along the coast of British Columbia.¹³ There are also two more in Oregon that, if built, would be supplied by gas from Western Canada, and several liquefaction plants have been proposed in Canada's Maritime Provinces on its Atlantic coast.

To date, however, no final decision has been made for any Canadian LNG export project and none have been built. Malaysia's Petronas has decided to continue to move forward with its project in British Columbia, yet final investments are still waiting for federal and provincial approval.¹⁴ Much of the delay in Canada relates to the relatively long distances over which wholly new gas pipelines have to be constructed to enable LNG exportation. These long pipeline routes (e.g., over 600 miles in British Columbia) have drawn significant environmental backlash, complicated by protracted negotiations with the First Nations and recent revisions to the tax regime in British Columbia. Recently, several First Nations, including the Lax Kw'alaams, have voted against LNG plans in British Columbia as it interferes with traditional territories, leaving significant

environmental and ecological concerns which need to be addressed.¹⁵ With these delays possibly curbing potential investment, Ottawa has announced a federal tax break for proposed LNG terminals in British Columbia, which intends to spur investment by making British Columbian LNG more competitive and to alleviate some economic uncertainty.¹⁶

In the United States, the euphoria brought on by the unconventional gas revolution has been astounding as estimates of technically recoverable natural gas resources have ascended to over 2,200 trillion cubic feet (Tcf), an amount in excess of 87 years supply at current consumption levels.¹⁷ The magnitude of these resources has led to FERC's approval of several LNG export terminals, five of which are under construction (**Figure 1**).¹⁸ Furthermore, there are 21 additional proposed projects in the continental United States and one in Alaska pending review by U.S. regulatory authorities, including several existing import terminals that are requesting to be converted into export facilities, i.e., for which substantial gas infrastructure components are already in place. In addition, it is estimated that there could be 11 more potential facilities in terms of available sites.¹⁹

¹³ For a list of British Columbian projects see: "Explore B.C.'s LNG Projects," Government of British Columbia, <http://engage.gov.bc.ca/Inginbc/Ing-projects/>. For a list of Canadian projects applying for an LNG export terminal license with the Government of Canada, see: "Canadian LNG Projects," Natural Resources Canada, last modified September 23, 2014, <http://www.nrcan.gc.ca/energy/natural-gas/5683>.

¹⁴ Chester Dawson, "Shell-Led Natural Gas Export Project in Canada Clears Environmental Hurdles," *The Wall Street Journal*, June 17, 2015, <http://www.wsj.com/articles/shell-led-natural-gas-export-project-in-canada-clears-environmental-hurdles-1434584827>.

¹⁵ Justine Hunter, "Lacklustre Support from B.C. First Nations Signals Trouble for LNG Facility," *The Globe and Mail*, May 10, 2015, <http://www.theglobeandmail.com/news/british-columbia/lacklustre-support-from-bc-first-nations-signals-trouble-for-Ing-facility/article24361708/>.

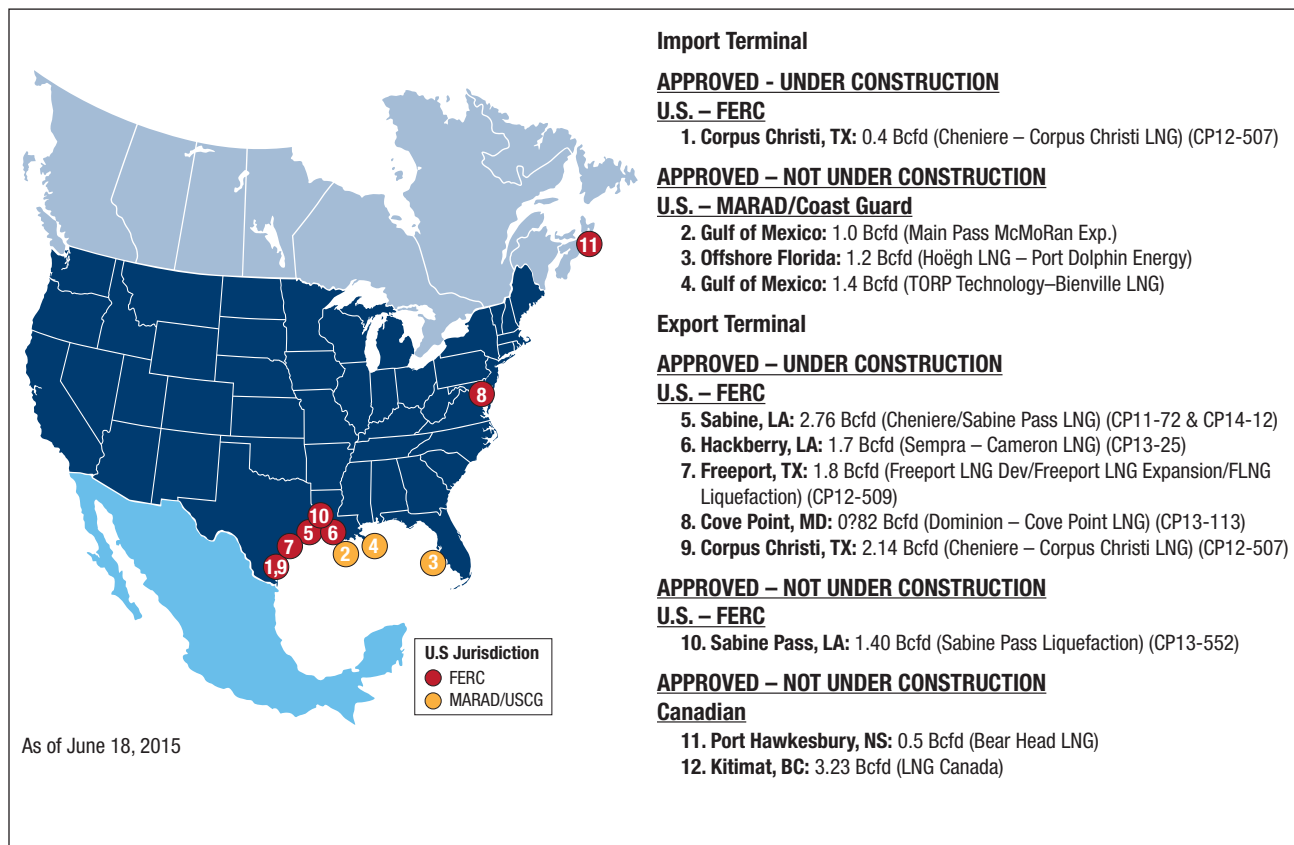
¹⁶ Brent Jang and Ian Bailey, "Ottawa Grants Tax Breaks for LNG Sector in BC," *The Globe and Mail*, February 19, 2015, <http://www.theglobeandmail.com/news/british-columbia/harper-announces-tax-breaks-for-Ing-industry-in-bc-to-spur-job-growth/article23106853/>.

¹⁷ "Frequently Asked Questions: 'How much natural gas does the United States have and how long will it last?'" U.S. Energy Information Administration, last modified December 3, 2014, <http://www.eia.gov/tools/faqs/faq.cfm?id=58&t=8>.

¹⁸ Likewise, proved U.S. gas reserves have reached record levels of 354 trillion cubic feet as of year-end 2013: U.S. Energy Information Administration, "U.S. Crude Oil and Natural Gas Proved Reserves," December 19, 2014, <http://www.eia.gov/naturalgas/crudeoilreserves/>.

¹⁹ "LNG," Federal Energy Regulatory Commission, last modified June 18, 2015, <http://www.ferc.gov/industries/gas/indus-act/Ing.asp>.

FIGURE 1. NORTH AMERICAN LNG IMPORT/EXPORT TERMINALS APPROVED



Source: Federal Energy Regulation Commission, U.S. Department of Energy

While the projected number of North American LNG export facilities is massive, closer examination of the projects' financial realities offer a more nuanced story. Almost all of the existing analysis and forecasts have been based on three central tenants. First, that spot market prices at Henry Hub will continue to be at record low levels. However, in reality, Henry Hub prices, while remaining relatively low, are projected in most forecasts to rise steadily in the coming years, albeit gradually. Unless the costs of the liquefaction process, transportation, and regasification of natural gas can be reduced, and there are currently few indications that they can, those marginal differences in hub prices may become more significant in

determining how attractive U.S. LNG exports will be.²⁰ The second supposition is that prices in Asia and Europe will remain high, creating ample room for arbitrage. Currently, Henry Hub prices have remained low at around \$3/Mcf. Meanwhile, spot prices in Asia (roughly \$6-7/mmBtu for 2015-2016)²¹ and Europe have tumbled over the course of 2014 (because they have been tied to world oil prices, which declined precipitously, because of a slowdown in economic growth, and because natural gas faces stiff competition from other fuel sources, negatively impacting demand) to levels where it would be increasingly difficult for North American LNG to be considered profitable. The third supposition is the continued

²⁰ International Gas Union, *World LNG Report - 2014 Edition*.

²¹ Osamu Tsukimori, "Japan Feb LNG Spot Price Falls a Quarter to \$7.60/mmBtu," Reuters, March 10, 2015, <http://www.reuters.com/article/2015/03/10/lng-japan-spot-idUSL4N0WC1JL20150310>.

practice outside the United States of indexing the price of LNG to the oil price, coupled with the general assumption that oil prices will remain high. Consequently, when oil prices fell by 50 percent after October 2014, many LNG projects' fiscal solvency were called into question. Even with prices having slightly rebounded, investors remain increasingly cautious about new projects. U.S. projects that are currently under construction are unique in that their pricing formulas are based on spot-market prices at Henry Hub, unlike other LNG projects around the world which are in some form indexed to oil or oil-related products. With the fall in oil prices, rivals to U.S. LNG projects, in particular those in Australia (which are discussed in more detail later in this brief) have become more competitive than they were just one year ago, but it is uncertain how the oil price will develop going forward.

In addition, there are many other uncertainties worth considering:

1. The pace at which China ramps up pipeline imports, particularly from Russia;
2. The rate at which many countries with large shale gas resources (China, Argentina, South Africa, and Algeria, to name a few) successfully develop them;
3. Inter-fuel competition from other sources such as coal and renewables with LNG, especially in the Asian power market;
4. Whether or not Russia will also initiate large scale pipeline exports to Japan and the Koreas, owing partially to the pace and scale of Russian LNG exports from its Arctic regions, as well as how much Russian LNG from Yamal and Sakhalin will continue to flow;

5. The speed and degree to which Japan determines whether or not to bring its nuclear reactors back online, and to what extent nuclear outages in South Korea continue to spur LNG imports;
6. To what extent Japan will continue its support schemes for renewable electricity and significantly expand in particular its solar capacity;
7. The ability to utilize LNG as a transportation fuel, particularly in the Chinese and Indian markets where pollution and health concerns are growing;
8. Whether the United Nations Framework Convention on Climate Change meeting in Paris in late 2015 reaches a global agreement on reducing CO₂ emissions and the nature of that agreement; and,
9. To what extent the major economies in Asia, in particular China and India, decide to reduce the share of coal in their electricity generation, especially if there is no serious agreement to reduce CO₂ at the Conference of the Parties meeting. In such a scenario coal will remain very competitive with LNG.²²

Faced with the foregoing uncertainties, U.S. LNG export projects are actually poised to compete favorably with new LNG projects coming to the world market from other locations. U.S. construction costs are comparatively low, especially for brown-field liquefaction projects, i.e., that will convert existing import terminals that have already secured environmental approvals for existing facilities. Additionally, low U.S. energy prices provide a construction cost edge, and the United States offers significant skilled labor at a reasonable cost.²³ Finally, depending on global oil prices, the U.S. LNG pricing structure,

²² Brian Songhurst, "LNG Plant Cost Escalation," The Oxford Institute for Energy Studies, February 2014, <http://www.oxfordenergy.org/wpcms/wp-content/uploads/2014/02/NG-83.pdf>.

²³ Leonardo Maugeri, "Falling Short: A Reality Check for Global LNG Exports," Harvard Kennedy School, December 2014, 21, <http://belfercenter.ksg.harvard.edu/files/Falling%20Short-LNG%202014.pdf>.

based on Henry Hub spot market prices, may give U.S. projects a competitive advantage going forward by providing buyers with lower cost LNG and price index diversity.

Yet the success of U.S. projects is not guaranteed. First, capacity costs are not fixed and can rise with an increased demand for material and skilled labor, as the overall economy improves.²⁴ Second, the oil price level plays an important role. Leonardo Maugeri of Harvard's Kennedy School makes a compelling case that U.S. LNG projects are likely less competitive at an oil price (Brent) level of \$80/bbl compared to \$100/bbl. With other LNG projects indexed to the price of crude, the current price level would make LNG from Australia more competitive vis-à-vis U.S. LNG in Asia.²⁵ It is worth noting that Australian projects that are competitive are not per definition profitable. Some estimates suggest that Australian LNG projects break even at around \$85/bbl, though of course every case is unique.²⁶ Third, with respect to Europe in general, LNG producers have to wonder what will be the absorptive capacity of the market. In Europe, LNG competes with cheap coal, support mechanisms for renewables, and very competitive pipeline gas from Russia, Norway, and Algeria (notwithstanding declining domestic production from the Netherlands, for example). It is not unlikely that, even if large amounts of U.S. LNG make it to the European market, traditional suppliers would start a price war rather than give up market share.²⁷ There is some empirical evidence that U.S. LNG could be very competitive in the more liquid parts of the European market, in particular the UK and Netherlands.

Fourth, given all these uncertainties, possible constraints, and the fact that a significant amount of projects are permeating the market in the coming years, it may be increasingly difficult to finance additional projects going forward.

For all proposed LNG projects worldwide, timing is crucial. According to M.C. Moore et al., of the University of Calgary, "delays beyond 2024 risk complete competitive loss of market entry for Canadian companies. Already British Columbia is behind schedule on the government's goal of having at least one terminal in operation by 2015."²⁸ Moore et al. argue that if Canadian facilities lag behind the projected entry of U.S. LNG facilities, they are at considerable risk for losing out on market share competitiveness by 2024 because of their relatively high delivered-product costs. Thus, it is still highly uncertain what amount of North American LNG will actually make it to the market. We observe that at this point in time, the number of firm export projects in the United States can be counted on one hand, while in Canada there are currently no projects under construction. We also note that even full regulatory approval from FERC and DOE does not guarantee that a project will eventually be built. In addition to regulatory approval, a project requires financing, and at current price levels with more LNG (particularly from Australia and the U.S.) coming on stream, we believe that it is increasingly unlikely that new projects other than fully licensed and financed ones will make it to the market before the early 2020s. Even for the five U.S. projects that have received all green lights over the course of 2014, it is important to keep in mind that

²⁴ Ibid., 23.

²⁵ Ibid., 33.

²⁶ Bob Lamont, "Falling Oil Prices Set to Hit Future LNG Price," *The Observer*, November 4, 2014, <http://m.gladstoneobserver.com.au/news/cheap-oil-to-hit-lng-price/2441170/>.

²⁷ Tim Boersma et al., "Business as Usual: European Gas Market Functioning in Times of Turmoil and Increasing Import Dependence," The Brookings Institution, October 2014, 22, http://www.brookings.edu/~media/Research/Files/Papers/2014/10/european-gas-market-import-dependence/business_as_usual_final_3.pdf?la=en.

²⁸ M.C. Moore et al., "Risky Business: The Issue of Timing, Entry and Performance in the Asia-Pacific LNG Market," *The School of Public Policy SPP Research Papers* 7, no. 18, July 2014, <http://policyschool.ucalgary.ca/sites/default/files/research/moore-lng-onl.pdf>.

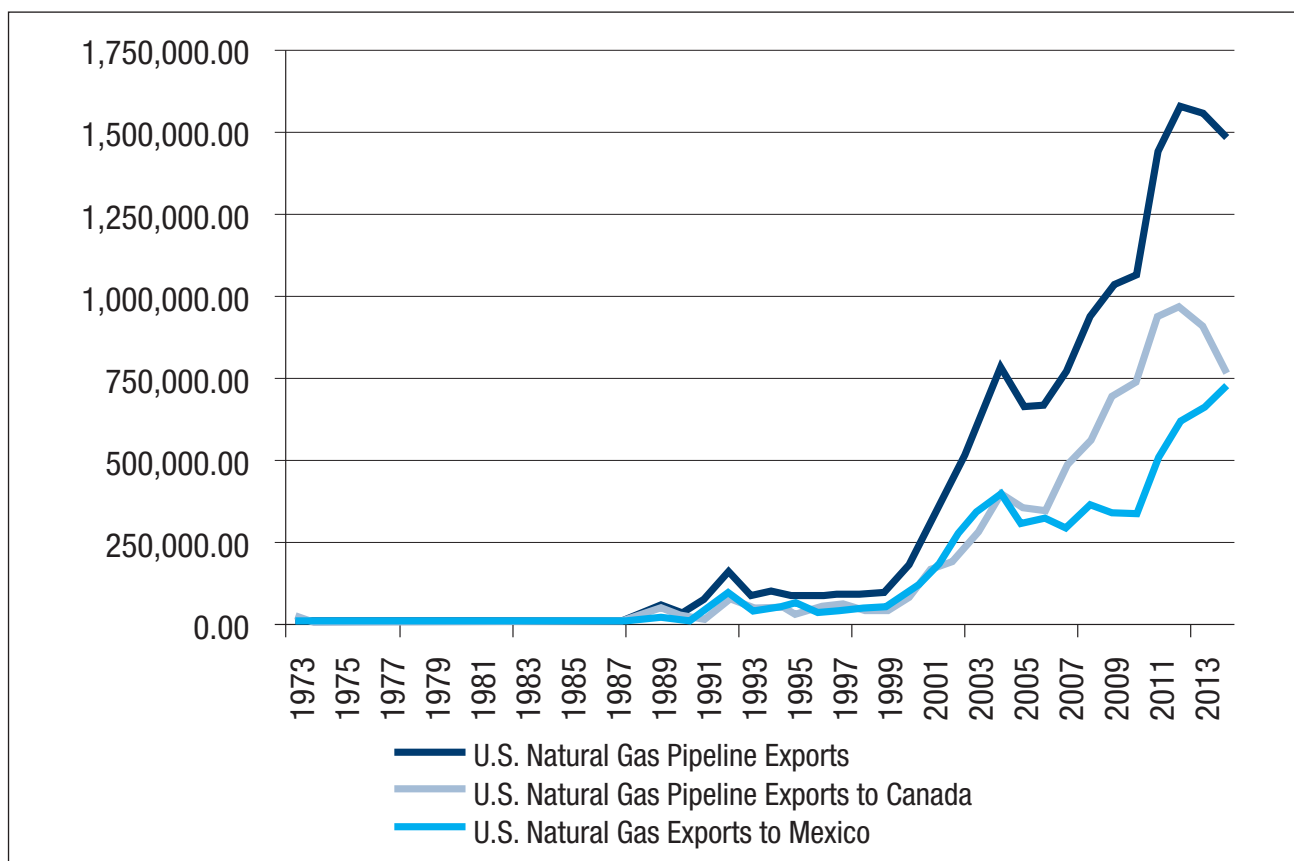
with an estimated brownfield construction time of four years, the earliest achievable start dates will be in late 2018/early 2019,²⁹ other than the initial four trains (2.2 Bcf/d) of the Sabine Pass LNG export project, which are nearing completion and expected to enter service beginning November 2015. We believe that the trend of increased regional pipeline gas exports will continue however, resulting in particular in vastly increased pipeline exports from the United States to Mexico (**Figure 2**), and a further erosion of Canadian-U.S. gas trade. This leaves an open question where Canadian producers can market their gas going forward.

Competition for U.S. LNG: The cases of Australia and East Africa

Australia

Australia has moved fast to break into the LNG market. With three major facilities already in operation and seven more prepared to go online in the next couple of years, Australia is poised to exceed Qatar as the world's largest LNG exporter in terms of export volumes. However, the Australian projects face significant cost increases, amongst others because production costs turned out higher than anticipated,

FIGURE 2. U.S. NATURAL GAS EXPORTS AND RE-EXPORTS BY COUNTRY



Source: U.S. Energy Information Administration

²⁹ Ibid.; International Gas Union, *World LNG Report - 2014 Edition*, 23.

and labor costs rose significantly. Because of that, combined with the fact that Australian LNG prices have been linked to oil, it remains to be seen how competitive Australian LNG will be. Regardless of their competitiveness, with huge sunk costs, the Australian projects are still expected to compete in the global market space.

Australia has approximately 43 Tcf of proven natural gas reserves with an additional 437 Tcf of technically recoverable shale gas reserves.³⁰ Much of the domestic need for natural gas was previously provided by Eastern Australia, but recently there has been a shift and the eastern market has begun exporting LNG. This increase in exports has had an upward effect on domestic prices. As a result, populist voices have emerged, calling to keep natural gas in the country in order to keep domestic prices low. However, the Australian government does not support this policy, arguing that reserving natural gas for domestic use will inhibit innovation, limit diversity of supply, and discourage new investment opportunities.³¹ Furthermore, the domestic Australian natural gas market is small, with coal currently dominating the electricity sector at about 64 percent of generation capacity.³² In addition, foreign investment in the development of the Australian natural gas export market has been beneficial to the Australian economy. The new LNG export facility in Queensland alone has provided the country with 30,000 construction jobs and 12,000 permanent positions through at least 2020.³³ The Queensland

Curtis LNG plant is the world's first large scale plant to convert coal-bed methane to LNG. In January 2015, it sent its first tanker carrying LNG to Singapore, Chile, China, and Japan.

Notwithstanding the economic benefits, the Australian projects have generated public concern. A shortage of skilled labor has resulted in delays and cost increases. The projects require skilled labor and Australia's labor pool is limited. However, labor unions in Australia and governmental restrictions over temporary work visas have made it difficult to bring in foreign workers. The labor unions in Australia are powerful and have been able to interrupt the construction of a project under the "right-of-entry" provision.³⁴ Additionally, labor unions have negotiated for higher wages, on top of already high salaries due to a strong Australian dollar. That strong currency also contributed to skyrocketing prices for construction materials, such as steel, in the early stages of the development of some of these projects. All of these issues contributed to delays in expected completion times as well as significant cost overruns. For example, the Gorgon project, with a capacity of 15.6 mtpa, has been delayed from an original completion date of 2014 to late 2015, while its costs have increased by 40 percent.³⁵

Australian LNG projects target Asian markets. They have a major advantage vis-à-vis North American exports in terms of proximity, as transportation costs are lower. Conversely, Australian projects have

³⁰ "Australia Overview," U.S. Energy Information Administration, last modified August 28, 2014, <http://www.eia.gov/beta/international/analysis.cfm?iso=AUS>.

³¹ Australian Government Department of Industry and Science, *2015 Energy White Paper*, (Canberra, Australia Capital Territory: Canberra ACT Department of Industry and Science, April 2015), <http://ewp.industry.gov.au/sites/test.ewp.industry.gov.au/files/EnergyWhitePaper.pdf>.

³² Ibid.

³³ Ibid.

³⁴ David Ledesma et al., "The Future of Australian LNG Exports: Will Domestic Challenges Limit the Development of Future LNG Export Capacity?" Oxford Institute for Energy Studies, Oxford University, September 2014, <http://www.oxfordenergy.org/wpcms/wp-content/uploads/2014/09/NG-90.pdf>.

³⁵ Ledesma et al., "The Future of Australian LNG Exports: Will Domestic Challenges Limit the Development of Future LNG Export Capacity?"

negotiated contracts based on the price of oil, a formula that may lose its competitive edge in comparison to U.S. projects if oil prices start to rise again. In addition, low Henry Hub prices have sparked a debate amongst Asian buyers whether oil-indexation should still be the preferred pricing method for LNG. There have also been discussions about the development of an Asian benchmark, a stance that is actively supported by the U.S. Department of State. The drop in oil prices has eroded some of the urgent needs of Asian buyers to address the oil-indexation of LNG cargoes, though we do not expect that desire for changes in pricing formulas to disappear. At the same time, it is too early to claim that non-oil based contracting practices marks a widespread disruption of the current system.³⁶

Australian LNG faces uncertainties regarding Asian demand. Japan is currently determining how many nuclear power plants it can bring back online since the shutdown of its nuclear fleet after the disaster in Fukushima. In 2013, 80 percent of Australian LNG exports went to Japan, and in 2012 Australia was the largest source of LNG for Japan.³⁷ Next to the more mature markets in Japan and South Korea, most growth in LNG demand is expected in China and India. However, growth in China in 2014 was weaker than anticipated due to the overall economic slowdown.³⁸

Nevertheless, Australia is still on schedule to take-over Qatar to become the world's primary LNG supplier before 2020. One major contributing factor has been that Australia secured contracts before

the U.S. shale gas revolution took off in full. Australia's potential for exports is enormous: "LNG exports rose in 2013 to 22.3 mtpa (30.5 Bcm), up by 9% from 2012 and by 2018 the proportion of Australian produced gas exported for LNG is projected to rise to 81%."³⁹ However, new investments have become uncertain, with other projects coming on stream and global demand in the nearby future possibly being weaker than expected.

East Africa

Over the past decade, both Tanzania and Mozambique have made significant offshore natural gas discoveries. With reports indicating discovered gas at over 140 Tcf in Mozambique and another 46 Tcf in Tanzania, East Africa can become a major competitor in the world LNG market. Although these two countries can produce LNG at relatively competitive rates due to largely conventional deposits and East Africa's close proximity to Asian markets, both Tanzania and Mozambique have substantial barriers to overcome concerning domestic regulations and political stability as well as the lack of available infrastructure to get this natural gas to market.

Both Tanzania and Mozambique must develop infrastructure in order to secure financial investment. The governments of Tanzania and Mozambique have worked with LNG project developers to design a "unitization initiative" in order to cut costs by sharing LNG production facilities while also effectively curbing construction time.⁴⁰ The infrastructure issue becomes even more compounded with the remote

³⁶ Ibid.; International Gas Union, *World LNG Report - 2014 Edition*, 14.

³⁷ "Australia Overview," U.S. Energy Information Administration.

³⁸ BG Group, "Global LNG Market Outlook 2014-15," BG Group, <http://www.bg-group.com/480/about-us/lng/global-lng-market-overview-2013-14/>.

³⁹ Ledesma et al., "The Future of Australian LNG Exports: Will Domestic Challenges Limit the Development of Future LNG Export Capacity?"

⁴⁰ International Energy Agency, *The Asian Quest for LNG in a Globalising Market*, by Anne-Sophie Corbeau et al. Paris: OECD/IEA, 2014, <http://www.iea.org/publications/freepublications/publication/PartnerCountrySeriesTheAsianQuestforLNGinaGlobalisingMarket.pdf>.

location of many of these LNG facilities. In Tanzania, LNG project completion is currently estimated anywhere from 2021 to 2023 with expected international investments of \$20 to 30 billion. While Mozambique LNG is officially still estimated to come to the market by around 2018 to 2019, there is a growing consensus that delays could move the completion date back to the mid-2020s. Companies working in the area, such as Eni and BG, have expressed their concerns over the infrastructure challenge being resolved in time to meet the 2018 target.⁴¹

Additionally, both countries are struggling to attract an adequate, skilled labor force to develop this infrastructure, with the local median age hovering around 17 years. Mozambique has attempted to quell this issue by instituting the Decree Law of December 2014, which outlines specific qualifications for bringing in skilled foreign workers. This decree, among other things, eases restrictions on hiring foreign workers, yet stresses the need to give job priority first to qualified Mozambicans. Additionally, the decree suggests that foreign workers should not be hired for unskilled jobs or those that are not technically complex as these should be reserved for the local population.

Tanzania and Mozambique have also considered using these natural gas resources to meet their domestic needs. The Tanzanian government has made it clear that it will prioritize the domestic market over exports. According to the Natural Gas Policy of Tanzania 2013, "Tanzania aims to have a reasonable share of the resource for domestic applications as a necessary measure to ensure diversification of the gas economy before [development of an] export

market."⁴² While the Tanzanian domestic market for natural gas is relatively small in comparison to its reserves, this policy could pose a significant barrier to investment. In Mozambique, the new Petroleum Law introduced by Parliament established a 25 percent domestic supply obligation.⁴³ The national market of Mozambique will not be able to absorb this amount in the long term; therefore, an open question is whether to allow South Africa to be part of this "national market."

East Africa faces the stigma of historic political instability, which could influence both future investments as well as physically impact production. While Tanzania has been a peaceful nation for over 50 years, Mozambique ended a nearly 20-year civil war in 1992 with the signing of a peace agreement. Despite the formal peace, there have been new periods of unrest. Starting in October 2012 and continuing throughout 2013, new skirmishes warranted a second peace deal, which has been in place since September 2014. Still, there continues to be concerns over the ability of the government to maintain political stability and protect against uprisings that could impact future investment in Mozambique.

Despite this uncertainty, at this point Mozambique is comparatively better positioned to export LNG than Tanzania. Mozambique has developed a much more specific regulatory framework and does not have any qualms with exporting the majority of its natural gas. The government recognizes the need for strong regulation and control over how energy resources are managed within the country in order to guarantee domestic revenues. Responsible planning and the reorganization of tax and regulatory poli-

⁴¹ International Energy Agency, *Medium-Term Gas Market Report: Market Analysis and Forecasts to 2019*, Paris: OECD/IEA, 2014.

⁴² The United Republic of Tanzania, *The Natural Gas Policy of Tanzania - 2013*, Dar es Salaam: October 2013, 14, http://www.tanzania.go.tz/egov_uploads/documents/Natural_Gas_Policy_-_Approved_sw.pdf.

⁴³ William Felimao, "Mozambique Passes Petroleum Law and Tax Break for Eni, Anadarko," *Bloomberg Business*, August 15, 2014, <http://www.bloomberg.com/news/articles/2014-08-15/mozambique-passes-petroleum-law-and-tax-break-for-eni-anadarko>.

cies are necessary in order for Mozambique's natural gas resources to be developed. The government recognizes that Mozambique has the ability to come out of poverty through the development of its energy resources. Standard Bank estimates that LNG could add 15,000 direct jobs and \$39 billion in gross domestic product per annum to the Mozambique economy by 2035.⁴⁴ The government of Mozambique has issued documentation considering issues such as transparency, regulatory clarity, revenue usage, infrastructure, education, and environmental protection to be priorities when determining the future development of their local natural gas resources.⁴⁵ While these are indeed noble intentions, there is still much work to be done in order to overcome rampant corruption, such as rent seeking, which could undermine development.⁴⁶

Even amidst these challenges, there still remains significant interest from Asian investors in developing this LNG. Together both Tanzania and Mozambique make East Africa an attractive investment opportunity. Their location makes their export potential to India and South Asia viable. Companies that operate in Mozambique, such as Eni and Anadarko, plan to have LNG projects online around 2018 with an estimated capacity of 27.2 bcm/year.⁴⁷ Even though completion of these projects before the end of the decade may be optimistic, if these plans are implemented and successful, in due time they could result in making Mozambique and Tanzania significant LNG exporters.

Final observations

From this brief overview, we reach the following conclusions:

Though the U.S. regulatory processes for LNG exports to countries with which the United States does not have a free trade agreement are convoluted, lengthy, expensive, and could be further streamlined, there is no outright ban to sell natural gas to any country. To date, no project has been rejected by either DOE or FERC. Thus, it is essentially up to the market to figure out how much room there is for exports of natural gas from the U.S.

We believe that the U.S. LNG projects that are currently under construction, totaling close to 10 Bcf/d in capacity, will make it to the market by 2020, but additional projects are at this point increasingly uncertain. As noted, factors that are important to consider are alternative suppliers of LNG about to enter the market, as well as competition from existing suppliers, such as Qatar, and pipeline supplies from Russia, Norway, and Algeria, and perhaps by the mid-2020s, Iran. Demand in Asia will be affected by the success or failure of additional intercontinental pipeline projects. Russia continues to expand to new markets in Asia, particularly in China, the Koreas, and Japan. Additionally, Central Asian countries continue to add new production and pipelines to the Asian power and industrial markets. Demand will also be affected by the likelihood of at least some

⁴⁴ Standard Bank and Conningarth Economists, *Mozambique LNG: Macroeconomic Study*, (Johannesburg, South Africa: Standard Bank, 2014), <http://www.mzlng.com/content/documents/MZLNG/LNG/Development/2014-MozambiqueLNGReport-ENG.pdf>.

⁴⁵ ICF International, *The Future of Natural Gas in Mozambique: Towards a Gas Master Plan* (Washington, DC: Public-Private Infrastructure Advisory Facility, December 20, 2012): ES-17, 18, <http://www.ppiaf.org/sites/ppiaf.org/files/publication/Mozambique-Gas-Master-Plan-executive-summary.pdf>.

⁴⁶ Anne Frühauf, "Mozambique's LNG Revolution: A Political Risk Outlook for the Rovuma LNG Ventures," The Oxford Institute for Energy Studies, April 2014, <http://www.oxfordenergy.org/wpcms/wp-content/uploads/2014/04/NG-86.pdf>.

⁴⁷ International Energy Agency, *Medium-Term Gas Market Report: Market Analysis and Forecasts to 2019*.

countries tapping into their own unconventional gas reserves in the coming years. If a country like China is successful in this endeavor, this will likely have a downward effect on LNG demand. Prices would also be affected. If, for example, a country like Argentina or Algeria is successful with new quantities of gas beyond their domestic requirements, then more supplies will reach at least regional markets putting a downward pressure on prices. Furthermore, the degree to which Japan (and to a lesser extent, South Korea) utilizes its nuclear capacity, can have a dramatic impact on LNG demand and the availability of supplies in the next couple of years. Finally, it remains to be seen whether there will be a global agreement to curb carbon emissions, as many energy forecasts seem to assume, and if so, what kind of agreement emerges, e.g., carbon pricing and GHG restrictions tend to favor natural gas and LNG, although outright requirements for or subsidies to renewables may have the opposite effect. Absent such an agreement, coal remains very competitive against LNG, especially in Asia's burgeoning electricity market. And then there are uncertainties in the LNG market itself, most prominently to what extent arbitrage between the different pricing regions in the market remains attractive, and whether promising technological advances like floating LNG facilities, small scale LNG, and usage of LNG in marine and transportation sectors become more widely dispersed.

Owing to strong environmental opposition by First Nations groups, leading local and international environmental organizations, and fishing interests, less rapid unconventional gas extraction, and less developed infrastructure, it is unlikely that Canada will have a LNG terminal up and running before the end of the decade. Canadian projects are opposed on a number of grounds (siting, impact on fisheries, adding to CO₂ emissions, pipelines serving the projects crossing wilderness areas in British Columbia),

and in the current market constellation we believe it will be increasingly difficult to finance new projects, because demand in the coming years can likely be met by existing capacity in combination with those plants that are currently under construction.

In terms of foreign competition, Australia with early market entrance will be paving the way for the future shape of LNG exports. Despite budgetary and project setbacks, Australia's LNG exports are coming online before most of the North American projects. In the coming years we expect to see fierce competition between different LNG suppliers, as supplies outgrow demand, turning the LNG market into a buyers' market. In addition, in areas such as electricity generation, LNG competes with pipeline gas and other fuel sources. As described, there are many different factors that will determine the amount of the future growth of LNG demand, and we would be cautious to take the unprecedented growth figures that we have seen until 2011 for granted.

The jury is out on whether or not Tanzania and in particular Mozambique can become significant producers of natural gas, though there is enormous potential. With many investors interested in developing this region, the lack of infrastructure, rent-seeking, and the ability to complete construction are among the greatest risks to East African LNG market development in the short term. It is worth noting that in the current market environment, and keeping in mind the local challenges in East Africa, constructing greenfields may be increasingly challenging. At the same time, it has been done before, recently, for instance, in Papua New Guinea. LNG coming out of East Africa in due time may well have the ability to compete cost-effectively against North American LNG exports.

The U.S. projects that are currently under construction are unique in their price setting. Even though in

the current modest oil price environment the immediate imperative for a more widespread adoption of this pricing formula may have faded, we believe that in the longer run it is likely that more gas producers will abandon the traditional model of oil-indexation. In northwestern Europe in 2008 and 2009 we saw a shift away from oil-indexation, incentivized by oversupply, and the supply glut that is anticipated in the coming years may well have similar effects. For major buyers of natural gas it is important to keep in mind though that spot-price indexation does not equal guaranteed lower prices, and more volatility is certainly one possible outcome.

In sum, the United States is poised to become a major global supplier of LNG, but its operators will face significant competition from a variety of suppliers, in terms of alternative LNG, pipeline gas, domestic

production, and alternative energy sources. A number of Australian and U.S. projects are ahead of the curve and will come to the market in the coming years. In combination with slowing demand for LNG these developments will lead to a situation of oversupply, which is expected to last at least until 2017. Therefore, going forward, despite the presence of abundant resources worldwide, we believe it will be increasingly difficult to finance new LNG projects, due to high upfront costs in combination with a substantial number of uncertainties which influence supply and demand. That does not prohibit some of the aforementioned projects in for instance Canada or Mozambique to come to the market, as in due time surely we expect a new investment cycle that results in new liquefaction and regasification capacity coming on-stream.

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Dr. Tim Boersma is a fellow and acting director in the Energy Security and Climate Initiative, part of the Foreign Policy Program at Brookings. His research focuses on energy policy coordination, energy security, gas infrastructure and regulation, and unconventional natural gas extraction.

From 2011 to 2012, he was a Transatlantic Academy fellow in Washington, D.C. Before starting his career in research, Tim spent five years in the private sector, working as a corporate counsel to the electricity production sector in the Netherlands. In November 2014 Tim published a Routledge monograph with Philip Andrews-Speed, Raimund Bleischwitz, Corey Johnson, Geoffrey Kemp, and Stacy D. VanDeveer called “Want, Waste, or War? The Global Resource Nexus and the Struggle for Land, Energy, Food, Water, and Minerals.” In addition, his manuscript entitled “Energy Security and Natural Gas Markets in Europe: Lessons from the EU and the United States,” is scheduled to be published in the series Routledge Studies in Energy Policy in September 2015. Boersma holds a Ph.D. in international relations from the University of Groningen.

Charles Ebinger

Dr. Charles K. Ebinger has nearly forty years’ experience dealing with international and domestic natural gas issues. In 1977, Dr. Ebinger conducted a pioneering study for the American Gas Association (AGA) on the prospects for LNG imports into the United States. In 1983, he conducted another pioneering study for AGA examining the prospects

for Natural Gas Vehicles in the U.S. market. During the early to mid-1980s Dr. Ebinger, as Director of the Georgetown University energy program at CSIS, was deeply involved in the policy debate on the pros/cons of Europe becoming more dependent on exports of natural gas from the Soviet Union for the NATO alliance, an issue he has continued to be involved on to this day. Dr. Ebinger has been involved in numerous studies focused on natural gas issues for the World Bank, the Asian Development Bank and USAID. Dr. Ebinger has served as a member of the Board of Directors for the Kokomo Gas and Fuel Company, an Indiana based natural gas distribution utility and North Coast Energy, an oil and gas production company.

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Heather L. Greenley is a senior research assistant with the Energy Security and Climate Initiative. While at Brookings, she has written pieces on the U.S. crude oil export ban, global coal markets, and Arctic development. Her research on international policy issues includes global electricity markets, cybersecurity, and various aspects of energy security with regional focuses in the Arctic and China. She has a M.S. in Global Affairs from New York University where she served as president of the Energy Policy International Club and was awarded the 2014 AFCEA Intelligence Graduate Scholarship for her work on cybersecurity and the North American electricity grid. She has a B.A. in East Asian Language & Literature (Mandarin Chinese) from the University of Florida.

Exhibit 7

FROM: [HTTP://WWW.EENEWS.NET/STORIES/1060017413](http://www.eenews.net/stories/1060017413)

GAS EXPORTS:

For U.S. LNG, is the window half open or half closed?

Jenny Mandel, E&E reporter

EnergyWire: Monday, April 27, 2015

After years of work behind the scenes, the United States has four liquefied natural gas export projects under construction, several more facing final investment decisions in the coming months and the first LNG cargo slated to ship from Cheniere Energy's Sabine Pass, La., terminal before year's end.

But despite that visible progress for the industry, there is growing concern that weak oil prices, disappointing world economic growth and a global gas glut have turned the economics of U.S. exports on their head.

For at least two years, industry stakeholders have been warning that the United States faced an unprecedented "window of opportunity" to jump into the LNG export game and claim a share of the market for U.S. producers before it became saturated and new contracts dried up.

Has that window for LNG export projects finally slammed shut?

"The drop in international oil prices relative to U.S. natural gas prices has wiped out the price advantage of U.S. LNG projects, reversing the wide differentials of the past four years that led Asian buyers to demand more Henry Hub-linked contracts for their LNG portfolios," warned Moody's Investors Service in a widely quoted assessment earlier this month.

That report essentially described the doomsday scenario for would-be exporters of U.S. natural gas, cautioning that the oil price plunge had stolen away the oil and gas majors' investment budgets just as the fundamentals for LNG shifted.

"Despite the hype over the past few years about gas-linked contracts, oil-linked contracts still dominate the industry, causing LNG revenues to fall for existing suppliers," Moody's said. "Lower oil prices are causing LNG suppliers to curtail their capital budgets. This will result in the cancellation of a majority of the almost 30 proposals in the U.S., 18 in western Canada and four in eastern Canada."

Part of the issue is how gas prices have shifted in the separate basins that make up the world LNG market.

Historically, Asian LNG prices have been indexed to oil prices while those in European markets have had a far weaker connection to crude. U.S. natural gas is priced based on supply and demand on the country's extensive gas grid, which has recently yielded prices significantly below Europe and Asia.

When crude prices dropped last year, Asian LNG prices followed, cutting into the arbitrage opportunity that has fueled interest in U.S. LNG exports.

As Jim Jensen, an independent consultant who has tracked LNG for years, explained in a recent presentation for the Center for Strategic and International Studies' Gas Market Study Group, the U.S. LNG industry is threatened by low oil prices in two ways.

First, there's the cut into the "Asia premium," the margin that Asian buyers pay over what product, shipping and other costs would imply based on the prices in the United States and Europe. He calculates that based on

2013 average natural gas costs, the Asia premium amounted to \$7.88 per million British thermal units of gas -- effectively doubling Japan's LNG costs.

Jensen calculates that with the oil price plunge the premium has about disappeared. Today, he said, the cost to purchase natural gas in the United States, liquefy it and ship to Asia is about what it costs to buy the LNG in Japan -- eliminating the enticing arbitrage opportunity that has fueled U.S. LNG export interest.

But in addition to that, Jensen notes that low oil prices cut into the profitability of shale gas plays where the co-production of natural gas liquids is an important part of the financial equation, because the prices for such liquids are tied to crude. Since low domestic natural gas prices have generally pushed U.S. drillers toward these "wet" gas plays for the supplemental income, much of U.S. drilling is at risk.

"If the Saudis intend to send a message that they are no longer willing to support a price umbrella for costly competitive oil development, they have also allowed the rain to fall on the prospects for many current LNG project proposals," Jensen concluded. "Even if today's price levels are only temporary, they make a strong statement of the price risk for much of the LNG capacity being considered for Asian markets."

The Moody's analysts see the commodity price plunge as dividing the LNG industry in two.

"In new supply areas such as Australia and the U.S., the winners are the early movers that already have their liquefaction projects under construction, have ready access to developed sources of natural gas supply and are assured a new source of cash flow longer term," they wrote.

"On the other hand, many sponsors, including those in the U.S., Canada and Mozambique that have missed that window of opportunity as oil prices have declined, will face a harder time inking the final contracts, most likely resulting in a delay or a cancellation of their projects."

Not an open-and-shut case

Many LNG industry stakeholders dispute Moody's bleak assessment, though.

Last week, Bob Franklin, Exxon Mobil Corp.'s president of gas and power marketing, gave a talk at the Johns Hopkins School of International Studies in which he said Washington, D.C., needs to get on board right away with regulatory reforms to ease the path for LNG projects but that the prospects remain good for some proposals to proceed.

Franklin took aim at an export review process conducted by the Department of Energy for businesses hoping to sell LNG to countries that lack free trade agreements with the United States, saying the drawn-out and unpredictable process at DOE threatens to stifle U.S. participation in the global industry, resulting in lost jobs and missed economic opportunities.

Exxon Mobil is partnering with Qatar Petroleum International on a proposal to add export capacity to the existing Golden Pass LNG import terminal, located down the road from Cheniere's Sabine Pass facility on the Louisiana-Texas border.

"The government's slow-walk policy [on non-free trade export permits] amounts to a de facto ban on LNG exports," Franklin told listeners. "Most applications, including ours, are languishing in approval purgatory" (*EnergyWire*, March 25, 2014).

As evidence that DOE should move quickly to approve all pending applications, Franklin pointed to a slew of studies by federal agencies, think tanks and corporate interests that concluded there would be limited or no harm from LNG exports, and significant benefits from liberalizing trade and increasing the country's geopolitical influence.

Even better than administrative action alone, he said, would be a legislative move to require fast LNG export decisions. The House passed such a measure in January, and Senate lawmakers have considered a similar measure that could advance within the next few months (*EnergyWire*, Jan. 29).

Franklin acknowledged that conditions are tough right now for new projects but said he does not see that as a deal-breaker and that, with the right regulatory change, the industry could continue to grow. "I would expect more projects to move forward," he said. "What I wouldn't be prepared to say is exactly which ones and how many."

Another stakeholder who sees growing room for new projects is David Montgomery, a former vice president with NERA Economic Consulting who has led several natural gas export analysis projects, including one under contract for the Energy Department that has helped to steer national policy on the issue.

In an interview, Montgomery said the "window of opportunity" concept stems from two ideas, one meaningful and one illusory.

The deceptive part of that window is the vision of a vast arbitrage opportunity between sky-high Asian prices and dirt-low U.S. gas rates, Montgomery said. The reality is that full-blown economic models like the one NERA relies on show that price gap quickly shrinking away as new supplies enter the market -- as has taken place over the past year.

"It doesn't really change the fundamental amount of LNG trade that was going to happen" to see that dramatic price difference disappear, he said, "but it dampens the enthusiasm."

But the other element of a "window" of time for the industry that is real, Montgomery said, is the significant first mover advantage available to the first few companies with product to sell.

Due to the extraordinary capital expense of a liquefaction plant and the financial incentives that creates, "Whoever gets in there first is basically in a position to scare off competitors," Montgomery said. By his analysis, the projected demand for LNG imports is not currently accounted for with export facilities so that first mover advantage is still there for the taking.

But if the United States has a process that runs two or three years longer than that of competitors like Canada, Australia or Qatar, he said, that will limit developers' ability to sit at the table.

Henry Hub exposure

David Goldwyn, former State Department coordinator for international energy affairs and president of Goldwyn Global Strategies, agrees that the U.S. industry has succeeded in positioning itself well in the first wave of projects.

"Two years ago we were looking at rising demand for LNG and lots of different countries who had projects, and the argument was that if we didn't move then we'd lose the opportunity to get contracts from 2018 forward," Goldwyn said. "I think you look back and with the projects that were approved ... they were nearly all subscribed."

Now, he said, shifting conditions mean the market has entered a new phase.

"Will there be more contracts? Are there opportunities left?" he asked. A ranking of proposals from all around the world shows that greenfield projects that aim to build liquefaction from scratch are generally the most expensive, while building onto existing facilities like many U.S. developers are proposing is significantly cheaper.

Another consideration for buyers is the price and reliability of the proposed gas supply, and there Goldwyn sees a big U.S. advantage in low production costs and the seemingly endless supply of shale.

"New projects [around the world] will have to offer some exposure to Henry Hub pricing," Goldwyn said. Despite the fact that an oil linkage is currently helping Asian buyers, he said he expects that tie-in to continue to erode as sellers are pressed for better contract terms. "I think they're going to have to offer either a better formula [for oil linkage], or something akin to Henry Hub pricing."

"There's an argument to be made that there's another window of opportunity opening, and U.S.-based projects, if they're able to get online quickly, may be more competitive because of the pricing they're able to offer and ... the reliability of the gas," he said.

Better risk

Looking at LNG sales from the buyer's perspective, another consideration quickly comes into focus.

Hidehiro Muramatsu, general manager of the Washington, D.C., office of the Japan Oil, Gas and Metals National Corp. (JOGMEC), said the key interest for Japanese energy traders and utilities in purchasing U.S. LNG lies in diversifying their energy portfolios.

"Diversification means not only the price differential but also the gas supply source," Muramatsu said in a March email.

Today, 80 percent of the country's LNG supply passes through the Strait of Hormuz between Iran and Oman, largely from Qatar, the world's largest supplier. Shipping U.S. Gulf Coast cargoes to Tokyo avoids that chronically sensitive region and shifts the most restricted portion of the route to a passage through the Panama Canal, a transit that is currently in the midst of a major widening project that will allow it to accommodate modern LNG tankers.

With several contracts in place for Japanese firms to buy Gulf Coast LNG, Muramatsu said some Japanese companies are looking to expand their options still further.

"The shrinking price differential makes some LNG projects on the West Coast less attractive than before," Muramatsu said. "Some Japanese companies are, however, still looking for the possibility and opportunity to export LNG from the West Coast of the U.S. and Canada."

James Jensen, the consultant who notes the oil price risk to U.S. wet gas production plays, pointed to a different motivator for buyers pursuing U.S. contracts. A key element of the appeal, he said, is the redefining of traditional LNG contract terms that shift risk and reward from the seller to the buyer.

All of the U.S. export contracts so far, he noted, are unusual in that the pricing is tied to the origin, rather than the destination, of the sale. They also differ from traditional contracts in giving the buyer title at the point of purchase, rather than upon delivery at one particular port, so buyers can resell cargoes if they so choose.

As he sees it, just holding contracts like those give buyers more leverage in negotiating flexibility with other sellers down the line.

Jensen said 60 percent of the contracts written so far for U.S. Gulf Coast supplies have gone to portfolio buyers "whose profit depends on the ability to buy at North American commodity prices and resell at international prices; these projects are clearly at risk."

But he added, "For destination market buyers, such as Japan or Korea, the diversified U.S. contract structure is a plus in future contract negotiations, even if the pricing advantage of U.S. gas disappears."

Exhibit 8

<http://www.reuters.com/article/Ing-veresen-japan-buyers-idUSL4N0SW19Q20141107#qodoAmjRezh4ExFR.97>

Veresen talking to Japanese buyers for Jordan Cove LNG

TOKYO | BY AARON SHELDRIK

Friday, Nov 7, 2014

Nov 7 Canadian pipeline company Veresen Inc is talking to Japanese buyers for offtake from its Jordan Cove liquefied natural gas (LNG) facility in Oregon and expects to make a final investment decision for the project by the middle of next year.

The project is one of a number of planned LNG terminals being built to ship surging production from shale formations to Asia's energy hungry markets.

Veresen expects to be able to ship LNG from the U.S. West Coast to Tokyo Bay for \$11 per million British thermal units, Chief Executive Officer Don Althoff told Reuters in an interview at an LNG conference in the Japanese capital on Thursday.

Initial capacity is slated to be six million tonnes of LNG, with shipments expected to start by 2019.

That price would make the gas almost 30 percent cheaper than the average price of LNG imports to Japan in September, at \$15.54 per mmBtu. A shipment of gas from Alaska to Japan in September cost \$16.00 per mmBtu on a customs-cleared basis.

"We are focused on one country at the moment more than any others," Althoff said. "I'm not actually talking to anybody in India. I'm not actually talking to anybody in Indonesia... I'm in Japan.

"We have signed six heads of agreement ... for about three times the volume of the plant's capacity," he added. "We have been at it now with this set of buyers for about 12 months."

Heads of agreements are preliminary contracts that can be confirmed when full approvals are received and final investment decisions made on a project.

Gas for the plant will come mainly from Canada through a cross border pipeline and Althoff received export approval this year.

The company has a reciprocal import license to bring the gas to the United States and Department of Energy approval to export gas. It expects to soon receive the green light for construction from the Federal Energy Regulatory Commission, along with other permits.

Veresen may also supply the terminal with gas from the United States through its \$1.425-billion acquisition of a 50-percent stake in the Ruby pipeline, which was completed on Thursday.

The Ruby line carries as much as 1.5 billion cubic feet per day of natural gas 680 miles (1,100 km) from the Opal, Wyoming hub to the Malin hub in southern Oregon.

Veresen is building a new pipeline to connect to the Malin hub and Jordan Cove. (Reporting by Aaron Sheldrick; Editing by Clarence Fernandez)

Read more at Reuters <http://www.reuters.com/article/Ing-veresen-japan-buyers-idUSL4N0SW19Q20141107#dSpF6lgdZRWIHxHW.99>

Exhibit 9

A Reality Check For U.S. Natural Gas Ambitions

<http://oilprice.com/Energy/Natural-Gas/A-Reality-Check-For-US-Natural-Gas-Ambitions.html>

By Arthur Berman

Posted on Fri, 31 July 2015 15:48 | 4

Something unusual happened while we were focused on the global oil-price collapse—the increase in U.S. shale gas production stalled (Figure 1).

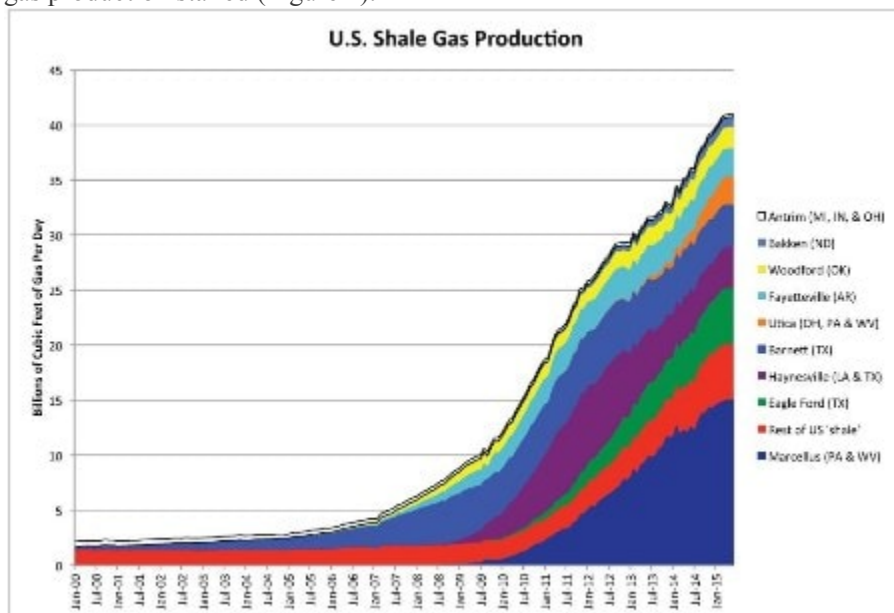


Figure 1. U.S. shale gas production. Source: EIA and Labyrinth Consulting Services, Inc.

(click image to enlarge)

Total shale gas production for June was basically flat compared with May—down 900 mcf/d or -0.1% (Table 1).

	Marcellus	Other	Eagle Ford	Haynesville	Barnett	Utica	Fayetteville	Woodford	Bakken	Antrim	Total
June-May Change mmcf/d	1.1	0.3	-1.0	-0.8	-1.2	1.5	-0.9	0.4	-0.3	0.0	-0.9
June-May Change Pct.	0.2%	0.2%	-0.6%	-0.7%	-0.9%	1.7%	-1.1%	0.6%	-1.0%	0.0%	-0.1%
Change From Max	0.0%	-0.8%	-0.7%	-47.6%	-24.9%	0.0%	-13.5%	0.0%	-1.4%	-49.1%	-0.1%

Table 1. Shale gas production change table. Source: EIA and Labyrinth Consulting Services, Inc.

(click image to enlarge)

Marcellus and Utica production increased very slightly over May, 1.1 and 1.5 mmcf/d, respectively. The Woodford was up 400 mcf/d and “other” shale increased 300 mcf/d. Production in the few plays that increased totaled 3.3 mmcf/d or one fair gas well’s daily production.

[Related: The Broken Payment Model That Costs The Oil Industry Millions](#)

The rest of the shale gas plays declined. The earliest big shale gas plays—the Barnett, Fayetteville and Haynesville—were down 25%, 14% and 48% from their respective peak production levels for a total decline of -4.8 bcf/d since January 2012.

The fact that Eagle Ford and Bakken gas production declined suggests tight oil production may finally be declining as well.

To make matters worse, total U.S. dry natural gas production declined -144 mmcf/d in June compared to May, and -1.2 bcf/d compared to April (Figure 2). Marketed gas declined -117 mmcf/d compared to May and -1 bcf/d compared to April.

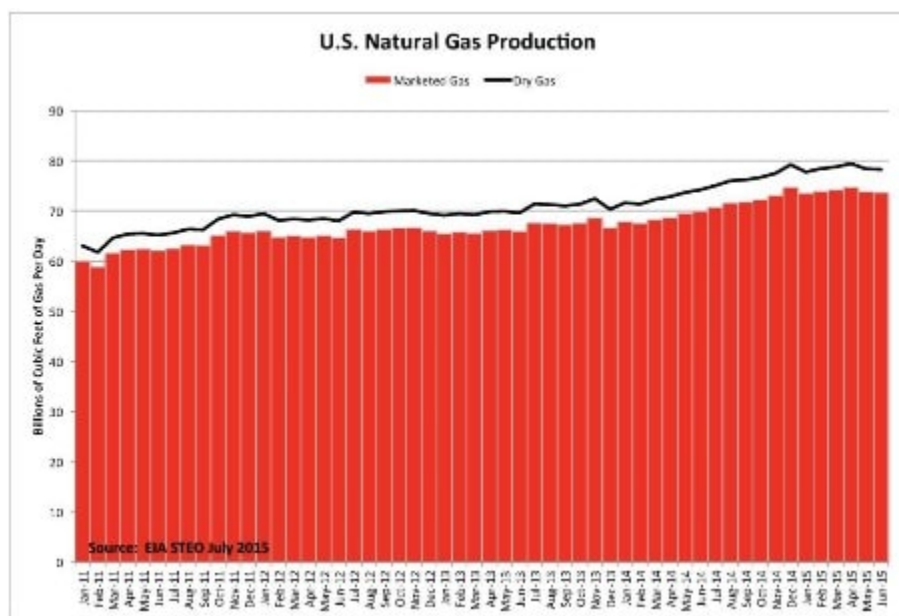


Figure 2. U.S. natural gas production. Source: EIA and Labyrinth Consulting Services, Inc.

(click image to enlarge)

Although year-over-year gas production has increased, the rate of growth has decreased systematically from 13% in December 2014 to 5% in June 2015 (Figure 3).

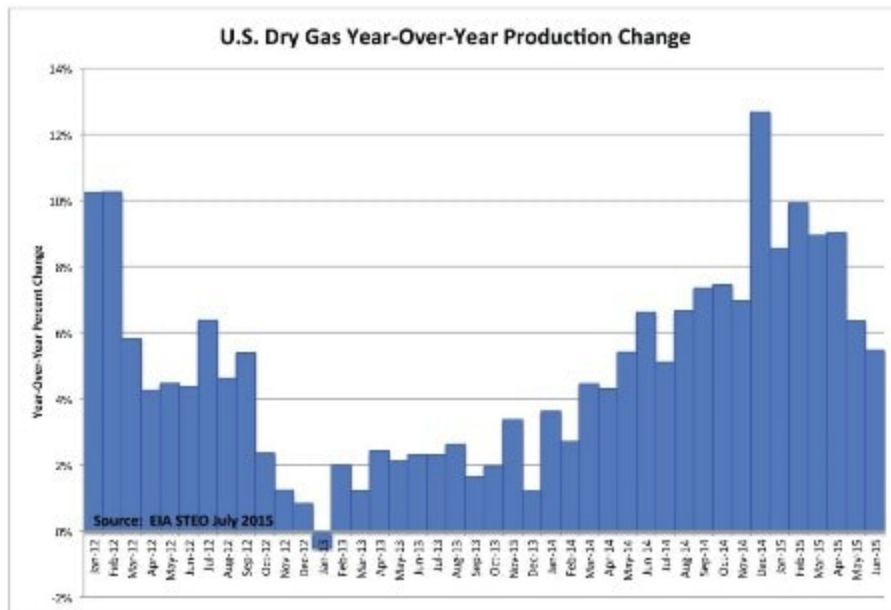
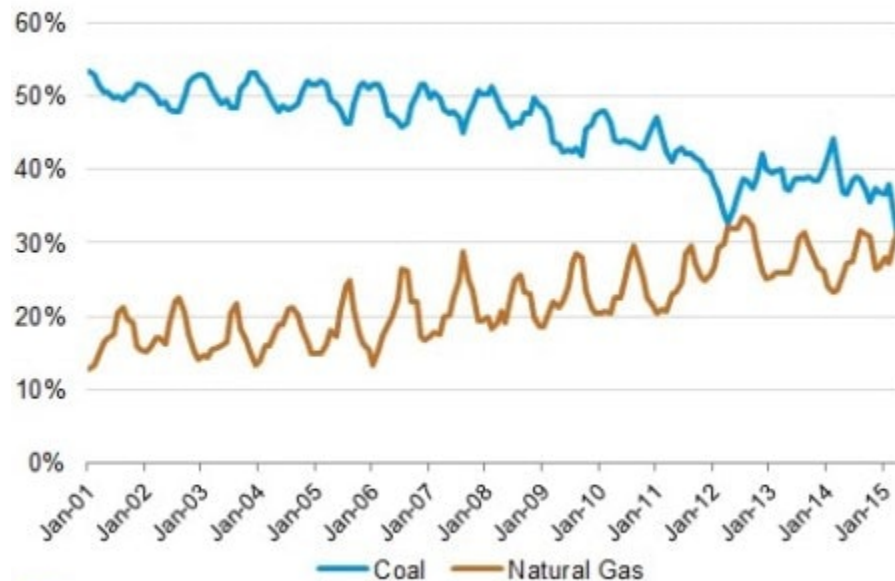


Figure 3. U.S. dry gas year-over-year production change. Source: EIA and Labyrinth Consulting Services, Inc.

(click image to enlarge)

This all comes at a time when the U.S. is using more natural gas for electric power generation. In April 2015, natural gas used to produce electricity (32% of total) exceeded coal (30% of total) for the first time (Figure 4).

Monthly shares of total power generation by fuel, 2001-15
percentage of total generation



Source: U.S. Energy Information Administration, *Electric Power Monthly*

Figure 4. Monthly shares of total power generation by fuel, 2001-2015. Source: EIA.

This is partly because of low natural gas prices but is mostly because of EPA clean air regulations that went into full effect in 2015 that are forcing retirements of older coal plants.

Related: Is France Ready To Move Away From Nuclear Energy?

For now at least, the U.S. is producing less natural gas because shale gas is stalled and conventional gas production is in terminal decline at 10% per year. The country is consuming more gas for electric power generation thanks to government regulations, and we are poised to export more gas outside the country both as LNG and as pipeline gas to Mexico.

Combined LNG and pipeline exports plus coal-plant retirements are estimated to total 7 bcf/d of gas this year (10% of forecasted lower 48 states production), 12 bcf/d in 2016 (17%) and 18 bcf/d by 2020 (25%) (Figure 5).

Brilliant.

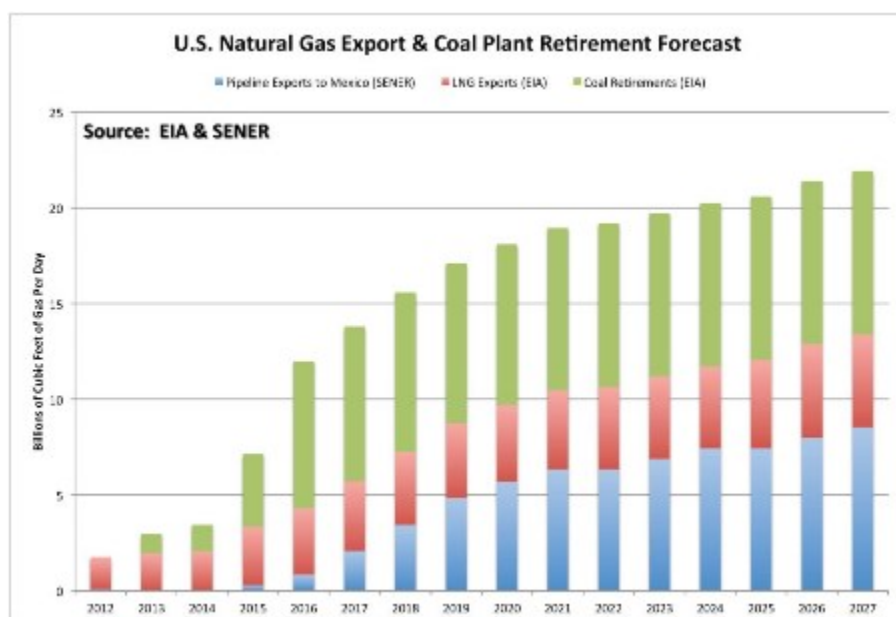


Figure 5. U.S. natural gas export and coal plant retirement forecast.

Source: EIA, SENER (Mexico Secretary of Energy) and Labyrinth Consulting Services, Inc.

(click image to enlarge)

Meanwhile, the global price of LNG is in the gutter. Landed prices in Asia are now less than \$8 per mmBtu and, in Europe, are less than \$7 per mmBtu (Figure 6).



Figure 6. World LNG estimated June 2015 landed prices. Source: FERC.

The appeal of U.S. LNG export was that prices in Asia were more than \$15 per mmBtu and more than \$11 in Europe before mid-2014. Because the LNG price is linked to crude oil price, all that changed when oil prices collapsed. Also, demand has fallen considerably and nuclear power options are being re-started for power generation in Japan.

The cheapest “tolled” export option (e.g., Cheniere’s Sabine Pass Project) breaks even at about \$9.30/mmBtu based on \$3.00 Henry Hub price plus 15% tolling (Figure 7).

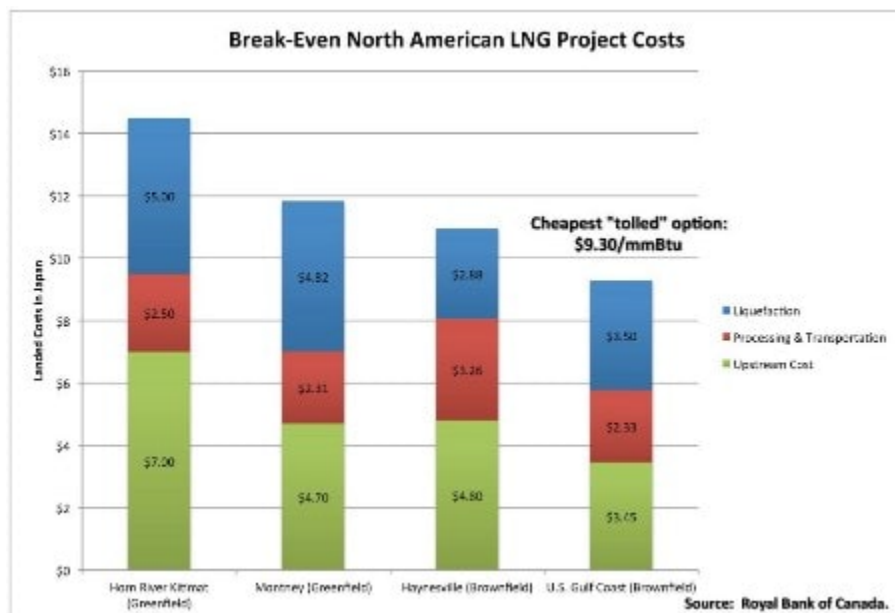


Figure 7. Break-even North American LNG project costs. Source: Royal Bank of Canada and Labyrinth Consulting Services, Inc.

(click image to enlarge)

Woops! LNG export from the U.S never made competitive economic sense to me but now, it looks dead-on-arrival.

The other big appeal of LNG exports, of course, was that we had 100 years of the stuff so it wouldn't affect our supply or the price by very much. Now supply is stalled and demand is rising. If this continues, price increases won't be far behind.

Related: Warren Buffett And Elon Musk To Spark A Lithium Boom

Despite a potential reality check in December 2014 during The Fracking Fallacy Controversy, the EIA Annual Energy Outlook 2015 forecasts ever-increasing gas supply out to at least 2040 (Figure 8).

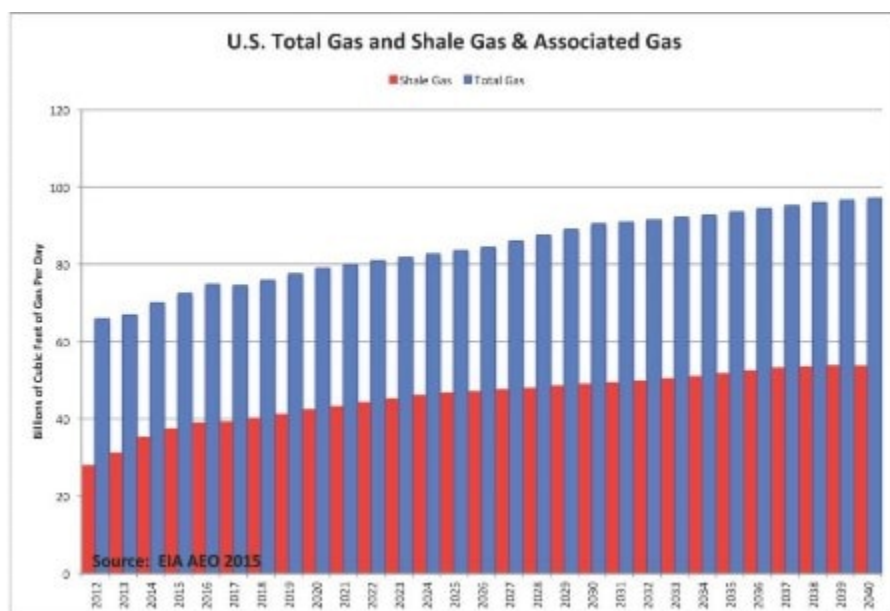


Figure 8. EIA total natural gas forecast. Source: EIA and Labyrinth Consulting Services, Inc.

(click image to enlarge)

The stalling of gas production is a temporary anomaly but it is also a red flag. In July 2015, the future for cheap and abundant natural gas for decades looks increasingly uncertain.

By Art Berman for Oilprice.com

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Exhibit 10

<http://oilprice.com/Energy/Natural-Gas/North-American-LNG-Export-Dream-Evaporating.html>

North American LNG Export Dream Evaporating

By Charles Kennedy

Posted on Wed, 08 April 2015 14:46 | 0

The rush to export natural gas from North America was nice while it lasted.

But the spot prices for liquefied natural gas (LNG) in Asia have collapsed, leaving a shrinking opportunity on the table for the plethora of export proposals. Much of that has to do with oil prices falling by half over the past year because LNG prices are linked to the price of oil in much of the world. The latest data from Platts shows that the Japan/Korea Marker (JKM) – the benchmark for LNG in northeast Asia – fell to just \$7.279 per million Btu (MMBtu) for April delivery, or nearly [60 percent lower](#) than they were at this time in 2014.

Related: How Much Longer Can OPEC Hold Out?

That has erased the enormous gulf between natural gas prices in North America and their counterpart in Asia. Without a wide price disparity, the opportunity to “arbitrage” natural gas by selling it at higher prices to Japan, Korea, and China is evaporating.

A new report from Moody’s predicts that most of the 50-plus proposed LNG export terminals in Canada and the United States will be cancelled. “The drop in international oil prices relative to US natural gas prices has wiped out the price advantage US LNG projects, reversing the wide differentials of the past four years that led Asian buyers to demand more Henry Hub-linked contracts for their LNG portfolios,” Moody’s Senior Vice President Mihoko Manabe [concluded](#) in the report.

Related: The Real Cost Of Cheap Oil

That won’t stop a global glut in liquefaction capacity as some of the projects already under construction around the world near completion. The problem is that while each individual project makes sense to complete if it is already underway, collectively they are running head on into a buzz saw.

Global liquefaction supply is set to expand by about one-third between 2014 and 2018. Much of that will take place in Australia, which accounts for more than half of the world’s LNG capacity under construction. The vast new supplies coming online at a time when prices are already subdued will kill off new LNG construction for years to come.

Related: EIA Changes Tack On Latest Oil Crisis

Fortunately for developers in North America, the vast majority of the projects on the drawing board have not received final investment decisions. That will limit the losses when they are ultimately scrapped. Cheniere Energy’s Sabine Pass is already under construction, and its Corpus Christi project may move forward as well. Other brownfield sites could also proceed, owing to their lower costs. But new greenfield projects in North America are as good as dead.

Exhibit 11

Comments on DEIS

Topic	DEIS Page	DEIS Text (if needed)	Requested Actions Including Comments/Questions
Safety	4-985 to 4-988		<p>Pipeline safety standards are significantly lower for rural areas (Class 1 and 2) compared to urban areas (Class 3 and 4). According to Table 4.13.9.1-1 (4-987), 1.1 miles of the pipeline are in Class 3 areas, 8.1 miles in Class 2 and the remainder in Class 1. The different safety standards for these three classes are significant and place individuals in rural areas at significantly greater risk. Request application of Class 3 standards, at the minimum, along the pipeline route wherever there is a residence within 1000 feet of the pipeline. It seems criminal to place rural residents at greater risk because they live in a lower density area.</p> <p>Table 4.13.9.1-2 identifies three DOT 3 locations and high consequence areas totaling 3.1 miles. Please confirm that these three locations and their beginning and ending MP will be Class 3.</p>
Rogue River HDD Contingency Plan	4-386 to 388; 4-606; 4-825		<p>Full review and public comment on Rogue River crossing alternatives in the event of an HDD failure should occur prior to the issuance of the Final EIS. It is not appropriate to wait until an HDD failure to address a construction failure of this environmental and economic significance. If both the wet open-cut crossing and overhead alternatives are found to be unacceptable during this review, The final EIS should include a statement that the proposed Rogue River crossing site will be abandoned in the event of an HDD failure. A failure should be defined as two unsuccessful attempts with the pilot hole, hole opening or pullback stages of the HDD. Alternatives in the event of an HDD failure are not discussed or referenced in the DEIS (see pages 4-386-388).</p> <p>In the event of a frac-out, the HDD Contingency Plan and Failure Procedure proposed by PCGP (Appendix 2H attached to Resource Report 2 of their application to the FERC) should be strengthened to provide additional protection to the environmentally sensitive Rogue River. The HDD Contingency Plan and Failure Procedure should be modified to provide that drilling fluid pumps will be shut off and drilling will not resume until designated Federal and State inspectors visit the site, insure that appropriate containment procedures have been implemented, and approve resumption of drilling.</p> <p>Page 4-825 included a statement that use of HDD technology would avoid direct impacts on the river and would have no direct impacts on recreational users of the river. This is only true if the HDD is successful. HDDs can, and do, fail.</p>

Topic	DEIS Page	DEIS Text (if needed)	Requested Actions Including Comments/Questions
Inadvertent Release of Drilling Mud during Rogue River HDD			Pacific Connector should be required to post a bond for costs of any clean-up or environmental damage caused by the inadvertent release of drilling mud resulting from HDD operations.
Rogue River HDD Request for Drill Entry Point on West Side of River	4-909 to 4-911	Pacific Connector has not determined whether drilling would occur from the western or eastern end of the crossing	The DEIS states that the closest existing residence to the west end of the Rogue River HDD section is about 740 feet from the probable equipment location and the closest residence to the eastern end of the Rogue River HDD section is about 340 feet from the probable equipment location. Additionally, the noise levels on the west side of the river are significantly less as shown on Table 4.12.2.4-7 and Table 4.12.2.4-8. In view of the above information, request that the drill entry point be on the west side of the river.
Rogue River HDD Site - Noise	4-910 to 4-911	.	If actual noise levels exceed the dBA standard (above), drilling operations must be shut down until compliance with the standard is achieved. Noise monitoring should be continuous during drilling and pull back operations and procedures in place for shutting down immediately if noise levels are exceeded.
Rogue River – Hydrostatic Testing Source	4-395 to 4-397 and 4-618		Page 4-396 of the DEIS identifies the Rogue River crossing as a potential hydrostatic source location with an estimated volume of 8,770,257 gallons. Specifics of the withdrawal, including analysis and impact, must be provided and made available for public comment before any permit is issued. Needed details include how the river will be accessed (i.e. from which side of the river), road construction to the river, equipment utilized and exactly how the water will be transported to the pipe (since it is a considerable distance to the drill entry and exit sites under the Rogue). Strongly recommend that the Rogue River not be used as a water source for hydrostatic testing. The public should have 30 days to comment on the Hydrostatic Test Plan once it is submitted.

Topic	DEIS Page	DEIS Text (if needed)	Requested Actions Including Comments/Questions
Access to Rogue River for a Water Source (Hydrostatic, HDD, dust abatement) – MP 122.00 & 122.6	P-16	These TEWAs are required for the Rogue River (ASP325) HDD, pipe pull-back areas, and to access the river for a water source (Hydrostatic, HDD, dust abatement) and for potential frac out response.	Appendix P of the DEIS (Pacific Connector’s Proposed Modifications to FERC’s Plan and Procedures) includes 28 pages of site-specific variances to FERC’s Wetland and Waterbody Procedures and Upland Plans. The variance at MP 122.00 & 122.6 talks about access to the river for a water source (Hydrostatic, HDD, dust abatement) and for potential frac out response. This is the only place in the DEIS where vehicle access to the Rogue River is mentioned (there is currently no road access to the river at the proposed crossing site). Road construction or equipment traffic to the edge of the Rogue River crossing site should not be allowed for any purpose. Water for dust abatement access road along the Rogue River, presumably where OFR comes within a few feet of the river at flood rock. The Rogue River as a source of water for dust is not mentioned in the main body of the DEIS. Rogue River water for hydrostatic testing is addressed in the following comment.
Extensive Grading Improvement Near Rogue River Crossing	Appendix 2H attached to Resource Reort 2		The GeoEngineers report included in Appendix 2H attached to Resource Report 2 (Rogue River HDD – Preliminary Feasibility Analysis, File 8169-021-00, Task 1200) states: “The HDD entry workspace may be accessed via a private drive off of Old Ferry Road and will likely require clearing and extensive grading improvements prior to construction”. These “extensive grading improvements”, which may have water quality environmental consequences due to their proximity to the Rogue River, should be detailed now in the EIS rather than waiting until construction begins, so they may be addressed in the 401/404 permitting process.
Construction Access Roads – Old Ferry Road	3-48 to 52	We do not recommend use of the new access road to the Rogue River HDD site.	<p>The Old Ferry Road (OFR) Committee disagrees with your recommendation. The problems associated with the use of OFR are not adequately addressed in the DEIS. The thrust of the language in the DEIS is more about justification for the use of OFR rather than addressing the issues that would be created by its use. Of central concern are three issues:</p> <ol style="list-style-type: none"> 1. The extent of OFR modifications to accommodate HDD drill rigs and associated equipment, trucks to remove drill tailings and vegetation/lumber from the ROW, trucks to haul pipe and pipe laying equipment. The DEIS (3-48) includes a statement that “the road would need to be approximately 16 feet wide while footnote b (3-50) states that “The existing road prism of OFR is estimated to be an average of approximately 12 feet in width”. There is no explanation for this disparity which does not support the statement (3-51) that “Improvement could be limited to several turn outs, curve widenings and one staging area”. We believe that the actual road modification will be much greater than stated. Where OFR runs along the Rogue River at flood

			<p>rock, road modification to 16 feet would require widening within 10 feet of the river or rock removal and possible blasting on the up-hill side of the river.</p> <ol style="list-style-type: none"> 2. The volume of traffic on OFR by duration and type of vehicle to include HDD drilling related equipment and truckloads of drill tailings, clearing vegetation/lumber from the right-of-way, truckloads of pipe (including total length of pipe propose to be transported via OFR), pipe laying equipment and vehicles transporting workers. The DEIS does not address the length of the pipeline ROW that will be supported by OFR. The distance involved will have a huge impact on OFR traffic. Are several miles of pipe being transported to the pipeline ROW via OFR and are several miles of cleared trees and possibly other vegetation being transported to Hwy 62 via OFR? These questions are not answered in the DEIS and raise the concern that the volume and type of construction related traffic on OFR will be much greater than implied. We need answers to these questions. 3. OFR road management during (and after) pipeline construction to include peak traffic hours (by type of vehicle), traffic management, gate management, watering schedule, repair of any road damage or drainage problems through the first winter/spring following completing of construction. <p>Traffic volume along OFR would be significantly reduced if pipe for mileposts 123.1 to 124.9 were brought in via the Indian Creek Firebreak Road (BLM road 34-1-23). The OFR Committee strongly recommends bringing in pipe for this section via the Indian Creek Firebreak Road. Please address this point in the FEIS (it was not addressed in the DEIS despite this request in my scoping comments).</p> <p>Pacific Connector has stated that the OFR gate will be replaced with a construction gate during the construction window. Since the gate width of 14 feet is wider than many sections of OFR, we question the need to remove the existing gate during the construction period. Please address this concern in the FEIS.</p> <p>Page 3-51 of the DEIS states that “The largest TEWA within the VRM II area has also been located in an existing log landing area; therefore, these TEWAs are expected to be consistent with the BLM’s VRM II visual quality objectives”. We are not aware of any such existing log landing area and therefor fail to see any connection with BLM’s VRM II visual quality objectives. VRM II visual quality objectives east of the Rogue River will be addressed separately under the heading of Visual Impact later in these comments.</p> <p>The most appropriate mitigation for OFR residents is to eliminate or minimize the use of OFR for this project.</p>
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Topic	DEIS Page	DEIS Text (if needed)	Requested Actions Including Comments/Questions
Unanticipated Hazardous Waste Discovery Plan – Jordan Cove Site Contamination Issues	4-303		<p>Barbara Gimlin’s public comments, entered into the FERC public record on December 16, 2014 detail various soil contamination issues at the proposed terminal. Ms. Gimlin’s precise and detailed comments about JCEP’s failure to report contaminants, address relevant safety issues, conduct additional testing and follow the Unanticipated Hazardous Waste Discovery Plan raise serious questions about the safety of the project and the adequacy of plans for identifying and correcting contamination issues in accordance with State and Federal law. The attached letter to Dick Pedersen, Director Oregon Department of Environmental Quality (DEQ) from 17 Oregon conservation organizations, includes six requested action steps in response to Ms. Gimlin’s serious allegations including independent testing for contaminants at appropriate locations with test results sent directly to DEQ. The Unanticipated Hazardous Waste Discovery Plan should be modified to require immediate contractor notification of any previously undiscovered soil contamination to both Jordan Cove’s Environmental Inspector AND TO DEQ DIRECTLY.</p>
Recommendations 14 through 26	5-29 to 5-31	Documents to be submitted prior to the end of the comment period on the DEIS	<p>All submissions filed with the Secretary per recommendations 14 through 26 should be subject to a minimum of a 30 day public comment period with public comments taken into account before issuance of the Final EIS and any approval of the project by FERC.</p> <p>Please note that the numbering of Recommendations is incorrect. There are two separate Recommendations listed for numbers 17, 18 and 19.</p>
Recommendations 48 through 52	5-36	Documents to be submitted prior to the start of construction	<p>All submissions filed with the Secretary per recommendations 48 through 52 should be subject to a minimum of a 30 day public comment period with public comments taken into account prior to the start of construction.</p>
Visual Resources on BLM Lands – KOP-P2 Trail Post Office (Near MP 123.0)	4-760 to 4-761 and 4-778 to 4-782		<p>This is essentially the view from the Crater Lake Highway (62). The simulated view of the near ridgeline from the heavily traveled Highway 62 is dramatic and will not meet the Scenic Integrity Objective (appears unaltered) or the BLM Visual Resource Management Class II definition (The nature of this class is to retain the existing character of the landscape). The DEIS acknowledges (4-782) that “the pipeline does not meet VRM Class II objectives in the short term (less than 5 years)” at this location and notes that mitigation developed in the Aesthetics Management Plan would help the area reach VRM Class II objectives in the long term (5 to 10 years). The purpose of having a VRM and Scenery Integrity Objective is to retain visual impact. The Aesthetics Management Plan must specifically address the steps that will be taken to restore the view at this location in the short term.</p>

Topic	DEIS Page	DEIS Text (if needed)	Requested Actions Including Comments/Questions
Third-Party Environmental Monitors	2-119	Pacific Connector has agreed to fund third-party environmental monitors to the extent determined necessary by FERC staff and the federal land-managing agencies during project construction.	<p>Comments filed with the FERC by Barbara Gimlin on December 16, 2014 provide compelling evidence that staff hired by Jordan Cove and Pacific Connector have a conflict of interest and may not report required environmentally sensitive information. FERC and the federal land management agencies should publicly identify the number of third-party environmental monitors hired, the areas for which they are responsible and contact information. The scope of the third-party monitors should include work performed on private property.</p> <p>What specific process is available to a property owner along the pipeline right-of-way if there are concerns that quality assurance standards, compliance with mitigation measures and other applicable regulatory requirements are not being met or followed? If the Chief Inspector and the EI work for Pacific Connector, there must be a clear and timely process for taking concerns beyond Pacific Connector representatives if the Chief Inspector or other Pacific Connector representative does not resolve the concern.</p>
Landowner Complaint Resolution Procedures			<p>Will the public have the opportunity to review the Landowner Complaint Resolution Procedures prior to the issuance of the final EIS? What types of complaints are eligible for review? Do the procedures provide for appeal to a neutral third party if the Landowner is not in agreement with a decision by Pacific Connector? If there is a neutral third party reviewer, does this individual have the authority to award damages in applicable situations if the landowner prevails.</p>
Construction Damages			<p>Pacific Connector should be required to post a bond for damages resulting from construction of the pipeline including, but not limited to, contamination of wells, erosion, drainage or failure to restore areas disturbed during construction in accordance with the ECRP.</p>
Easement Use			<p>FERC should not allow the permanent easement to be used for any purpose other than the interstate transportation of natural gas.</p>
Pipeline Alternatives	3-19		<p>Pete Samarin, a lead Oregon Department of Fish and Wildlife (ODFW) biologist for the project reports that ODFW proposed crossing the Rogue River upstream of Lost Creek Lake to avoid wild salmon habitat and potential water quality issues in the Rogue basin. I cannot find any reference to such a proposal in either the import FEIS or the export DEIS. The FERC must evaluate the feasibility of this alternative in the EIS or identify where it was evaluated in the export DEIS. What was the name of the ODFW suggested route?</p>

Jack Hampel
Coos Bay Oyster Company
PO Box 5478
Charleston, Oregon 97420

February 28, 2015

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street NE, Room 1A
Washington, DC 20426

RE: Change in contact zip code for Coos Bay Oyster Company / Jack Hampel listed in Motion to Intervene Out of Time filed under Jordan Cove Energy Project, L.P. Docket No. CP13-483-000 and Pacific Connector Gas Pipeline, L.P. Docket No. CP13-492-000.

Dear Secretary Bose:

Earlier today on February 28, 2015, I filed a Motion to Intervene Out of Time with the Federal Energy Regulatory Commission under FERC Dockets CP13-483 and CP13-492 which listed an incorrect contact zip code of 97459. Pursuant to 18 CFR § 385.2010(c)(2) please note attached updated Motion to Intervene and revise the FERC Service List to correctly show our contact zip code as 97420:

Jack Hampel
Coos Bay Oyster Company
PO Box 5478
Charleston, Oregon 97420
j.hampel@wildblue.net

Sincerely,

/s/ Jack Hampel

Jack Hampel, Coos Bay Oyster Company

**UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

IN THE MATTERS OF

Jordan Cove Energy Project, L.P.) Docket No. CP13-483-000
Pacific Connector Gas Pipeline, L.P.) Docket No. CP13-492-000

**MOTION TO INTERVENE OUT OF TIME OF COOS BAY OYSTER COMPANY AND
JACK HAMPEL, AS AN INDIVIDUAL AND OWNER**

Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C. F. R., 385.214, I, Jack Hampel, an individual and owner of Coos Bay Oyster Company, respectfully move to intervene out of time in the May 21, 2013, application of the Jordan Cove Energy Project, L.P. and the June 6, 2013, application of the Pacific Connector Gas Pipeline, L. P. in the above-captioned dockets.

I. Identity and Contact Information

I ask that all communication in regards to this motion be addressed to the following:

Jack Hampel
Coos Bay Oyster Company
PO Box 5478
Charleston, Oregon 97420
j.hampel@wildblue.net

II. Declaration of Interest

On May 21, 2013, Jordan Cove Energy Project, L.P. filed in FERC Docket No. CP13-483-000 an application under section 3 of the Natural Gas Act (NGA) and Parts 153 and 380 of the Commission's regulations, seeking authorization to site, construct and operate a natural gas liquefaction and liquefied natural gas (LNG) export facility on the bay side of the North Spit of Coos Bay in Coos County, Oregon, directly across from the Cities of North Bend, Coos Bay and the Southwest Oregon Regional Airport. The LNG Terminal would be capable of receiving natural gas via the Pacific Connector Gas Pipeline, liquefying it, storing it in its liquefied state in two cryogenic storage tanks, and loading the LNG onto ocean going vessels.

On June 6, 2013, Pacific Connector Gas Pipeline, L. P. filed an application under CP13-492-000 with FERC to construct and operate the Pacific Connector Gas Pipeline (PCGP) Project, a new 231.82-mile, 36-inch diameter interstate natural gas transmission system and related facilities. The proposed PCGP system will extend from the proposed Jordan Cove Liquefied Natural Gas (LNG) Terminal, being developed by Jordan Cove Energy Project, L.P. (JCEP), to interconnects with two interstate natural gas pipelines near Malin, Oregon. The PCGP is the proposed supply pipeline for the proposed Jordan Cove Terminal.

On December 18, 2014, I met with Representative Caddy McKeown and Michael Hinricks of the Jordan Cove Energy Project where I learned about the plans of the Pacific Connector Gas Pipeline and the close proximity of the proposed pipeline to our Silverpoint oyster beds. As we understand it, the line is proposed to run up the channel between ours (Silver point 3) and Clausen Oysters (Silver point 1) oyster beds.

Our concern is the effect that the construction of the Pacific Connector Gas Pipeline will have on our oysters along the proposed route through the Haynes Inlet on Coos Bay.

Our oysters are planted at the minus tide lines to utilize the mud flats as close to the channel as we can get. At certain minus tides, the channel may only be 100-200 feet wide. With the amount of mud and sand sediment that would be created within the close proximity of our beds, I believe we could suffer a devastating dead loss.

In the summer months, we set oyster larvae on shell and place them on pallets in bags that keep them up about a foot off the mud flats. This is done to keep them out of any silt or sediment while letting them grow through fall and winter for planting in the spring.

These larvae, when first set, are very small and very vulnerable. (Twelve million larvae equal about the size of a tennis ball).

When the oyster spat are planted in the spring (March-June), by removing them from the bags and pallets and cast directly onto the mud flats, they are approximately $\frac{1}{4}$ to $\frac{1}{2}$ inch in diameter, and if you cover them with sediment, they will die!

I am also concerned about the bay water quality in this area during the construction time. The Oregon Department of Agriculture will surely be testing this water and if they have any concerns during this period, they will shut our harvesting down.

We need continual access to these beds both day and night. We work on the tides and they change daily.

Due to the fact that the Pacific Connector Gas Pipeline's current proposed route could destroy our oyster business, I move to intervene out of time in this proceeding. No other party has been willing or is able to adequately represent our interest in this proceeding and it is for this reason I wish to be made a party to this proceeding, with all the rights attendant to such status. The decision by FERC to allow this Motion/Notice of Intervention Out of Time would be in the public interest.

Dated this 28th day of February 2015.

/s/ Jack Hampel
Jack Hampel, Coos Bay Oyster Company

CERTIFICATE OF FILING

I certify that on the 28th day of February 2015, I filed by electronic filing the original document, Motion to Intervene Out of Time electronically with:

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, DC 20426

Dated this 28th day of February 2015.

/s/ Jack Hampel
Jack Hampel, Coos Bay Oyster Company

CERTIFICATE OF SERVICE

I certify that on the 28th day of February 2015 I served electronically or by first class mail this Motion to Intervene Out of Time to each person designated on the official service list compiled by the Commission in the above-captioned proceedings.

Dated this 28th day of February 2015.

/s/ Jack Hampel
Jack Hampel, Coos Bay Oyster Company

Document Content(s)

Procedural-Motion-to-Correct-Contact-Zip-Code.PDF.....1-1

Corrected CB-Oyster-Co_Hampel_Motion-to-Intervene.PDF.....2-4

James and Archina Davenport, Coos Bay, OR.
Docket No. CP13-492-000

My name is Archina Davenport. My husband, Jim, and I live on 61954 Old Wagon Road in Coos Bay, OR, which can be seen on page 3-27 #12 in Williams Pacific Connector's filed DEIS. We are writing to FERC as individual adversely affected landowners on the proposed Pacific Connector pipeline route running through Coos County.

These comments factually demonstrate that the DEIS conclusion that the Proposed Route is environmentally preferable and that the Blue Ridge Alternative Route has no significant environmental advantage is without basis because:

- DEIS rationale that Blue Ridge Alternative Route would impact critical habitat is in error because no critical habitat exists in the vicinity of the Blue Ridge Alternative Route.
- The amount of LSOG Forest impacted by Blue Ridge Alternative Route would be an inconsequential 0.00014 of total LSOG on Coos Bay District BLM.
- Blue Ridge Alternative Route would not cross an additional northern spotted owl home range compared to the Proposed Route.
- DEIS assertion that property values would not be affected lacks analysis and is in error.
- Proposed Route would impact a contaminated site with hazardous substances.
- DEIS violates NEPA regulations and requirements in every instance when comparing impacts of Blue Ridge Alternative Route and Proposed Route.
- DEIS comparison of Blue Ridge Alternative Route and Proposed Route contains many substantive factual errors, incomplete information and omission of essential information.
- DEIS comparison of Blue Ridge Alternative Route and Proposed Route has no analysis, discussion or exposition of cataloged environmental effects.
- Proposed Route violates Pacific Connector's criteria to avoid impacts to waterbodies by locating the pipeline on ridgetops such as the Blue Ridge Alternative Route.
- Proposed Route violates Pacific Connector's criteria to avoid geologic hazards where feasible.

These comments factually demonstrate that the Blue Ridge Alternative Route is environmentally preferable and has significant environmental advantages because:

- Blue Ridge Alternative Route would be located on stable ridgetop and avoid a rapidly moving land slide crossed by the Proposed Route.
- Blue Ridge Alternative Route would cross landslides totaling 4,370 feet while the Proposed Route would cross landslides totaling 8,850 feet
- Blue Ridge Alternative Route would avoid three floodplains which the Proposed Route would cross in violation of Executive Order 11988
- Blue Ridge Alternative Route would cross only 9 waterbodies while the Proposed Route would cross 65 waterbodies.
- Blue Ridge Alternative Route would not impact any domestic water sources while the Proposed Route would impact two domestic water sources.

- Blue Ridge Alternative Route would cross 23 landowner parcels with 3 homes while the Proposed Route would cross 61 landowner parcels with 33 homes.
 - Blue Ridge Alternative Route would have no eminent domain issues while on the Proposed Route 15 landowners have expressed their intention to legally resist right-of-way acquisition by PCCP.
 - Blue Ridge Alternative Route would cross less fish bearing streams than the Proposed Route
 - Blue Ridge Alternative Route parallel to ridgetop logging roads would have significant less environmental impact than Proposed Route collocated on rugged, broken and difficult terrain of the BPA power line right-of-way.
 - Blue Ridge Alternative Route impact to Late-Successional Reserves would be an inconsequential 0.00005 of total Late-Successional Reserves on Coos Bay District BLM.
- Our personal impact from Williams Pacific Connector's proposed route;

The Pacific Connector pipeline is not needed in Oregon, and it is certainly not convenient on the route the company has filed with FERC. The project would merely benefit out-of-country investors at the expense of our land and Oregon's natural resources. As both of our families have a history in the military as fighting for our country, it is difficult to understand how a foreign country can take away our land for use in another foreign country for the profit of big corporations.

Most importantly, this pipeline should not be on or near our property, or any property on the incredibly steep and constantly shifting terrain that makes up the Old Wagon Road neighborhood. Please consider the following environmental, human, and personal property concerns:

1. Stream Disturbance

a. There is a stream that passes through our property right at the bottom of the steep ridge where Pacific Connector plans on putting the pipeline and staging area. Eventually, the pipeline even crosses this stream. The forms and maps Pacific Connector sent me give no indication of bottlenecking or related mitigation efforts to lessen the damage of the crossing. This stream also serves as the water source for our Neighbors David and Jonell McGriff.

2. Unstable ridge

a. Williams inaccurately portrays the elevation gain and loss on the filed route. The ridge where they plan on putting the pipeline and staging area is completely unsuitable for such purposes. It has never dealt with any serious excavation and is held up by a retaining wall. Any continuous trench is guaranteed to cause landslides.

3. Underground springs

a. Both the ridge and stream will also be damaged by the multitude of underground springs that would be exposed by excavation and would cause added, continuous erosion of the land.

4. Sewage system

a. The pipeline route runs directly through our sewage system.

5. Violation of mortgage contract

a. Agreeing to this pipeline directly violates our mortgage contract, which prohibits us from doing anything environmentally unsafe or that devalues our property.

Please move the section of the pipeline from MP 11.13R and MP 21.6 onto Blue Ridge where its potential damage to our community would be greatly mitigated.

James and Archina Davenport
61954 Old Wagon Rd.
Coos Bay, OR 97420

Document Content(s)

27861.TXT.....1-3

Lynn Hoot-Schofield, Renton, WA.

My name is Lynn Schofield I am an affected land owner at 1860 Hoover Hill Rd Winston Oregon at mile post 60.11 to mile post 60.26.

This project pits two multibillion dollar companies against poor landowners that live in an socio-economically depressed area and they are attempting to give pennies on the dollar for the land they want to take through Eminent Domain. This is a violation of Federal Statutes and human rights.

Our land is something our father has been worked for, worked hard on and paid for with intent to keep it long term in the family. It has not been the intent of this family to have our land taken from us by a large corporation. This is thievery and is criminal. Just because the government has a role in this does not make it less of theft or a crime. This is a bastardization of the use of Eminent Domain. It was never the intent of our forefathers to have a country that would use government power to support the use of eminent domain for the benefit of a private FOREIGN company (Veresen Energy, a Canadian Corporation) for the export of a product for use by foreigners. Eminent Domain is for the use of the Public Good. In what way is the use of Eminent Domain in the benefit of the Public in this project? There is over 300 affected landowners that will have land taken from them at well below market level and forever their land will be negatively changed. In exchange there will be less than 40 full time jobs created in Coos Bay as a result of this project. The trade off here is insignificant and in no way should be considered in the "Public Good" It is FERC's responsibility to decide this and it is a drastic mistake to allow this and a drastic infringement on the very foundation of American Ideals.

To take the value of our land and the freedom of how we use our land is thievery and criminal once again. Williams Pipeline company has been stalking us, trespassing, misrepresenting themselves and trying to rape the poor landowners of this region. There are peoples lives, health, land, incomes, peace of mind, joy, happiness, and freedom that is trying to be forcefully taken from them.

I know our land to Williams hold no value, but to our families there is no monetary value to replace our lives or our land. Now lets get down to what is truly most important to people, by allowing this project you are robbing people of their dreams of keeping their land sacred for their kids, grandkids and future generations. You are robbing them of their dreams to build, landscape, design and future plan on their own private property. You are robbing them of their dreams to be able to grow and build new creations on their land which is so valuable to witness as other generations pass and new ones are born. The land here is sacred to everyone of us in some way or in some form, whether handed down to us or purchased from a family member, a new homeowner to the area, vacation home, a working ranch or simply a dream in progress.

Every landowner has a story as to why they are where they are and where they call home. No one ever chose their home because they were excited about a pipeline coming to town let alone through their own back yard.

There are not enough long term permanent jobs created with this project that even come close to the monetary and emotional damage this pipeline will have to property owners and their neighbors... forever.

When the wells and steams dry up and the flow of potable water has shifted due to upsetting the land with this pipeline, who takes care of our water supply? Why would Williams come back to a home to repair this when they know the landowner cant afford to fight them? The future problems and damages this pipeline is bound to create are also a form of Williams taking advantage of this poor under-educated people and this socio-economically depressed area.

Keep your pipeline but at your own expense. Reroute through land far from our's and our neighbors. For safety reasons reroute it so we can use our land within the law as we choose to. Reroute it so we can be assured our water and neighbors water source is unharmed of pollution and flow. Reroute it because it is an export line and not an import line. As an American it should be that this request be adhered to along with all other requests of all natures be adhered to as well.

Do the right thing. The right thing, not the easy thing. Deny this project.

Lynn Schofield

Document Content(s)

28366.TXT.....1-2



Oregon Women's Land Trust

501(c)(3) Non-Profit Corporation Founded 1975

P.O. Box 1692, Roseburg, Oregon 97470

Phone: (541) 643-0611

OWLT@live.com

February 12, 2015

Kimberly Bose,

Please consider these comments from Oregon Women's Land Trust on the Draft Environmental Impact Study for the Pacific Connector Pipeline and Jordan Cove Liquefaction terminal, Docket Numbers CP13-492 and CP13-483. We are a non-profit 501(c)(3) organization dedicated to providing access to land and land skills for women while protecting and restoring the natural environment of the land in our care for the sake of its ecological values. We have hundreds of members and supporters spread across Oregon, the US and the world. We are an impacted landowner on the Pacific Connector Gas Pipeline's (PCGP) proposed route beginning near MP 85.7. According to PCGP, 7.8 acres of our property would be impacted, including clearcutting in our oldest forests. These forests provide nesting, roosting and foraging (NRF) habitat for the Known Owl Activity Center (KOAC P2294) near MP 86. We have cared for and kept the land free of chemical, mechanical and other disturbances for over 37 years.

1. Alternatives through OWLT

The DEIS (3-42) considers two alternatives across our property, the 2007 Route and the Proposed Route. Our scoping comments stated:

“Both routes are objectionable to us for reasons stated below. However, the northern route through our largest trees and the adjacent BLM land with the Known Owl Activity Center (KOAC) is particularly objectionable.”¹

The DEIS failed to consider our comments. The Comparison of Alternatives, Table 3.4.2.7-1 fails to even mention that the KOAC is impacted by the preferred alternative. Without this information, an informed decision cannot be made about which alternative to choose at MP 85-86 and the fate of KOAC P2294.

Our scoping comments said:

“The DEIS must consider mitigations for us and for the spotted owl if the proposal is to clearcut the NRF habitat we protect on our property.”

FERC did not acknowledge those comments in the DEIS. In the summer of 2013, PCGP made an offer to OWLT with what they claimed to be a fair real-estate market value. However, they failed to include any mitigation for destroying NRF habitat on our property. Since our non-profit status and our mission commits us to protection of our trees, we lose far more than the real estate market value of our property. The BLM is being offered mitigation for loss of wildlife habitat in the KOAC. The loss of the same type of habitat protected on our land should also be mitigated.

¹ OWLT scoping comments to FERC dated 10-12-2012.

Since both alternatives are objectionable, FERC should have developed a third alternative south of the 2007 Route that avoids OWLT property completely, allowing us to continue fulfilling our mission as a 501(c)(3) land conserving organization. Such an alternative would fully protect KOAC P2294, and would also fully protect the important forests and the wetland that the 2007 Route impacts.

The Proposed Alternative requires road access from South Myrtle Road. The DEIS claims there is an “existing” road through our neighbor’s property that will be used to access the proposed right-of-way on our property at MP 85.5. Our scoping comments informed FERC there is no existing road at this location. Instead, there is an illegal ATV trail that goes through the Silver Butte land and onto our land. No road has ever been engineered in the location that FERC claims there is an existing road. FERC failed to acknowledge our scoping comments. This error must be corrected if a Final Environmental Impact Statement is issued.

The label on this road must be changed from Existing to New. Since large, destructive road-building equipment will be needed to install an engineered road, surveys for rare plants, such as Kincaid’s lupine, are needed. By mislabeling this as an existing road, PCGP is able to avoid all the important plant and wildlife surveys. FERC should not allow this mistake to go forward.

2. Impact on The Mission and Members of OWLT

The OWLT mission statement states: “Oregon Women's Land Trust is committed to ecologically sound preservation of land, and provides access to land and land wisdom for women”. Our Articles of Incorporation commit us to “preserve land and protect it from speculation and over-development, and to foster the recognition of land as a sacred heritage.”

The Draft Environmental Impact Statement (DEIS) failed to include an analysis of our ability to continue with our mandate to preserve the land.

Our scoping comments were not addressed in the DEIS:

We are a 501(c)3 nonprofit corporation. This land was purchased in order to serve our stated purposes in perpetuity. It is for this mission that the land has been protected over more than three decades. As members of the board it is our responsibility to uphold the purpose of the Trust. We are devastated to be faced with the possible terrible consequences of this pipeline on all we have worked towards.

The pipeline right-of-way directly conflicts with this purpose, as it will cause the ecosystems we protect to be significantly harmed. Our land would be used to facilitate profiteering from fossil fuels which exacerbate detrimental climate change, and which increase methane contamination of the atmosphere, along with all the associated environmental and social problems of fracking. Such actions are in direct conflict with the stated purpose of Oregon Women’s Land Trust.

Our scoping comments stated:

We are committed “*to promote, explore, develop and maintain the spiritual, physical and cultural well-being of women by providing women access to land and encouraging self-sufficiency and means to attain it*”. In doing this, we assure privacy to those who spend time on the land, and attend our activities and functions. OWLT provides a place of safety and

sanctuary; a place of quiet refuge, a retreat, which offers hands-on experience with land skills and forest wisdom in a natural woodland setting.

Many of our events and trainings are conducted outdoors. We require the same privacy in our woods and meadows as we require indoors. In a private rural setting, having people wander through your land is like having people wander through your living room, or peer into your windows.

With Pacific Connector staff freely operating up and down the pipeline route for monitoring, inspection and brush clearing, we will lose the personal privacy and sense of security upon which we base our programs, if we lose our right to determine who comes onto our land and when.

FERC failed to address these comments in the DEIS.

An additional invasion of our peace and privacy will occur when Pacific Connector flies over the pipeline route regularly, able to observe at will, and without limit, our private retreats, programs and meetings. This is a major impact on the human environment that FERC should have addressed in the DEIS.

We do not permit use of herbicides or pesticides on our land, which Pacific Connector will use on the right-of-way. Disturbed land on the right-of-way will grow back with thick brush, including flammable noxious weeds. The DEIS failed to discuss how this brush and the fire hazard will be controlled without pesticides or frequent work-crews disrupting our lives. The long-term impacts of these dangers were not evaluated in the DEIS.

We use only organic farming methods in our garden, orchard and meadows. The DEIS failed to be clear about how construction of the pipeline, including use of heavy equipment, would impact or contaminate our air, soil, and water supply. The preferred alternative puts the pipeline on at the top of the watershed feeding our water supply.

The DEIS failed to address our concern that a pipeline right-of-way will encourage illegal use by ATV riders, who already trespass on surrounding lands. With that trespass comes danger from criminals and poachers.

The DEIS failed to address our concern about how we and other landowners can be assured that workers on the pipeline will be screened for any history of violence, including restraining orders, property damage, sexual or domestic violence, theft, etc., so that such individuals do not threaten our peace or disrupt our activities.

3. Fair compensation is not possible.

The DEIS failed to consider whether fair compensation is even possible when granting the power of eminent domain to a multi-national corporation worth billions of dollars.

In 2013 Pacific Connector told us they wanted to use 7.8 acres of the most sacred place on our land. They offered us a one-time payment of only \$2,292.48. Since they expect to get eminent

domain, they don't have to make us a truly fair offer to use our property for their profits of billions of dollars through the life of this project.

We would have to live with an ugly scar that destroys protected forest habitat and suffer invasion of privacy for pipeline inspections and maintenance, forever, in addition to other impacts described above – with only a single one-time small payment, equivalent to only about 2 weeks of the average US salary. Because of the power of eminent domain, it is unlikely we would be able to negotiate for anything close to what might be considered a fair price.

At a public meeting Pacific Connector claimed that the initial payment they paid could be invested, and the interest earned would be “like royalties”. Since the landowners do not have the billions of dollars the corporation has at hand, there is no fair playing field for negotiation.

Tree harvest: Even if we were to view our trees as a commodity, in violation of our forest protective purposes, we would be expected to oversee a contractor logging our land, clearcutting a 100 to 150-foot corridor. We would be forced to sell at whatever the current timber commodity prices are at that time. The 50' wide permanent easement in the center of the clearcut corridor could never be reforested and revert back to wildlife habitat.

We also have no way to be compensated for the loss of the astounding and magical ancient madrone trees that would be killed. Some of these trees are over 4' across, are many centuries old, and provide habitat for wildlife that depends on late-successional habitat. Because they have no “commercial” value, we would not be economically compensated, nor would the displaced wildlife be compensated for their destruction. These trees are priceless to us and to the forest community of which they are a part.



The DEIS failed to consider these impacts to the human environment from granting approval of this profoundly impactful pipeline, including the power of eminent domain for private profit, through our land and the properties of our neighbors.

4. Pipeline Safety in Class 1 Areas

The DEIS failed to consider the impacts of different safety standards required for the pipeline in rural areas, including our land. We, and many of our neighbors, are in a “Class 1” location because there are 10 or fewer buildings on a one-mile length of pipeline. Compared to those in urban areas, we would have fewer welds, thinner pipes, and a host of other reduced safety measures. FERC failed to consider the impact of the reduced safety standards on rural landowners.

The DEIS failed to consider an alternative that provides us, and our neighbors, with protections equal to Class 4 areas. In the economic analysis, the DEIS failed to disclose how much money

Pacific Connector is saving with the weaker regulations. The DEIS should have weighed those money savings against the cost of an accident. The DEIS also failed to consider whether it is appropriate to design a project that affects public safety in such a way as to save the Pacific Connector money at the expense of our safety.

FERC failed to consider an alternative that would finance rural emergency response services for when the pipeline leaks methane, or blows up. For example, the Days Creek Fire Department will have over 19 miles of the pipeline route under their jurisdiction, yet their budget is being cut, not enhanced by the County. Currently their budget is only \$21,000 a year. Even though Pacific Connector Pipeline is paying the County a small amount of taxes, it's not enough to make up for the annual budget reductions. After the pipeline is installed, the Days Creek Fire Department will have even less money to deal with emergency services – in spite of the fact that PCGP will save millions of dollars using reduced safety standards in rural areas like Days Creek.

5. Maps of impacts to our property are inadequate

Several times we have asked Pacific Connector for maps of the route through our property and the adjoining BLM public land in the form of shapefiles. Pacific Connector denied our request. Local groups also made the request of BLM and they were also refused. The BLM claimed this is because “the data would be accessible to individuals or groups seeking to exploit vulnerabilities in the nation’s energy infrastructure, and Pacific Connector would suffer substantial commercial and competitive harm if its facilities were subject to attack.”²

The pipeline route will be visible on Google Earth if it is built. If BLM thinks the pipeline on and near our land could be “subject to attack”, then this danger should have been considered in the DEIS, especially considering the reduced safety standards applied to our rural area. Before this project is found to be in the public interest, we should be provided with all the maps we request that use current mapping standards, such as shapefiles. The Days Creek Fire Department should also be provided shapefiles of the pipeline through the 19 miles in their district.

6. Other Human & Economic Impacts

The FERC claims that related impacts, such as global warming and gas extraction methods like fracking, are “out of the scope” of this project (DEIS 1-20). Therefore, FERC will not consider these impacts in the DEIS. We disagree. Fracking and increased global warming through the use of fossil fuels is inextricably linked to the pipeline proposed through our land. FERC should have considered these connected actions.

Significant amounts of methane drilled by fracking escape into the atmosphere.³ The process of fracking, liquefying, shipping, and other methane leaks along the way, makes fracked LNG contribute significantly to climate change, especially since methane is 86 times more potent as a greenhouse gas than carbon dioxide⁴ when it escapes unburned into the atmosphere.

² Letter dated 8-12-13 from the BLM Department of the Interior to the Rogue Riverkeeper.

³ <http://www.nature.com/news/methane-leaks-erode-green-credentials-of-natural-gas-1.12123>

⁴ <http://www.epa.gov/outreach/qanda.html> “86 times more potent” is based on a 20-year period.

The Oregon DEQ is permitting the Jordan Cove LNG Terminal to emit 2,166,000 tons of CO₂e per year. After Boardman Coal closes in 2020, the LNG terminal will become Oregon's highest greenhouse gas contributor. That doesn't even count the emissions caused by fracking, shipping and burning the natural gas.

As a nonprofit organization dedicated to preserving the natural environment, Oregon Women's Land Trust cannot allow these destructive environmental impacts to happen through the use of our property.

This concludes our DEIS comments. Please consider our comments when making a final decision.

Sincerely,

Jenny Council
Director, Oregon Women's Land Trust

owlt@live.com

OWLT
P.O. Box 1692
Roseburg, OR 97470

Document Content(s)

OWLT DEIS comments.PDF.....1-6

20150210-0041 FERC PDF (Unofficial) 02/10/2015

CP13-492

IND290

**Robert O. Clarke
TREE & ENERGY FARM
P.O. Box 82
Tenmile, OR 97481**

FILED
SECRETARY OF THE
COMMISSION

February 5, 2015

2015 FEB 10 A 11:47

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street NE, Room 1A
Washington, D.C. 20426

FEDERAL ENERGY
REGULATORY COMMISSION

Project Docket CP-13-492-000

ORIGINAL

Greetings Fellow Citizens:

I am writing to you to inform you of a geological hazard on our property that is in close proximity to the easement of the proposed Pacific Connector Pipeline, or the P.C.P. Said hazard consists of an unstable slope weakened by old logging skid roads. After looking at the Draft E.I.S., I could not locate any maps for my area. I believe if there was a map it would have been located in the Draft E.I.S., Volume I, chapter 3 between pages 32-36. Therefore, due to the lack of pertinent information in the Draft E.I.S., I will not be commenting on the Draft E.I.S. directly, but submitting my own information.

This information consists of a report on the landslide by a forestry consultant, as well as maps of our property, including an older map showing the pipeline location when it was proposed as an import pipeline. Hopefully this additional information will help you locate said landslide. This hazard affects our only access to this piece of property which is needed for proper management and income. I really hope that the recommendations in Volume II, chapter 5 are retained in the Final E.I.S., particularly recommendation #48, page 36. It is my understanding that eminent domain only gives the P.C.P. 95 ft. of construction easement. Therefore any damage to our property outside that easement is not allowed by eminent domain and is litigious. Before any construction begins on our land, we will have in hand, plans from a certified soils engineer to stabilize the slope.

IND290-1

Having addressed the landslide issue, I would like to move on to the affect the P.C.P. would have on my small wood products business. The loss of the tree growing land is a major concern. As one of my products is bio-mass, we tend to harvest more frequently and smaller diameter trees. We allow hardwoods to resprout on the stump and reharvest in a short period of time (approximately 10 years).

My best selling product is madrone firewood, but we also produce wood suitable for barbecues. We also have the ability to produce lumber, but we are not marketing lumber at this time. I think instead of the usage of industry standards for fair market value, each individual affected business or landowner should be compensated for their true impacts or losses. For instance, chip price for small diameter wood is around 41 dollars per ton. I receive more than three times that amount for the same wood cut into firewood. When the easement can be replanted, I would want it to be replanted in

IND290-2

20150210-0041 FERC PDF (Unofficial) 02/10/2015

-2-

madrone, but I don't think it would be commercially available. All madrone removed during construction would not be replaced by P.C.P.

Now, I want to challenge the assertion the people working for P.C.P. have made that we denied them access for this project. This is false. Employees were on our property for 4 days in 2006, most of that time spent on neighboring properties. After lying to us about the location of the proposed P.C.P., they were kicked off.

IND290-3

In closing, I was curious to know how many individual energy producers would be negatively affected by the P.C.P. and Jordan Cove Project directly. For instance, how many bio-mass, bio-fuel, wind and solar energy producers are being affected by the construction of the P.C.P. on their lands.

IND290-4

I think the Draft E.I.S. and the Final E.I.S. should include that information. I also think that the taking of land by the government, of one energy producer to give to a competing energy producer should be illegal. It reeks of malicious behavior and fraud by P.C.P. and the U.S. government.

I want to thank you for your time in considering these matters.

Respectfully,

Robert O. Clarke

SENECA JONES  TIMBER COMPANY

February 13, 2015

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street NE, Room 1A
Washington, DC 20428

**Re: FERC PREFILING DOCKET NO. PF12-17 & PF12-7
JORDAN COVE & PACIFIC CONNECTOR GAS PIPELINE**

Dear Ms. Bose:

We appreciate the opportunity to comment on such an important project with wide-spread ramifications, both directly and indirectly. The Pacific Connector Gas Pipeline (PCGP) will cover 231.8 miles and although a significant portion is sited on public land (32%), the majority of the proposed project impacts hundreds of private landowners' property by the permanent installation of an underground pipeline. Seneca Jones Timber Company (SJTC) is one of these stakeholders and 1.6% of the pipeline project is sited on our land. A project, if determined to benefit the public interest, should clearly be sited on public land whenever possible. Three areas on our property are within 500' of public land and relocating these areas to public property could reduce the impact to SJTC land by 30%.

The Forest Practices Act governs forestry operations for the private timber industry. Periodic reviews are conducted by the Oregon Department of Forestry to ensure that we operate within these rules and procedures to protect Oregon's natural resources; such as restocking harvested forests, protecting riparian areas, streams, wildlife, and avoiding activities on steep ground that potentially can lead to landslides.

On the other hand, the government manages their forest lands under their own specific set of rules to protect resources, which are not subject to periodic reviews by an independent party. Throughout the DEIS these management practices are set aside and waivers are being provided. We are observing various government agencies allowing pipeline activities to occur in sensitive areas and the primary discussion topic is mitigation.

For over sixty years, the timber industry and the government have entered into access agreements to provide mutual utilization of transportation systems. In the past, both parties possessed wide latitude to build transportation systems across each other's property. Today, due to environmental concerns, the construction of new roads on public land is virtually impossible and deemed as ground disturbing

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Federal Energy Regulatory Commission
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Page Two

activities. The ardent process is so difficult, we seldom make such a request and explore whatever other alternatives might be available, despite increased cost and potentially greater environmental concerns. While the industry has a long standing cooperative relationship with both the Bureau of Land Management (BLM) and Forest Service (FS), Jordan Cove and PCGP are essentially new entities, however, these public agencies are modifying their management plans to accommodate the project, including the allowance of injury to sensitive species and sites. One example cited in the DEIS under 4.5.2.2 indicates that blasting will be allowed within Northern Spotted Owl nest patches and buffers without application of seasonal timing restrictions. Another area within the DEIS indicates that the BLM will allow a site-specific exemption to protect Marbled Murrelet Habitat on various BLM districts. When the government has discretion, they would not offer this level of latitude to the timber industry, their own neighbors. This leads to significant disparity on what one specific "for profit private industry" can construct on public lands, while a transportation system proposal of this length (or any length for that matter) would be received by the timber industry with a resounding "no", particularly if injury to wildlife habitat and/or streams were negatively impacted.

In addition to the direct installation of the pipeline, our property will receive further impacts by what the PCGP calls temporary extra work areas (TEWAs). TEWAs come in two types, one is an area to mobilize equipment and conduct construction work, while the other is a rock fall area. On steep slopes, PCGP is anticipating that rock falling could be a concern that needs addressing given soil conditions and topology. Although, we have not provided PCGP direct authorization to survey our property, they have identified six TEWA areas located on our land as having very steep slopes. Human safety is a significant concern in these areas deemed rock fall TEWAs.

The placement of gas pipelines located on forest properties requires the timber industry to employ atypical harvest methods, as characteristically the gas pipeline is located on the same ridge line in which a forest landowner wants to place its equipment or construct access. Topographical features, such as soils and slopes, can limit the number of viable equipment sites. In many cases, only one location may be available and/or feasible. Finding new alternatives can be costly to a business that has deep roots in Oregon.

Gas pipeline installers are extremely reluctant to allow forest yarding operations and/or the hauling of heavy equipment across underground gas lines. PCGP requests that landowners identify alternatives or determine in advance potential

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Page Three

crossing locations in order to bolster these areas. Our timberland and access routes are significantly affected in a search for alternative solutions, which come at a cost.

Most recently, we put a harvest unit up for bid that contained a gas pipeline within the unit. We received bids from independent contractors in excess of 300% higher than a typical logging bid for similar equipment and topography. Even in a good lumber market, the profit margin on this area of timber was significantly and detrimentally impacted as a result of a placement of a gas pipeline.

In Oregon, the historical impact of mill closures and loss of timber related jobs is largely attributable to reduced harvest levels on public lands. In some ways, PCGP's plans will increase timber supply availability and the employment of local independent contractors, albeit briefly. Construction and pipeline installation will occur over a course of one year, maybe two. These activities in such a short timeframe:

- Generate significant timber volumes entering the market quite rapidly; potentially affecting log market values in a negative way, due to a temporary and interim glut of logs on the market.
- Require significant contractor manpower to accommodate this project in an expeditious manner, while the forest industry may have to be more competitive to acquire contractors to complete their needs, at an increased cost.
- Increase the traffic load on forest roads built to sustain occasional use by logging equipment. Generally roads are maintained according to upcoming needs. In some cases roads proposed for use may not be at current standards to support PCGP traffic loads for slash and timber removal, heavy equipment and piping dimensions. This traffic may interfere with the timber industry's current plans and specifications. We recommend that PCGP be required to participate in a cooperative road maintenance program prior to use to ensure the transportation system is viable and PCGP's use thereof will effectively manage sedimentation and run-off issues in accordance with the Oregon Forest Practices Act.
- Construction of the pipeline will create significant ground disturbing activities. While much of the excavated material will be returned to

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surface the pipeline, significant portions will require creation of "waste areas" in stable areas. Stable areas suitable for waste sites are extremely limited in the forest. With PCGP utilizing these sites, there will be fewer waste area sites available for industry, creating additional cost. Although, we have not provided PCGP direct authorization to survey our lands, four waste site areas are identified on our property, which will likely require us to haul our own waste material to a site further away increasing our own costs.

Once the pipeline is installed, PCGP proposes reestablishing the surface with grass and providing a minimum level of maintenance every three to five years. In Oregon we have an excellent growing capacity; pipeline corridors quickly become brushy areas with a high level of invasive species, such as scotchbroom and blackberries. During the dry season, these grasses and brush varieties can contribute a significant slash component that will be susceptible to forest fires. Fire behavior in these types of fuel loads can spread quickly and will put stakeholders' investments at additional risk.

Exposed utility right-of-ways in the magnitude proposed by PCGP effectively encourage off highway vehicle traffic and year round public entry into private forest lands. Unwanted traffic can lead to sedimentation issues and increased risk of fire on adjacent timberland investments. We suggest that the final EIS address alternatives to limit unwanted access across the pipeline for concerns related to public safety, environmental damage potential, and increased risk of fire on the slashy areas described above.

As a forest landowner, our experience with catastrophic wildfires clearly demonstrates that scorching of subsoils can occur to depths as much as three feet, along with retainage of significant temperatures in these soils. To suppress fire, often times heavy equipment is utilized to dig and turn over soils to adequately distribute the heat and suppress the fire. These normal suppression efforts will be impeded with the placement of a gas pipeline and increase risks to fire suppression personnel. PCGP's response is that forest fires on the ground surface are not a direct threat due to the insulating effects of soil cover on the pipeline and there are no increased risks or costs in fire suppression efforts in the vicinity of the pipeline. The risk of fire is a serious concern to all forest landowners and we recommend that the EIS reference any scientific studies that support and validate PCGP's claims. As a contributor to the risk of fire, we would ask that PCGP be held accountable as part of the solution to mitigate that risk. Construction of ponds and pump chances periodically along the route could

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potentially provide a level of mitigation and additional water resources to aid in fire suppression.

PCGP admits that utilization of the pipeline will be in perpetuity and the infrastructure should last forever, provided the pipeline receives adequate maintenance, which is governed by the Code of Federal Regulations. On the other hand, PCGP readily admits that the useful life of a pipeline is 50+ years, while a typical energy provider contract is generally 30 years. The DEIS addresses if PCGP proposed to abandon the pipeline facility what processes are necessary to occur. It is important that there is no gap in maintenance and once utilization of the pipeline ceases, that appropriate reclamation procedures occur. To effectively remove liability from the underlying landowner this may require removal of the pipe itself. According to PCGP experts, reentry for removal of the pipe recreates additional environmental impacts and would be subject to a similar process as in the installation. The DEIS does not adequately discuss PCGP responsibilities regarding pipeline reclamation or the long term effects on private property if the pipe is left in the ground in perpetuity. Approval of a project of this magnitude should have a complete plan of reclamation, including returning the ground to its original condition in the event of any unforeseen occurrence, as well as operator bankruptcy. If the installation of the pipeline indeed has no negative effects to private property, we would encourage FERC to require PCGP to purchase the private property outright, pay the property taxes, and if they desire, attempt to resell the property on the open market.

SJTC remains supportive of projects that provide significant benefits to local communities in Oregon and we are proud of our ability to manage our forests responsibly with sustainability. From a socioeconomic perspective, we struggle to understand how the agencies associated with this project can support and elevate the position of a gas export facility, while adding cost somewhat discriminately to another business that has served Oregon for over 60 years in domestic markets.

We appreciate the opportunity to comment and provide our concerns regarding the socioeconomics and environmental resources impacted by this project. As a private landowner, our goal is to maintain an open dialogue with PCGP. In fact, we began our discussions with representatives of PCGP beginning in February of 2006. We remain optimistic that these continued discussions will bear fruit, in the words of PCGP *"The more we talk with each other, the better we can create a customized offer that fits your situation."*

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Nine years later, we have significantly expanded our understanding about pipelines. This has taken an enormous amount of energy to ensure that the pipeline does not negatively impact our way of life, forest management. PCGP indicates that many of our concerns can be addressed via specific easement language that may resolve direct impacts, but does not address indirect impacts on third party transportation systems. Seneca Jones Timber Company provided PCGP counterproposal alternatives to attempt resolution, which remain unrequited. After nine years, all we have from PCGP is assurance that their intent is not to add cost to our business, or apologies for entering our property without permission. We hope that the next nine years will produce results that are more positive for both parties.

In support of Senator Wyden's request we would ask that the public comment period for the DEIS be extended for an additional 30 days. In his words, "*A project of this size and scope certainly merits careful consideration.*"

Our own review shows that the DEIS acts as a summary of findings and if you stay apprised of all the information released by FERC, in many cases the details are many layers deep or not adequately transparent. We also see throughout the DEIS that PCGP still has many permits and processes yet to complete or in some cases, permits and/or authorization will be obtained either after pipeline construction or after FERC certification. These permits and processes should continue in advance of commencement of activities on their own merits without undue influence from other agencies.

Again, thank you for the opportunity to comment. We encourage you to make safety the number one priority in completing your assessment and setting guidelines as this project moves forward.

Sincerely,

SENECA JONES TIMBER COMPANY, LLC



Monica Jelden
Land Use Manager

cc: T. Payne
S. Weber
T. Reiss
R. Re
D. Riddle

Document Content(s)

20150213115347613.PDF.....1-6

Ervin and Mitzi Sulffridge, Winston, OR.

This is regarding the proposed Pacific Connector Pipeline that would connect Malin to the proposed Jordan Cove Terminal in Coos Bay, traversing Klamath, Douglas, Jackson and Coos Counties.

To whom it may concern,

We searched for the perfect property to retire and live out our golden years and we finally found it approximately 30 years ago. It was bare land to begin with and we worked very hard to put in the road, electricity, water, sewer, and we built our home on top of the mountain with a huge front yard. We planted it all in small wood lot trees. I can look out my living room window and see lots of wild animals such as deer, turkeys, pheasants, quail, rabbits, red tailed hawks and even once saw a cow elk walking across my front yard one morning. I watch the yellow school bus meandering up Rice Creek to pick up the kids. One day we heard a tap tap tap noise and looked out to see a man driving surveying stakes on our property all the way across our big yard. We told him to leave and he said he didn't have to, they had eminent domain. We have been fighting them ever since.

The proposed 100' swath with a 36" pressured pipe will come up our road and go across our front yard where our children, grandkids and great grandkids have picnics, graduation parties, birthdays and much more. They also have their swing set, trampoline; have a power wheel track where they ride their power wheels and bikes. We love to relax in the yard and watch the birds by day and star gaze by night. They also propose 2 big staging areas to be used while they are working.

We picked this property to build our home because of the high ridge and we can see the beautiful surrounding mountains. We were told our property was chosen because they like to stay on the ridges when they can. We have been told that after our property is torn up to put in the pipeline, they will put it back like it was.

How would you like your sweet babies to share their yard with a monster? I refer to the pipeline as a monster and I love my family far too much than to take the chance.

I propose to stop the use of my property via eminent domain for its use on the pipeline.

Ervin and Mitzi Sulffridge
800 Honey Run Lane
Winston, OR 97496

Document Content(s)

26806.TXT.....1-1

Deb Evans, Ashland, OR.

Please Note: This is a resubmittal of my ecomments, filed to the incorrect docket Numbers on Feb 13, 2015, as requested by FERC personnel. This is PART 1 of 2 comments. Thank You.

Federal Energy Regulatory Commission (FERC):

As an affected land owner of the Pacific Connector gas pipeline (Docket CP13-492-000), a citizen of Oregon and a concerned mother of three committed to preserving the unique flora and fauna that draws environmental businesses to our state, I am writing to express my grave concerns over insufficient information found in FERC's Draft Environmental Impact Statement. The proposed Jordon Cove liquefied natural gas (LNG) export terminal (Docket CP13-483-000) and Pacific Connector gas pipeline as outlined in the Draft EIS would have a significant negative impact on our state. In particular, the following areas are either completely missing or inadequately addressed:

1) Poses threat to people, flora and fauna - The 232 miles of pipeline proposed would cross 400 streams, rivers and wetlands through steep earthquake, flood, landslides and fire prone areas of Oregon. Seven days ago, southern Oregon experienced 4 hours of rainfall in a 24 hour period and unprecedented high winds causing literally thousands of trees to topple or snap and sending torrents of sediment from exposed bare land into the creeks and lakes. Lack of snowfall caused extreme dry conditions in 2014 leading to the Oregon Gulch Fire burning over 30,000 acres in 3 days. Cutting a 95 foot swath 232 miles across our state, with increasingly extreme weather conditions we will experience thanks to global warming and climate change, will pour fish-killing sediment into the streams. Hydraulic discharge, potential gas leaks and accidents further threaten wildlife, fisheries and timber. Current land use laws in Oregon are some of the best in the country designed to protect the environment. The draft EIS, doesn't adequately address any risk assessment of the real hazards this project poses. Additionally it does not address the threat to biodiversity and livelihoods that depend on Oregon's complex ecosystem.

2) Failure to show public benefit - According to DOE commissioned NERA study (1), exporting LNG will increase the price of natural gas prices for customers and industry in the US. As natural gas prices around the world are plummeting due to falling oil prices the same reports wrongly projection in all their models that "...the U.S. natural gas price does not become linked to oil prices in any of the cases examined." We now know this is NOT true. Nowhere in the Draft EIS, have you addressed how this project provides public benefit. Again, in the NERA study, what benefits are described are for the gas industry and their shareholders and "On the negative side, producing incremental natural gas volumes will increase the marginal cost of supply and therefore raise domestic natural gas prices and increase the value of natural gas in general. Households will be negatively affected by having to pay higher prices for the natural gas they use for heating and cooking. Domestic industries for which natural gas is a significant component of their cost structure will experience

increases in their cost of production, which will adversely impact their competitive position in a global market and harm U.S. consumers who purchase their goods. Natural gas is also an important fuel for electricity generation, providing about 20% of the fuel inputs to electricity generation. Moreover, in many regions and times of the year natural gas-fired generation sets the price of electricity so that increases in natural gas prices can impact NERA Economic Consulting 14 electricity prices. These price increases will also propagate through the economy and affect both household energy bills and costs for businesses.”(1). Exporting LNG does not provide a public benefit but rather an increase in cost of domestic natural gas prices and USA made goods.

3) Negative Contribution to Climate Change through Greenhouse Gas emissions: In a statement made by Defense Secretary Chuck Hagel on October 2014, Hagel states “Among the future trends that will impact our national security is climate change. ...In our defense strategy, we refer to climate change as a “threat multiplier” because it has the potential to exacerbate many of the challenges we are dealing with today - from infectious disease to terrorism. We are already beginning to see some of these impacts.” (2) Recent studies by DOE and leading scientists have discovered that nearly 8% of natural gas (methane, CH₄) is lost to the atmosphere during the drilling, capturing and transporting processes. When you couple this loss of methane, a greenhouse gas 84 times more damaging than CO₂, that puts natural gas on the same par as burning coal (3). In the Copenhagen 2009 climate accord, the United States, along with 140 other countries representing 87.74% of greenhouse gas emissions, set the goal of limiting global temperature rise to 2 degrees Celsius above pre-industrial levels. We are currently at 1 degree Celsius. 350.org founder Bill McKibben and leading scientists have calculated 565 gigatons of CO₂ to be the top amount that can be emitted and still stay below 2 degrees Celsius. At the current world rate of CO₂ emissions, we will reach that mark in 15 years.(4) Please include this most recent data in the EIS. Without it, you are grossly underestimating the environmental impacts of this project. Using the government figures of 119700 pounds of CO₂ emissions for every million cubic feet (Mcf) of natural gas and 7.8% leakage of methane during handling the proposed 1.1 million cubic feet per day (Mcf/d) of natural gas, that comes to the equivalent of 18.3 coal fire plants averaging 3.5 million tons of harmful greenhouse gases per year on this project alone.

Please Note this is Part 1 or 2 of my comments... the rest of the comments are in Part 2 or 2. Thank you for this opportunity.

Deb Evans

Document Content(s)

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Jayson Wartnik, President
Robert Beers, Treasurer
Clide Grover, Secretary



Denise Russell
Ron Stuntzner
Bob Mahaffy
Jay Messerle

Coos Curry Small Woodlands Association

Please accept this letter as Coos Curry Small Woodlands Association's recommendation to the FERC to utilize the Blue Ridge Alternate Route between mile post 11.1 R and mile post 21.8 as opposed to the Proposed Route.

It is the opinion of the Coos Curry Small Woodlands Association that the Draft EIS incorrectly finds the Proposed Route to have less environmental impact than the Blue Ridge Route. We have reviewed the analysis. It's clear to us that the information presented is not complete and in several cases not correct. We have a great deal of combined experience in the land and water of Coos County and we understand clearly which of these two routes has problems and it is clearly the Proposed Route.

Our association has many objectives not the least of which is to make recommendations to others as to how they might investigate certain situations in order to solve specific problems. In the case of the environmental impact between mile post 11.1 R and mile post 21.8, it is clear that the Alternate Blue Ridge Route is a much better choice.

Note: We, like the FERC, have received and read the extensive comments submitted to the FERC by Mark Sheldon. These comments are well researched and clearly point out several reasons to select the Blue Ridge Route over the Proposed Route. Specifically we feel that small woodland owners would be unnecessarily impacted by the proposed route, compared to the alternative route that crosses more public lands.

The Coos Curry Small Woodlands Association is an independent local chapter of the Oregon Small Woodlands Association, a state organization that represents the interests of Oregon's 140,000 family forest owners. We represent the owners of family forest lands in Coos and Curry Counties to the general public and before legislative bodies and regulatory agencies. Please take our recommendation and advice seriously. Many of our members have spent their lives in this county and we know the damage that comes from digging in wetlands and through the many bodies of water that are associated with the Proposed Route. Believe us when we tell you that Blue Ridge provides the best, most stable, and environmentally preferable route.

Thank you for your consideration,

A handwritten signature in black ink that reads "Jayson F. Wartnik". The signature is written in a cursive, flowing style.

Jayson F. Wartnik
President
Coos-Curry Small Woodlands Association

Document Content(s)

CCSWA_Ferc Comment Letter.PDF.....1-1

20150220-5121 FERC PDF (Unofficial) 2/20/2015

Deb Evans, Ashland, OR.

Please Note: This is a resubmittal of my ecomments, filed to the incorrect docket Numbers on Feb 13, 2015, as requested by FERC personnel. This is PART 2 of 2 comments. Thank You.

4) LNG Export threatens US Energy Independence and our National Security – Within the last 10 years, all the talk in the United States has been about gaining our energy independence so as not to be dangling in the wind over our dependence on energy needs from highly volatile places like the Middle East. The very thought that we would be talking about exporting gas to overseas markets is stunningly crazy. If we want to plan for the sustainability of America, we would not be selling this non-renewable resource for any price, but using it to transition ourselves as quickly as possible to renewable energy sources. The Draft EIS, needs to address how allowing a foreign company, Veresen LLC and other gas industry producers, using environmentally harmful fracking technics to pull this greenhouse gas riddled fuel, making billions of dollars while contributing to chaotic and costly climate change, serves anybody but a handful of companies and shareholders. The environmental impacts and costs to livelihoods are staggering and to suggest that this pipeline and LNG facility, fraught with liability to the citizens of Oregon, and taking away a resource that could be used here to secure our energy independence is irresponsible. Include the real cost to the American public and the please explain how this project could possibly warrant eminent domain to implement.

5) 4.13.19 – Pipeline facilities – A large portion of the 242 miles where the pipeline is planned is in high lightning, fire, slide and earthquake areas. I see there is an emergency response co-share plan being recommended in 4.13.8 Conclusions on Facility Reliability and Safety, but I do not see a similar request for the Pacific Connector Pipeline emergency. As a member of the Greensprings Volunteer Fire Department, I would like to know how we are assured that the hazards that a methane leak in timbered forest causing damage to timber and risk to personnel that the Pacific Connector pipeline would cause will be paid for? Also, should the pipeline go in and gas prices plummet as they are currently doing and the pipeline becomes obsolete, then we want to make sure that the owner, not the public, is responsible for its removal.

6) 57% of Pacific Connector Pipeline goes through private property and 90% of those 301 private land owners are opposed to the Pacific Connector pipeline going through their property, myself included. We believe for the reasons already stated that this project, being completed to potential make billions for a private company and that in no way benefits the public, has in fact a significant impact on the environment that we live in. This is a gross misuse of eminent domain adding another level to the disservice of this draft EIS if it fails to address the above concerns and direct impacts to the environment.

7) In section 5.0 – Conclusions and Recommendations you list 106 additional conditions to make this a safer project. Points 14-26 requested that several missing final plans be filed prior to the closing of the Draft EIS comment period, February 13. Have these been filed and have they been made available for the public to comment on? The fact that you have included 106 more conditions to “make this project safer” and this without even the full plan presented to you, to mitigate the impact that this project will have adds to the reasons that the only logical conclusion to the scope and dangers this project represents do not warrant its recommended approval.

In conclusion, given the above significant risks to climate, environment, livelihoods that depend on the continued uncompromised landscape of southern Oregon and the lack of proof of public good, I strongly encourage you to reject this project.

Sincerely,

Deb Evans

1. Montgomery, W. David, NERA Economic Consulting. “Macroeconomic Impacts of LNG Exports from the United States.” 3 December 2012. 10 February 2015.

http://energy.gov/sites/prod/files/2013/04/f0/nera_lng_report.pdf.

2. Hagel, Chuck. “The Department of Defense Must Plan for the National Security Implications of Climate Change.” 13 October 2014. The White House Blog. 10 February 2015.

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August 1, 2014

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street NE
Washington, DC 20426

Re : Copy of Appeal of Douglas County, Oregon Major Amendment to Conditional Use
Permit for Williams Pacific Connector Gas Pipeline

Dear Ms. Bose:

Please accept the following document as comment regarding opposition to the Pacific
Connector Gas Pipeline project in Douglas County, Oregon

Sincerely,

/s/ Stacey McLaughlin

Stacey McLaughlin
Affected Private Property Owner
799 Glory Lane
Myrtle Creek, OR 97457

NOTICE OF REVIEW

Appeal of a decision regarding land use matters pursuant to Section 2.500 of the Douglas County Land Use and Development Ordinance

Date: March 31, 2014

Submitted by: John Clarke, 1102 Twin Oaks Lane, Winston, OR 97496
Richard Chasm, 730 Hoover Hill Road, Winston, OR 97496
Stacey McLaughlin, 799 Glory Lane, Myrtle Creek, OR 97457

- A. Decision Sought to be Reviewed:** Pacific Connector Gas Pipeline, LP, Approval of a request for a MAJOR AMENDMENT to a previously approved Conditional Use Permit & Utility Facility Necessary for Public Service (PD File No. 09-045); Planning Department File No. 13-047.
- B. Party Status:** Petitioners were individually qualified as a party by the Douglas County Planning Commission at a public hearing held on October 17, 2014, pursuant to section 2.200 of the Douglas County Land Use and Development Ordinance (LUDO).
- C. Specific Grounds relied upon in the petition request for review pursuant to Planning Commission Action of March 20, 2014:**

III. Findings on Procedural Issues

A. The 2009 Approval Has Been Extended

"The fact that Pacific Connector seeks to remove Condition of Approval #12 (limiting the authorization to "the import of natural gas only") is not relevant to whether the 2009 Approval remains valid. Permits may be extended 'if it is determined that a change of conditions, for which the applicant was not responsible, would prevent the applicant from commencing this operation within the original time limitation.' LUDO 3.39.0300. That is what happened here. Nothing in the LUDO prohibits the holder of a valid permit for when an extension has been approved from also seeking either a minor amendment or a major amendment to the permit, as authorized in LUDO 2.900.

Finally, this proceeding on Pacific Connector's request for a Major Amendment to PD 09-045 does not afford opponents an opportunity to challenge extensions granted on PD -09-045. In order to approve the Major Amendment, the Commission has considered whether PD 09-045 has been duly extended, and the Commission finds that it has.

Petitioners are challenging and requesting review of the aforementioned findings on procedural issues adopted by the Planning Commission on March 20, 2014, as follows:

1. *"The fact that Pacific Connector seeks to remove Condition of Approval #12 (limiting the authorization to "the import of natural gas only") is not relevant to whether the 2009 Approval remains valid."*

Petitioners deem the CUP expired on December 10, 2011. The validity of the CUP permit is a fundamental issue. It is unreasonable for the Planning Commission to assert that an expired CUP can be modified. Furthermore, a CUP cannot be extended in violation of the Douglas County Land Use and Development Ordinance. Petitioners deem an illicit approval quashes any extension(s) granted.

2. *Finally, this proceeding on Pacific Connector's request for a Major Amendment to PD 09-045 does not afford opponents an opportunity to challenge extensions granted on PD -09-045. In order to approve the Major Amendment, the Commission has considered whether PD 09-045 has been duly extended, and the Commission finds that it has.*

The granting of extensions and approvals are germane to the request for a Major Amendment; therefore, making the following relevant and applicable for consideration by the Planning Commission. The Planning Commission failed to address or consider evidence submitted which substantiates Petitioner's claim that the CUP expired on December 10, 2011.

a.) On December 10, 2009 – the Douglas County Planning Commission approved the application of Pacific Connector for a Conditional Use Permit & Utility Necessary for Public Service, Planning Department File No. 09-045 (the “2009 Approval”). The 2009 Approval authorized the construction of a natural gas pipeline crossing 7.31 miles within the Coastal Zone Management Area (CZMA) of Douglas County, crossing properties zoned Timberland Resource (TR), Farm Forest (FF) and Exclusive Farm Use – Grazing (FG).

Section 3.39.200 of the Douglas County Oregon Land Use and Development Ordinance (LUDO) states: A conditional use permit will become invalid without special action if:

1. *The permit is not exercised within two (2) years of the date of approval.*
2. *The use approved by the conditional use permit is discontinued for any reason for one (1) continuous year or more.*

b.) On December 17, 2009 – the Federal Energy Commission issued a certificate of public convenience and necessity to Pacific Connector Gas Pipeline, LP (Pacific Connector) under section 7 of the NGA to construct and operate a 234-mile-long, 36-inch diameter interstate natural gas pipeline extending from the outlet of the Jordan Cove LNG terminal to a point near Malin, in Klamath County, Oregon on the Oregon/California border, as well as blanket construction and transportation certificates under subpart F of Part 157 and subpart G of Part 284 of the Commission's regulations.

Within seven days of the granting of the Douglas County CUP (PD File No. 09—045,) Pacific Connector Gas Pipeline received the necessary permit/certificate to begin construction of a natural gas pipeline crossing the 7.31 miles within the Coastal Zone Management Area of Douglas County and issued a press release to this effect. (See attached Exhibits)

Pacific Connector Gas Pipeline LP delayed and chose not to begin construction in a timely manner and instead facilitated a series of extension requests wrongly granted by the Douglas County Planning Director under Section 3.39.300 Granting of Extensions of the Douglas County Land Use and Development Ordinance.

Section 3.39.300 states: *An applicant may request an extension of the validity of a conditional use permit approval. Such request shall be considered a Ministerial Action and shall be submitted to the Director, prior to the expiration of such approval, in writing, stating the reason why an extension should be granted.*

The Director may grant an extension of up to one (1) year in the validity of the conditional use permit approval if it is determined that a change of conditions, for which the applicant was not responsible, would prevent the applicant from commencing his operation within the original time limitation.

In response to other petitioner requests and demands, the applicant has repeatedly argued that the Douglas County CUP pertains only to the 7.31 stretch of pipeline contained within the CZMA of Douglas County; therefore, the Pacific Connector Gas Pipeline LP could have commenced work on the 7.31 mile stretch of pipeline pursuant to the original time limitations in Douglas County CUP (PD File No. 09—045); and, if they could not, the applicant failed to demonstrate why in their request for an extension as required by the Douglas County LUDO.

- With expiration of the December 10, 2011 expiration of the CUP time limitation pursuant to Section 3.39.200 of Douglas County’s LUDO imminent and no work having commenced by September 2011 – the applicant sought an extension of (PD File No. 09—045,) at the solicitation of the Douglas County Planning Department.
 - The Pacific Connector Gas Pipeline request for an extension offers no evidence that a change of conditions exists or existed that prevented them from commencing operations for the 7.31 stretch of pipeline that is relevant to the CUP time limitations.
- On October 13, 2011, Jonathan M. Wright, Administrative Planner for Douglas County granted an extension of PD File No. 09-045 in violation of Douglas County LUDO Section 3.39.300 - *The Director may grant an extension of up to one (1) year in the validity of the conditional use permit approval if it is determined that a change of conditions, for which the applicant was not responsible, would prevent the applicant from commencing his operation within the original time limitation.*
 - The October 13, 2011, correspondence from Jonathan M. Wright offers an extension of the Conditional Use Permit and Utility Facility without a determination that a change of conditions existed for which the applicant was not responsible and that would prevent the applicant from commencing his operation within the original time limitation.
 - On December 7, 2011, the Jordon Cove – Pacific Connector Project Update announces it has received approval from the U.S. Department of Energy to *export* domestic natural gas to U.S. free trade partners. The application to export was filed on September 22, 2011 – a week later on September 30, 2011, the extension request for the CUP that is limited to *import* only is submitted to Douglas County. The Press Release goes on to state, “Originally planned as a liquefied natural gas (LNG) import terminal connected to the

Pacific Connector Gas Pipeline, Jordon Cove made the decision to consider the additional capability to also export LNG. . . .”

A second extension to December 10, 2013 was similarly granted by Jeffrey A. Lehrbach, Administrative Planner on October 23, 2012; a third extension was similarly granted on November 7, 2013 by Stuart Cowie, Administrative Planner. Both extension requests again containing no evidence that a change of conditions for which the applicant was not responsible, would prevent them from commencing operations within the original time limitation or the previous erroneously granted extensions.

The Douglas County Land Use and Development Ordinance clearly states that a determination must be made by the Director as defined in the LUDO, that there has been a change in conditions to prevent the commencement of work authorized by a Conditional Use Permit in order for an extension to be granted.

At no time has the applicant produced substantive evidence or proof that they could not have commenced work pursuant to the time limitations of the CUP. Furthermore, the Douglas County Planning Director has failed to exercise due diligence and require the applicant to produce evidence or substantiate that a change in condition existed for which the applicant was not responsible, and that prevented the applicant from commencing his operations within the original time limitation.

While it may be the Planning Department’s practice to sanction rubber-stamp extensions, it is not the spirit or the intention of the law as outlined and presented in the Douglas County Land Use and Development Ordinance Section 3.39.300.

Pacific Connector Gas Pipeline extension requests present as routine form letters certifying that they have not now, or ever intended to meet the time limitations of the original CUP approval or the subsequent extensions. Pacific Connector Gas Pipeline, LP, through the issuance of correspondence, press releases and newsletters has unashamedly announced construction schedules beyond the time limitations of the original CUP and subsequent illicit time extensions.

In addition, Pacific Connector Gas Pipeline has willfully violated the integrity of the Douglas County Land Use and Development Ordinance and the decision of the Douglas County Planning Commission in the granting of the original CUP on December 10, 2009, which was for import purposes only and in accordance with their original application request. Pacific Connector Gas Pipeline instead has consciously delayed any construction because of dependence on the Jordon Cove Energy project which has, *“made the decision to consider the additional capability to also export LNG because changes in the domestic gas supply outlook within the past three years (stated first quarter 2012) have resulted in an abundant supply of natural gas, rendering the U.S. market less attractive for imports. The proposed Pacific Connector Gas Pipeline project could benefit . . . by providing additional supply options that would make it possible to transport natural gas from the Opal Hub in Wyoming . . . to Coos Bay and the LNG terminal.”* (Exhibit attached)

While Petitioners continue to assert that the Conditional Use Permit expired on December 10, 2011, the following evidence demonstrates that the extensions granted on October 13,

2011, October 23, 2012 and November 7, 2013, were in fact granted in violation of 3.39.300 of the Douglas County LUDO, as the applicant was indeed responsible for and caused their own delays.

On April 16, 2012, the Federal Energy Regulatory Commission (FERC) Docket No. CP07-441-001, et. al. (25.), vacated the December 17, 2009, Order authorizing the Jordan Cove LNG import terminal. The vacation was ordered because Jordon Cove had decided that construction and operation of an import facility was not viable under current market conditions and had made the determination to use the Jordan Cove terminal facilities for only the exportation of natural gas. Since the Pacific Connector Gas Pipeline was proposed as an integral part of the larger Jordan Cove Project, the stated purpose of the pipeline being to transport gas sourced from the Jordon Cove terminal, FERC also vacated authorization to construct those facilities.

“Jordon Cove is owned by Veresen and the Pacific Connector Gas Pipeline is equally owned by Veresen and a subsidiary of the Williams Companies, Inc.” See attached Exhibit from Veresen, Inc., outlining ownership.

As early as July 27, 2011, Jordon Cove applied to the Department of Energy for authorization to export natural gas and intended to ask FERC to amend its existing authorization to add export facilities. Pacific Connector as a part of that existing application and authorization knew even before it requested an extension of a CUP for import only in September 2011 that its plans were to export.

In addition when FERC issued its order in April 2012, withdrawing approval, Pacific Connector Gas Pipeline, continued to facilitate extensions on the import only CUP approved by Douglas County with full awareness that they would be required to file a new application with FERC, which did not occur until more than a year later in June 2013.

Conditions of approval from Douglas County in 2009 included FERC approval and an “import,” only restriction. When FERC withdrew its approval in April 2012, one could reasonably assume that it is irrational and negligent for an extension to be granted at the local level in October 2012 on a CUP that was overtly in violation of the original conditions of approval.

On June 6, 2013, Pacific Connector Gas Pipeline (owned by Veresen, Inc., who also owns the **proposed** Jordon Cove LNG facility) filed a new application with FERC requesting the necessary certificate of public convenience and necessity to construct and operate a pipeline whose purpose is for the export of natural gas.

In light of all of this evidence and supporting data, petitioners are requesting that the Board of Commissioner’s find that the Conditional Use Permit & Utility Facility Necessary for Public Service (PD File No. 09-045); Pacific Connector Gas Pipeline LP was effectively expired on December 10, 2011, Planning Department File No. 13-047. The applicant has repeatedly failed to meet the requirements of the County’s Land Use and Development Ordinance Section 3.39.300; and the Planning Director wrongly authorized extensions in violation of the requirements of the Douglas County Land Use and Development Ordinance Section 3.39.300.

B. Pacific Connector's Application is not premature

Several opponents testified that they believe this application should be stayed until federal regulatory processes reach particular thresholds - for example, issuance of a Draft Environmental Impact Statement (DEIS) or Final Environmental Impact Statement (FEIS), or approval of a Certificate of Public Convenience and Necessity by FERC. Under Oregon law, however, the County land use process is independent of federal permitting activities. Indeed the County is required to process a permit application in accordance with statutory timelines, generally requiring a final decision within 150 days of when the application is deemed complete. (ORS 215.427) Opponents have cited no authority or approval standard, and the Commission is aware of none, which requires or allows this county application process to be put on hold pending actions in related but separate federal processes. The Planning Commission concludes that there is no legal impediment in Oregon law or the LUDO to seeking county and federal approvals concurrently.

Petitioners are requesting review of the aforementioned findings on procedural issues adopted by the Planning Commission on March 20, 2014.

Petitioners believe the application for a Major Amendment is incomplete. The Douglas County Planning Department has failed to acknowledge or understand petitioner's testimony and intent regarding, at a minimum, its demand for a draft environmental impact statement or Petitioner's preference that a final environmental impact statement be included in the application. As it currently stands, the application for the Weaver Ridge 1.7 mile section, as well the entire 7.31 miles of the Pipeline in the CZMA lacks adequate data to fully address the environmental impacts of pipeline construction as it pertains to the CZMA.

Petitioners deem the application incomplete pursuant to the Oregon Coastal Management Program (OCMP), which applies within the CZMA. Without an FEIS on the project, the Planning Commission is unable to assess the general level of risk as defined by the OCMP for a high-pressured pipeline containing natural gas. Without the FEIS information the Planning Commission cannot knowingly apply the proper conditions for construction or characterize the level of risk in the coastal zone from natural hazards such as tsunamis, or earthquakes, not to mention those caused by man.

Petitioners deem that without adequate seismic, and other environmental and geologic data the Planning Commission cannot qualify the application as complete. The Planning Commission approved the original CUP application and this request for a Major Amendment without critical information necessary to make an informed, responsible and safe decision.

A decision made without sufficient technological (example: pipeline construction), environmental (example: seismic, geologic, etc.) data compromises the safety of people residing, visiting and owning property in rural Douglas County. When the Planning Commission approved the request for Major Amendment, Douglas County landowners and residents were put at risk of serious injury or death.

Moreover, a decision based on an incomplete application on such an environmental, hazardous and sensitive issue, particularly in the protected Coastal Zone Management Area demonstrates irresponsible local government at the highest level. To facilitate exposing Douglas County and its citizens to injury, death, fiduciary and legal risk to such an extent will adversely affect taxpayers on both a short and long-term basis, particularly in light of the fact the courts can easily rule it could have been prevented. (Exhibit attached)

Petitioners are fearful that without adequate environmental geologic and seismic data the financial future of Douglas County will be forfeited and seized by the types of potential liability that is currently facing the State of Washington and a rural community in Kentucky as timely examples.

Douglas County is well within its purview of authority to require the completion of the Final Environmental Impact Statement before rendering a decision. Petitioners find it unreasonable and negligent for the County to forfeit its right to this information in advance of a final decision. (See February 14, 2014 account of natural gas explosion in rural Kentucky; March 31, 2014 Williams Pacific Northwest LNG Facility Explosion)

B. Commissioner [Ware] is Not Disqualified From Participating in the Decision on this Application

The Commission concludes that all Planning Commission members who participated in the decision were capable of rendering a fair judgment.

Petitioner's call attention to the following chain of events:

January 9, 2014

- Commissioner Brosi, who prior to reviewing the record casts an affirmative vote at the January 9, 2014, meeting in favor of the applicant request for a Major Amendment. Planning Department Staff advise that Mr. Brosi cannot vote because he has not reviewed the record. Mr. Brosi's vote is disallowed.
 - Petitioners believe, even unknowingly, Mr. Brosi did in fact publicly demonstrate bias in favor of the applicant by casting an affirmative vote prior to reviewing the record.
- Once Commissioner Brosi's vote was disallowed the vote became a tie vote and the matter is deemed denied.
 - Pursuant to LUDO Section 2.300 (3) (j) "If a majority of the quorum fail to agree, and there is no lower decision, the matter shall be deemed denied, unless members preset at the hearing vote to reschedule the deliberation."
- Planning Director Keith Cubic then instructed the Commission that it must affirm that it could not reach a majority vote, in order for the matter to be appealed to the Board of Commissioners. The matter was affirmed with the motion passing unanimously with Commissioner Brosi abstaining.
 - Planning Director Keith Cubic does not instruct or inform the Planning Commission that it must or can reschedule a deliberation.

- Petitioners believe the LUDO is unmistakable in intent and spirit that an action to reschedule a deliberation must take place at the same meeting. No mention or instruction to this effect was provided to the Planning Commission.
- A Petitioner overhears members of the applicant contingent discussing the meeting outcome and strategizing with the applicant attorney on how to solicit Commissioner Brosi's vote to be counted as they exited the Courthouse following the January 9, 2014 meeting.
 - Petitioner is willing to testify to this account under oath.

January 10, 2014

- A notice of Public Meeting advising that on Wednesday January 22, 2014 at 3:30 p.m. in Room 103 of the Justice Building the Planning Commission will hold a public meeting solely for the purpose of adopting findings to memorialize their action resulting from a lack of a majority decision in the Pacific Connector matter.

January 15, 2014

- A telephone conference is scheduled with the applicant and Planning Director Keith Cubic.

January 16, 2014

- The public meeting scheduled for January 22, 2014, to adopt findings in the Pacific Connector matter was cancelled.

January 21, 2014

- A telephone conference is scheduled with the applicant attorney, Planning Director Keith Cubic, Planning Staff member Cheryl Goodhue and Senior Planner Stuart Cowie. Although requested by Petitioner McLaughlin, no meeting notes were produced.

January 22, 2014

- The day of the cancelled Special Planning Commission meeting a telephone conference between Planning Staff and the applicant attorney takes place.

January 23, 2014

- The day after the telephone conference takes place, the cancelled Special Planning Commission meeting is rescheduled to February 5, 2014.

January 24, 2014

- A notice is received from the Planning Department informing parties that the January 22, 2014 public meeting of the Planning Commission was cancelled due to lack of a quorum and was rescheduled to Wednesday, February 5, 2014.
- The purpose of the meeting has changed and the notice now states that the Planning Commission will either adopt findings memorializing their split-vote decision (which had already been affirmed on January 9, 2014 at the behest of the Planning Director) or reschedule deliberation pursuant to 2.300.j. of the LUDO.

February 5, 2014

- The Special Meeting Agenda for February 5, 2014 states, **“THE PLANNING COMMISSION WILL TAKE ACTION TO EITHER:**
 - 1) ADOPT FINDINGS MEMORIALIZING THEIR SPLIT DECISION OF JANUARY 9, 2014, OR:**
 - 2) RESCHEDULE DELIBERATION PURSUANT TO 2.300.J OF THE LAND USE AND DEVELOPMENT ORDINANCE.”**
- Attached to the agenda is the Planning Director’s report of February 5, 2014, containing information noticeably drafted to induce the Planning Commission to reschedule deliberations and not memorialize their prior vote.
- As a final comment in the report it is mentioned that the Planning Department has prepared draft findings to memorialize the Planning Commission’s prior action of a tie vote and application denial on the LNG for consideration this evening if no reschedule for further deliberation is authorized.
 - At no time are the draft findings memorializing the prior Planning Commission vote of a tie vote produced or provided to the Planning Commission for review. The draft findings are not included in the Planning Director report to the Planning Commission.
- There is no discussion other than an immediate inquiry by Commissioner Ware asking why Commissioner Brosi had not been allowed to participate in the vote. He also asked if Commissioner Brosi could have participated in the vote if he had taken the time to review the Record prior to the vote.
- Planning Director Cubic then states that if the Commission decided to reschedule the deliberation, it would allow Commissioner Brosi time to review the record and then he would be able to participate in the deliberation.
- Mr. Cubic further stated that at the next meeting, Commissioner Brosi could then reveal that he had reviewed the Record, that he had no conflict of interest and the Commission could then proceed to a vote with all Commissioners participating.
- There is no discussion.
- A motion is then made by Commissioner Ware and seconded by Commissioner Seonbuchner to reschedule deliberations on the Pacific Connector Gas Pipeline, LP request for a Major Amendment. The motion carries.

February 7, 2014

- A notice is sent advising that the Planning Commission has made a decision to reschedule deliberations on the Pacific Connector Gas Pipeline pursuant to LUDO Section 2.300.3.j based on the previous January 9, 2014 public meeting in which the Planning Commission vote was split three to three; with mention that no further opportunity will be allowed for public testimony. The meeting is scheduled for February 20, 2014.
- No information is provided announcing that Commissioner Brosi will now be participating in the deliberations.

February 12, 2014

- Correspondence from Petitioner McLaughlin is directed to the Planning Commission expressing concern regarding the reconsideration and redeliberation decision and new information submitted into the record by Planning Commissioner Keith Cubic regarding instructions and bias presented by the Planning Director.
 - No response is received and the correspondence is kept out of the record under the pretense “it is new testimony.”

February 20, 2014

- The Planning Commission does not redeliberate their decision from the January 9, 2014 meeting, rather new deliberation proceedings are conducted and Commissioner Brosi is included in the process. The proceedings confirm that the pipeline will not provide natural gas to Douglas County. It was then determined that public need is not a part of the decision making criteria.
- Planning Commission members hold considerable discussion, which denotes a lack of understanding of the process, requirements and authority of the Planning Commission.
- Chair Goirigolzarri clarifies the import or export of gas has no impact on the criteria for approval. Commissioner Ware moves, seconded by Commissioner Seonbuchner to approve the Major Amendment with the conditions as outlined by Staff. A myriad of other motions and seconds and clarifications ensue before a vote is held and the motion is approved with Commissioner’s Goirigolzarri, Murphy, Seonbuchner and Ware approving the motion and Commissioners Duckett and Hawks opposing the motion. The motion carries five to two to approve the Major Amendment to the Conditional Use Permit.
- Planning staff indicate that the Applicant will prepare the Findings of Fact for the Planning Commission to review and approve at the March 20, 2014 Planning Commission meeting.

March 20, 2014

- The Findings of Fact prepared by the Applicant Attorney granting the Major Amendment and thus removing the highly controversial Condition No. 12 limiting the pipeline for import of LNG only are approved by the Douglas County Planning Commission.

Petitioners call attention to Section 2.300 (3)(b.) of the Douglas County LUDO, which states, “No member shall serve on any proceeding in which such member has bias. Meeting minutes and transcripts clearly demonstrate bias by Commissioner Ware and suggested bias by Commissioner Brosi.

Petitioners believe it is of paramount importance that the integrity of the Planning Department, Planning Commission and the Board of Commissioners be observed and held to the highest ethical standards to protect and preserve public trust.

Petitioners find the chain of events, the subsequent and overt change in prescribed actions to the Planning Commission and the consequent change in decision from the meeting of January 9, 2014, extremely disturbing and questionable. Moreover, Petitioners believe distinct bias in favor of the applicant is suggested by events and actions occurring subsequent to the January 9, 2014 Planning Commission meeting.

IV. Findings Under Applicable Approval Criteria

- A. Article 3 – Exclusive Farm Use – Grazing Zone
- B. Article 2 – Timberland Resource Zone
- C. Article 5 – Farm Forest Zone

Pacific Connector Gas Pipeline LP request for a Major Amendment to a previously approved Conditional Use Permit & Utility Facility Necessary for Public Service. Planning Department File No. 13-047.

Planning Director Keith Cubic made the following statement to the Planning Commission meeting at its meeting of February 20, 2014:

“For a pipeline in exclusive farm use zone there are additional standards that would apply if this project was not under review by the Federal Energy Regulatory Commission. And those are the standards that are often associated with, “is there a utility facility or a pipeline necessary for public service?” But in the case of review of a pipeline that is subject to a Federal Energy Regulatory Commission the review standards that are set out to judge necessary for public service are eliminated from the formula. But the statute, the rule, and the local code say things like reasonable alternatives, vocational dependency, existing rights of way, costs are not and cannot be considered in the review criteria for a pipeline that is subject to both the Federal Energy Regulatory Commission Review.”

Petitioners are challenging the accuracy of the Planning Director’s statement and the applicant’s assertion that, “public interest,” for natural gas pipelines is decided exclusively by federal agencies as it pertains to “whether the PCGP is a utility facility necessary for public service” in the applicable zones. Petitioners offer the following information:

The U.S. Congress passed the federal Coastal Zone Management Act [CZMA] in the early 1970's to address competing uses and resource impacts occurring in the nation's coastal areas. The Act included several incentives to encourage coastal states to develop coastal management programs. One incentive was a legal authority called “federal consistency” that was granted to coastal states with federally approved coastal management programs. The federal consistency provisions of the CZMA require that any federal action occurring in or outside of Oregon's coastal zone, which affects coastal land or water, uses or natural resources must be consistent with the Oregon Coastal Management Program. The federal consistency requirement is a rather unique concept in that state programs for coastal management cannot generally be preempted by federal law (FERC).

The Oregon Coastal Management Plan reviews Federal Licenses & Permits, in particular the Federal Energy Regulatory Commission, and specifically:

- *Power plant siting and transmission lines/construction and operation of hydroelectric plants*
- *Interstate pipelines*
- *Permits for construction and operation of facilities needed to import or export natural gas*

The Major Amendment to the CUP pertains to lands in the Coastal Zone Management Area and is therefore subject to the provisions of the Coastal Zone Management Program (CZMP). The CZMP stipulates to the Comprehensive Plans and land use regulations adopted by local governments to provide the enforceable policies for the type of energy project proposed by Pacific Connector Gas Pipeline, LP, in the Coastal Zone Management Area. The CZMP states, "LNG projects that were formerly subject to the exclusive jurisdiction in the EFSC review process are now subject to the local planning and state agency review process. This is due to the pre-emption effects of the Energy Policy Act of 2005. The CZMA is Douglas County's opportunity to maintain its equal footing with the Federal Government in its decision-making capacity and should not be misspent or ignored as irrelevant.

Petitioners are therefore, challenging instructions and information provided to the Planning Commission in outlining the scope of their authority in determining and applying approval criteria.

Specifically, as it pertains to the applicable zones Douglas County LUDO Section 1.090 defines UTILITY FACILITY as: A communication facility or a facility constructed for a public utility, including but not limited to: facilities for generating power on less than 10 acres; new distribution lines (gas-oil-geothermal) with a right-of-way of 50 feet or less width, or new distribution lines for electric transmission with a right-of-way of 100 feet or less width; water intakes, treatment, pumping and distribution; wastewater treatment; rural fire protection facility; utility lines, accessory facilities or structures not limited to an individual end user and not in a public right-of-way which are necessary for public service (electricity, gas, water, telephone, cable); and, equipment for the production, transmission, delivery or conveyance of communications, with or without lines, including towers. These uses may be subject to limitations as specified in the applicable zoning designation. Utility facilities are locationally dependent if they must cross or be located on land to achieve reasonably direct routes or service or to meet unique geographic needs. Temporary workforce housing facilities may be provided in accordance with OAR 660-033-0130.

Douglas County LUDO Section 1.090 defines PUBLIC UTILITY as: Any corporation, company, individual, association of individuals, or its lessees, trustees or receivers, that owns, operates, manages or controls all or any part of any plant or equipment for the conveyance of telegraph, telephone messages with or without wires, for the transportation as common carriers, or for the production, transmission, delivery or furnishing of heat, light, water or power, directly or indirectly to the public.

Petitioners deem that Utility Facility for the purposes of the Pacific Connector Gas Pipeline project does not meet zoning requirements as outlined in the LUDO.

In addition, with the removal of Condition No. 12 the CUP no longer meets the requirements of Public Utility as defined and included in the definition of Utility Facility. Public Utility is specific in its definition and intent – “for the transportation as common carriers or for the production, transmission, delivery or furnishing of heat, light, water or power, directly or indirectly to the public.”

Petitioners challenge that in the absence of a specific definition of “Public,” in the Douglas County LUDO it is reasonable to conclude that it does not intended to include persons outside of Douglas County, the State of Oregon, or the United States.

Moreover, Petitioners call attention to the sanctity of “public” and “public use,” in Douglas County land use decision-making as specified in Section 2.32.040 of the Douglas County Code and Oregon Revised Statute 35.015

Section 2.32.040 Prohibit Taking Property for Private Use. A recent decision of the United State Supreme Court, *Kelo v. City of New London, Connecticut* (04-108), may allow the use of eminent domain powers for the benefit of purely private entities despite the limitations on that power contained in the federal constitution. The Douglas County Board of Commissioners is opposed to such encroachments on the traditional rights of owners of real property. The Douglas County Board of Commissioners believes that the power of eminent domain should be used to acquire property only for public purposes, as traditionally has been the case in Oregon. **(Ord 2005- 10-01, Eff 2-1-06)**

35.015 Prohibition on condemnation of certain properties with intent to convey property to private party; exceptions. (1) Except as otherwise provided in this section, a public body as defined in ORS 174.109 may not condemn private real property used as a residence, business establishment, farm or forest operation if at the time of the condemnation the public body intends to convey fee title to all or a portion of the real property, or a lesser interest than fee title, to another private party.

Petitioners assert that the approval of any land use decision by a Douglas County, Oregon authority, which can result in the taking or transfer of private lands using eminent domain by any public body is in direct violation of both State and local laws.

V. Decision

Based upon the [preceding] Findings of Fact and the evidence contained in the entire record, the Commission finds that the proposed Major Amendment PD 09-045 is consistent with the applicable approval criteria, and hereby approves the application for the requested Major Amendment, ie., the removal of the 2009 condition limiting the pipeline to “import only” and the approval of the alternative alignment in the Weaver Ridge area subject to . . .

In light of the removal and absence of Condition No. 12 (import only) and a definition of “public utility and utility facility,” as outlined in the Douglas County LUDO Petitioners deem it is reasonable to conclude that applicable approval criteria is not met.

Petitioners challenge whether the Planning Commission has thoroughly applied the provisions of the Douglas County Comprehensive Plan in its considerations of applicable criteria and whether its decision is consistent with Statewide Planning Goals.

Petitioners believe the Planning Commission has, with some exceptions, attempted to make a qualified and informed decision based on the information it has received from the Douglas County Planning Department.

However, Petitioners are concerned that sufficient expertise and technical understanding exists within the Douglas County Planning Department to ensure that all legal, legislative, technical, scientific and pertinent matters have been satisfied in addressing this highly sensitive application and request for a Major Amendment. Petitioners further question whether the Planning Department has relied too heavily on the applicant and the applicant attorney to guide and propel this Conditional Use Permit forward to secure their desired decision.

Conclusion:

Petitioners request the Douglas County Board of Commissioners consider this Notice of Review and render a decision consistent with the evidence and facts presented in this Notice and determine that Pacific Connector Gas Pipeline, LP, Conditional Use Permit & Utility Facility Necessary for Public Service (PD File No. 09-045); Planning Department File No. 13-047 is invalid.

Moreover, Petitioners appeal to the Board of Commissioners to fully examine competencies in the Planning Department given evidence of oversights to the LUDO, and the distinct disorder, and confusion demonstrated in the Planning Commission's proceedings as it pertains to this issue, evident in transcripts of the meetings.

Petitioners recognize it is probable the Board of Commissioners will remand this issue back to the Planning Department and offer the applicant the opportunity to reapply for a new Conditional Use Permit without prejudice, allowing for an authentic and more judicious process. Petitioners would like the Board of Commissioners to understand its desire is simply to have a fair process that respects and follows the law.

Sincerely,

John Clarke
Party

Richard Chasm
Party

Stacey McLaughlin
Party

Exhibits and Supporting Documentation
Attached and Included in the Notice of Review
**Appeal of a decision regarding land use matters pursuant to Section 2.500 of the
Douglas County Land Use and Development Ordinance**
Date: March 31, 2014

Pacific Connector Gas Pipeline Extension Requests 2011/2012/2013
U.S. Department of Energy Notice of Application to export LNG September 22, 2011 (Free trade)
U.S. Department of Energy Notice of Application to export LNG May 23, 2012 (Non-Free Trade)
Jordan Cove – Pacific Connector, Project Update/Press Release announcing December 7 (17), 2011 received approval from the U.S. Department of Energy to “export” natural gas to U.S. free trade partners
139 FERC 61,040, United States of America – Order, Vacating Certificate and Authorizations Pertaining to 2009 approval
Jordan Cove Energy Project Press Release – (ownership, Veresen/Williams/Pacific Connector et. al.) s/Vern Wadey
Veresen Press Release, May 22, 2013 – announcing filing of application to construct and operate an (LNG) export facility (Jordan Cove), “application follows more than a year of engineering and design activities (demonstrating prior knowledge to all requested extensions by Pacific Connector, Jordan Cove Project Partner)
Pacific Connector Gas Pipeline Correspondence dated June 6, 2013 to Federal Energy Regulatory Commission requesting certificate of public convenience and necessity authorizing export of LNG
News article regarding Washington State Mudslides (allvoices.com) 2014
Minutes of Planning Commission Meetings On-File: October 17, 2013 Written/Transcript; December 12, 2013/Transcript; January 9, 2014 Written/Transcript on file; February 5, 2014 Written/Transcript on file; February 20, 2014; Written/Transcript on file
Meeting Notices of Douglas County Planning Commission: on file
Planning Department Email/Correspondence: on file

Exhibit 12

Summary of landowner commenters' impacts

Property owner: Bob Barker (FERC Intervenor)

Location: 2724 Old Ferry Road Shady Cove, OR 97539

Property Impact summary: Mr. Barker and his wife purchased their property as a retirement home after a lifetime of saving. Almost one-third of the 6.2-acre property would be used as a proposed drill entry site for a 3,000 foot Horizontal Directional Drill (HDD) under the Rogue River. 1.8 acres of the property would be cleared of all trees and other vegetation and graded to level the ground to accommodate the construction work area and the 95-foot wide pipeline easement. The clearing will include removal of pine, cedar and oak trees within the easement area and the temporary construction area. The aesthetic impacts on this residential property would be significant and long lasting.

HDD work area requirements include a drill rig, driller's console generator, drill pipe, crane, parts van, mud cleaning unit, mud mixing tank, mud pumps, mud pit, FRAC tanks, drilling mud, parking trailer and containment berm. Spilling of drilling mud (FRAC out) is a distinct possibility on our property due to loose soil near the surface of the early part of the drill. The property will be uninhabitable during the weeks, and perhaps months of drilling and pipe pull-back operations and unsafe for our animals. If the HDD is successful, a 500-foot trench will be dug through the property to a depth of 6 feet in preparation for the laying of the 36" pipe. After pipeline construction the clearing of trees, grading and trenching will have degraded the primary aesthetic values the Barker's sought in purchasing this rural residential property.

Property owner: John Clarke (FERC Intervenor)

Location: 1102 Twin Oaks Lane Winston, OR 97496

Property Impact summary

The Pacific Connector Pipeline would impact the entire ridgeline crossing Mr. Clarke's 80-acre forested property replacing a scenic ridgeline with a permanent clearcut that will significantly decrease both Mr. Clarke's enjoyment of his property and its value. Local real estate agents have informed Mr. Clark that if the pipeline is constructed the value of his property would be decreased by 35 to 65%. The proposed pipeline would also impact and put at risk the watershed that is used for domestic water supply on the property. Like many other landowners, Mr. Clarke's concerns about the risk of a high magnitude accident and the likely forest fire that would result would significantly impair Mr. Clarke's enjoyment of his property.

Property Owner: Oregon Women's Land Trust (FERC Intervenor)

Location: T30S, R4W, Section 25; MP 86 of the proposed pipeline. No property address. Postal address is: P.O. Box 1692, Roseburg Oregon, 97470.

Property Impact summary: The Pacific Connector pipeline would directly impact 7.8 acres of this scenic 147-acre property that is managed as a non-profit land trust for its conservation values. The pipeline would impact a key forested ridgeline important to the non-profit mission of this conservation focused property. The property would be impacted by a clearcut along the pipeline route which is between 95' to 150' wide in places in addition to construction storage areas on either side of the clearcut. The property has very significant wildlife values for spotted owls and other key Northwest Forest species that would be degraded by the proposed pipeline.

Property Owner: Evans Schaaf Family LLC (Deborah Evans and Ron Schaaf owners)

Location: Clover Creek Road in Klamath County. No street address.

Property Impact summary: The Pacific Connector Pipeline would cross .45 miles of the Evans Schaaf Family LLC's 157-acre forested property. A 95' clear-cut would be cut across their property and 50' of that area would be permanently removed from timber production on what was purchased as timber land. A hydrostatic testing site would also impact their property. The pipeline would result in long-term management impacts due the restriction on tree planting within the pipeline right of way, limitations on heavy equipment movement over the right of way, and disturbance from right of way management activities such as herbicide spraying and vegetation clearing. Importantly, because of safety concerns related to the Class I pipeline, if the pipeline is built the owners will not proceed with planned improvements to the property, including a residential structure, which was an important reason for their purchase of the property.

Property Owner: Stacey and Craign McLaughlin

Location: 799 Glory Lane Myrtle Creek, OR 97457

Property Impact summary: The Pacific Connector pipeline would impact one-mile of Stacey and Craig McLaughlin's 357-acre forested property and home site from Milepost 68 to Milepost 69. The McLaughlin's have planted over 10,000 Douglas Firs on the property and invested significant efforts to improve the property over the last ten years. The property is their primary personal asset. Pipeline construction and operation will permanently remove at least a mile of pipeline right of way from timber production and create significant land management obstacles after construction that will directly affect the property's value for timber production. The McLaughlin's have been informed by a local realtor they consulted that the pipeline if constructed would reduce the resale value of their property by 40 to 50% because of abundant public concerns about pipeline risks and the related risks of wild land fire.

Exhibit 13

The Compliance and Safety Records of Williams (WMB), Williams Partners L.P. (WPZ), Williams Midstream

- 2002 – Williams is reported to be in **Financial distress** and on **verge of bankruptcy** ^{(38) (19)}
- 2002 – Williams has class action **lawsuit** filed against it alleging that it **failed to disclose** failing financial conditions ⁽³³⁾
- 2003 – Williams **pays** \$20 million (along with Encana Company) to settle claims of **reporting false data to manipulate** the U.S. natural gas market ⁽²⁵⁾
- 2004 – **FINED** \$30,000 for a fire at a well in *Parachute, Colorado* ⁽⁴⁷⁾
- 2007 – Williams agrees to pay \$290 million to settle class action **lawsuit** filed in 2002 ^{(19) (32)}
- 2008 – Natural gas **explosion** in Virginia [Transco] the blast ripped a 32-foot section of pipe from the ground and caused a 1,100 feet burn zone. **Property damage** reported to **exceed \$3 million** ⁽³⁵⁾
- 2009 – **FINED** \$952,000 for **failure to monitor** corrosion adequately with the Virginia pipeline explosion in 2008 ^{(36) (43)}
- 2010 – Transco Pipeline leak in Texas. **Leak was not reported for 4 days**. The 1/4 inch diameter leak caused a reported \$57,000 in property damage. **Aerial patrol did not see the leak**. Found by an operator who saw some bubbles. ⁽²²⁾
- 2010 / 2011– **FINED** \$275 Thousand over **failing to implement** and/or maintain storm water **measures to prevent potential pollutants** during planned construction in *Parachute, Colorado*. State inspectors notified Williams (Bargath) in Nov. 2010 of violations and told them to take immediate action. According to report, **Williams did not fix violation for 7 months**. ^{(8) (28)}
- 2011 – **FINED** \$23,000 by PHMSA for **failure to conduct own annual inspections** of Natural Gas compressors stations in Texas and Louisiana ⁽¹⁸⁾
- 2011 – [Transco] Natural Gas Pipeline **rupture & explosion** in Alabama. **8 acres burn**. Coating failure blamed as cause. Reports state that **the corrosion was not recognized by Williams** even though they claimed to have systems in place. ^{(2) (36)}
- 2012 – Gas leak caused **explosion** at Natural Gas Compressor Station in Pennsylvania. **Williams restarts the station within 24 hours** and started pumping fracked gas **despite request** from PA Dept. of Environmental Protection **not to do so**. DEP states they make it very clear on the above matter but because it was not an official order no fines were issued. **1 ton of Methane released**. ^{(2) (16)}
- 2012 – Transco/Williams **FINED** \$50,000 by PHMSA for **failure to follow own internal policies** with controlling corrosion in Natural Gas pipeline in NY ⁽¹⁸⁾
- 2012 – Transco natural gas **leak** in New Jersey ^{(18) (44)}

- 2012 (Dec. 20) – The **beginning** of the **Natural Gas Liquid (NGL) pipeline leak** in *Parachute, Colorado (population 1,000)*. Parachute Creek runs through the small town, which is nestled next to the Colorado River. ⁽⁸⁾
- 2013 (Jan) – **Williams discovers leak of NGLs** in *Parachute* plant while working on construction to expand the plant. Reports say the **leak was found by ACCIDENT**. Leak stopped, but **Benzene**, a cancer causing agent, has **contaminated soil**. Williams says leak not affecting creek. ^{(8) (34)}
- 2013 (March 8) – Williams begins **cleanup (2 months later) of Benzene leak** (NGL) in *Parachute, CO*. Authorities and landowners notified that the **soil has been contaminated**. No mention that groundwater is poisoned. Reports say that **Williams didn't report the spill/leak** earlier because they thought less than 25 gallons had leaked. ^{(8) (12)}
- 2013 (March 15) – **Groundwater** in *Parachute* is **contaminated with Benzene** from NGL leak. Spill finally announced to public. **Benzene is cancer-causing** agent that breaks down bone marrow. ^{(8) (20) (34) (41)}
- 2013 (March) – Reports say **Williams/Transco rejects U.S. Army Corp of Engineers safety recommendations** in connection with the proposed Rockaway Lateral natural gas pipeline, claiming the requirements would “needlessly delay” the project and force cost overruns. ⁽⁷⁾
- 2013 (March) – Williams Natural gas pipeline in West Virginia **ruptures** ⁽³⁰⁾
- 2013 (April) – *Parachute, CO* residents **question credibility of Williams** who is in charge of testing their water and want the government to take over. **Contamination** continues to **spread into their creek**. ^{(8) (42)}
- 2013 (April) – Williams say **faulty** pressure gauge cause of leak in *Parachute*. **Diesel found** at gates of Parachute water supply. **Benzene detected in creek**. State Health Dept takes over oversight of leak. ^{(8) (9)}
- 2013 (May) – Benzene levels rise in *Parachute, CO* creek. State agency tells **Williams violated it the law**. ⁽⁸⁾
- 2013 (May) – Williams announces it will not expand the *Parachute, Co* plant expansion NOT because of the NGL leak but due to low gas prices. ⁽⁸⁾
- 2013 (May 21) – Williams holds Analyst Day in New York City. CEO Alan Armstrong states they have been working on the Bluegrass pipeline project for about 9 - 10 months. Williams states Bluegrass Pipeline **is BIG and it's RISKY** in terms of permitting. ⁽⁴⁵⁾
- 2013 (June 13) – Williams’ Natural Gas Liquid (NGL) cracker plant that process NGLs in Louisiana **Explodes and Burns**. That chemical plant was **in middle** of \$350 million **expansion**. 700 contract workers were present; **2 people killed** (ages 29 & 47); 70 injuries; **62,000 pounds of toxic chemical released** ^{(1) (4) (5) (6) (39)}
- 2013 (June 14) – Investigations into **Williams Louisiana explosion** reveals **three years of noncompliance with Federal Clean Air Act**, Williams had **NOT conducted an OSHA inspection in 10 years**. ^{(4) (14)}

- 2013 (July 10) – Williams (Bargath) **FINED** \$7,854 by OSHA for **failing to protect workers they sent excavate toxic soil** near the Williams' *Parachute, Co* plant that leaked Benzene. Report states that **Williams did not have a decontamination procedure** or ensure its employees received safety training related to the spill. Williams states it has not agreed to or accepted OSHA's allegations. ⁽⁴⁹⁾
- 2013 (July 13) – Benzene levels increase at a point in the *Parachute, CO* Williams NGL leak. **130 tons per day of contaminated soil has been stockpiled.** ⁽³⁾
- 2013 (July 20) – Report shows that Williams expects to **remove and treat as many as 26 million gallons of groundwater** over a half-year to a year at the site of its natural gas liquids leak alongside Parachute Creek. **About 155,000 gallons of tainted groundwater removed in March has been disposed of in an injection well** in Grand County, Utah. ⁽⁵²⁾

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Pipeline vs Rail & Truck

While accidents associated with the transportation of hazardous materials via rail and road are more frequent than pipeline incidents, rail and truck spills are limited to the amount of product that can be held in transit.

According to a review of data from the Pipelines and Hazardous Materials Administration (PHMSA) completed by the Association of American Railroads, total railroad crude oil spills between 2002-2012 equaled less than one percent of the total pipelines spills (railroads spilled 2,268 barrels total vs. pipelines spilled 474,441 barrels total). Additionally, during the same time period, average pipeline spills were four times larger than the average rail spill (average 65 barrels by rail vs. average 266 barrels by pipeline).

Exhibit 14

We the undersigned landowners along the Pacific Connector pipeline route, agree with the letter submitted by Landye Bennett Blumstein LLP Attorneys on behalf of landowners: Robert Barker, John Clarke, Oregon Women's Land Trust, Evans Schaaf Family, LLC and Stacey and Craig McLaughlin.

Neal C. Brown Family LLC, Pamela Ordway & Liz Hyde, 14138 NW Lakeshore Ct, Portland, OR 97229

Landowners United, President Clarence Adams, 2039 Ireland Rd, Winston, OR 97496

Alisa Acosta, 536 Ragsdale Road, Reno, NV 89511

Andrew Napell, 28759 Loma Chiquita Rd., Los Gatos, CA 95033

Janet Stoffel, 62890 Olive Barber Road, Coos Bay, OR 97420

Arnella Hennig, 1677 Westhaven Ave, Salem, 97304

C2 Cattle Company LLC, Jason Saulan, 18501 Hwy 140, Eagle Point, OR 97524

Nova and Ellen Lovell, 61984 Old Wagon Rd, Coos Bay, OR 97420

Johannes A. Besseling, 3125 W Military Ave, Roseburg, OR 97471

Curtis and Melissa Pallin, Pallin Angus, 62225 Catching Slough Rd., Coos Bay, OR 97420

Beulah Reddington, 14602 Hwy 39, Klamath Falls, OR 97603

Nicholas Garcia, 20136 Crystal Mountain Ln, Bend, OR 97702

James & Archina Davenport, 61954 Old Wagon Rd., Coos Bay, OR 97420

Don & Tammy Eichmann, 3170 Days Creek Road, Days Creek, OR 97429

Myrtle Creek Farm LLC, Delbert Blanchard, PO BOX 3790, Tualitin, OR 97062

Ed Plume, p.o.35-134 citadel rd., Trail, OR 97541

Emily J McGriff, 61869 Old Wagon Road, Coos Bay, OR 97420

Don & Shirley Fisher, 97182 LONEpine LN, Coquille, OR 97423

Marcella Laudani, PO Box 71, Shady Cove, OR 97539

Robin Lee, 415 Sunrise Av, Medford, OR 97504

Lyle and Janet Cross, 1691 Ireland Road, Winston, OR 97496

Joan D. Dahlman, 344 Honey Run Ln, Winston, OR 97496

John Shoffner, 1507 N. Modoc Ave., Medford, OR 97504

Judy Faye Whitson, 2002 Kent Creek Road, Winston, OR 97496

Kenneth and Kristine Cates, 1688 Denn Road, Camas Valley, OR 97416

Linda Sweatt, 1170 Winsor, North Bend, OR 97459

Ervin and Mitzi Sulfridge, 800 Honey Run Ln, Winston, OR 97496

James E. Dahlman, 344 Honey Run Ln, Winston, OR 97496

Old Ferry Road Committee, Inc., John and Pat Roberts, 2525 Old Ferry Rd., Shady Cove, OR 97539

Paulette Landers, 66069 North Bay Rd., North Bend, OR 97459

Rebecca J Edwards, 1729 Ireland Rd, Winston, OR 97496

Ron & Molly Foord, 94615 Boone Creek Ln., Coos Bay, OR 97420

Russell Lyon, 3880 Days. Creek Road, Days Creek, OR 97429

Don and Jonnie Farmer, 13087 Sitkum Lane, Myrtle Point, OR 97458

Suzanne Dickson, 3181 Fisher Rd., Roseburg, OR 97471

Sandra Lyon, 3880 Days Creek Roac, Days Creek, OR 97429

We the undersigned landowners along the Pacific Connector pipeline route, agree with the letter submitted by Landye Bennett Blumstein LLP Attorneys on behalf of landowners: Robert Barker, John Clarke, Oregon Women's Land Trust, Evans Schaaf Family, LLC and Stacey and Craig McLaughlin.

Barbara Brown, 4864 SW Wembley Pl, Beaverton, OR 97005

Richard Brown, 2381 Upper Camas Rd, Camas Valley, OR 97416

Toni Woolsey, P O Box 151 - 213 Ragsdale Rd, Trail, OR 97541

John Caughell and Tammy Bray, 61982 Old Wagon rd, Coos Bay, OR 97420

William and Wendy McKinley, 2579 Old Ferry Road, Shady Cove, OR 97539

Nonda Henderson, 58375 Fairview Rd, Coquille, OR 97423

Frank Adams, 1731 Ireland Rd, Winston, OR 97496

Auer Jersey Farm, Bryon L. Auer, 15331 Old Highway 99, Myrtle Creek, OR 97457

john muenchrath, 62241 old sawmill road, coos bay, OR 97420

Frank Diaz, P.O. Box 109, Malin, OR 97362

Richard and MerryLou Rust, 2378 Upper Camas Road, Camas Valley, OR 97416

Dennis Henderson, 3 Walnut Hollow Lane, Holmdel, 7733

David Park, 800 old trail creek road, trail, OR 97541

Liz Hyde, 4732 Rebecca St. NE, Salem, OR 97305

Bill and Sharon Gow, 4993 Clarks Branch Road, Roseburg, OR 97470

Tom Loustalet, 37290 Loveness Road, Malin, OR 97362

John and Lynn Hoot Schofield, 1868 Hoover Hill Road, Winston, OR 98056

Cynthia Garrett, 13674 Sitkum Lane, Myrtle Point, OR 97458

Dan Hammon, P.O. Box 154, Butte Falls, OR 97522

Robert Clarke, 1102 Twin Oaks Lane, Winston, OR 97496

Calvin Clack, 660 Bilger Creek, Myrtle Creek, OR 97457

Raynor Clack, 5589 North Myrtle, Myrtle Creek, OR 97457

Marie & Gary Worthington, 149 Towhee Lane, Tensile, OR 97481

Gladys Milton, 655 Wildcat Road, Camas Valley, OR 97416

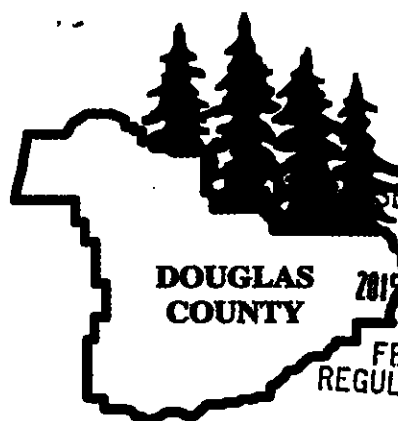
Chris Mathas, 3969 Obenchain Rd, Butte Falls, OR 97522

Katherine R Clark Loving Trust, 18809 Hill Rd, Klamath Falls, OR 97603

ORIGINAL

Exhibit 15

CP13-492


 FILED
 SECRETARY OF THE
 COMMISSION

**DOUGLAS COUNTY
 BOARD OF COMMISSIONERS**
CHRIS BOICE SUSAN MORGAN TIM FREEMAN

1036 SE Douglas Ave., Room 217 • Roseburg, Oregon 97470

 2015 OCT 19 A 11:57
 FEDERAL ENERGY
 REGULATORY COMMISSION

October 5, 2015

We, the Douglas County Board of Commissioners, have concerns about the Pacific Connector Pipeline which will cross the center of our county. In Douglas County the route includes approximately seven miles of coastal zone and approximately 58 miles of non-coastal zone (65 miles total).

In this letter we will list two major concerns and ask your agency consider them and incorporate conditions into any authorization action.

Concern #1 is safety. Impacted property owners and other community members continue to raise safety concerns about the proposed pipeline. We, the Board, share those concerns. The County reviewed and approved a conditional use permit for the pipeline route and construction in coastal Douglas County. Safety was considered in the County decision of approval. For the coastal zone we required the pipeline be constructed to Class 2 design standards and that an additional automatic block valve be located in our coastal zone pipeline route. On behalf of our citizens the Board of Commissioners request that FERC require the pipeline constructed in and through Douglas County be required to meet the Class 2 design standards and Class 2 standards for installation of block valves.

Concern #2 is use of eminent domain. The Douglas County Board of Commissioners recognize and support the language as stated in the Bill of Rights as the 5th amendment to the Constitution that says "nor shall private property be taken for public use, without just compensation." The Board does not believe the use of eminent domain for the acquisition of private property for the Pacific Connector Pipeline, a privately owned company, is appropriate. We request FERC to include a condition in any approval of the Pacific Connector Pipeline through Douglas County that eminent domain not be used and Pacific Connector be required to negotiate with property owners to reach agreement on route, safety and compensation.

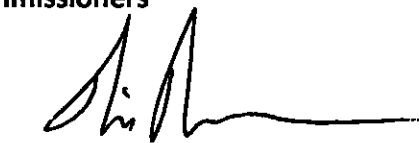
We believe both the issues listed should be addressed by FERC in the Pacific Connector review decision. We raise these issues in the interest of impacted property owners and the citizens of Douglas County.

Please feel free to contact us if you have questions.

Douglas County Board of Commissioners



Susan Morgan, Chair



Tim Freeman



Chris Boice

References:

http://www.archives.gov/exhibits/charters/print_friendly.html?page=bill_of_rights_transcript_content.html&title=The%20Bill%20of%20Rights%3A%20A%20Transcription

<http://www.rcalaw.com/condemnation-issues-under-the-natural-gas-act>

https://www.law.cornell.edu/anncon/html/amdt5bfrag4_user.html

Document Content(s)

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Exhibit 16

September 9, 2015

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street NE, Room 1A
Washington, DC 20426

Re: Docket Nos. 13-492-000; 13-483-000

Dear Ms. Bose:

I am a Commissioner for the County of Douglas, Oregon. The Pacific Connector Gas Pipeline is proposed to traverse both public and private lands in Douglas County. I was not in office when the County initially approved a conditional use permit for this pipeline. I am concerned about construction safety standards; in particular construction standards in a wild fire situation.

Many of the landowners in Douglas County have expressed serious concerns about adequate review of the pipeline construction in a rural area. As their local representative, I am hereby requesting that FERC provide Douglas County with a supplemental environmental impact statement [SEIS] in light of recent wild land fires along the Pacific Connector pipeline route or outline in the current SEIS where this issue has been considered.

At a minimum I request FERC address and respond to the following:

1. How will a wild land fire be fought with a buried 36-inch high-pressured gas pipeline and above ground block valves in the fire or in the immediate vicinity?
2. How will a wild land fire impact the integrity of pipeline construction and infrastructure both before and after a wild land fire?
3. What are the new environmental consequences of constructing a pipeline in burnt soils and crossing water bodies in burned areas?
4. What are the pipeline owner's responsibilities, post catastrophic wild fire event, either resultant of a natural caused wild land fire or caused by a breach or explosion of the pipeline infrastructure.
5. What mitigation efforts proposed in the original DEIS have now been impacted by the occurrence of the Stouts Creek Wild land fire – either as a mitigation area for other impacted areas or as an area requiring mitigation efforts.

6. What new safety standards for pipeline construction and engineering must be examined to insure the safety of landowners and residents adjacent to and affected by pipeline construction?
7. How will firefighter safety be insured in the wake of a wild land fire with a 36-inch high-pressured natural gas pipeline to contend with?

I understand that FERC is scheduled to release the Final Environmental Impact Statement at the end of the September. I wonder if the above questions were considered in the development of the E.I.S. These questions must be asked and answered with allowable public input and inquiry before any release of a Final Environmental Impact Statement can be considered.

Further review is hereby requested as outlined in this correspondence. I will also be asking that Oregon's Congressional delegation support this request on behalf of the residents of Douglas County.

Sincerely,

Chris Boice
Douglas County Commissioner

C: Congressman Peter DeFazio
Senator Jeff Merkley
Senator Ron Wyden

Document Content(s)

Final FERC letter and exhibits.PDF.....1-138