

From: <u>dh.oregonwild@gmail.com</u> on behalf of <u>Doug Heiken</u>

To: FERGAS

Subject: FE Docket No. 12-32-LNG - Comments on Jordan Cove Energy Project, L.P.; Amendment of Application for Long-Term, Authorization To

Export Liquefied Natural Gas

Date: Tuesday, March 22, 2016 6:56:30 PM

Attachments: image.png

FROM: Doug Heiken, Oregon Wild | PO Box 11648, Eugene, OR 97440 | 541-344-0675 | dh@oregonwild.org

TO: U.S. Department of Energy (FE-34), Office of Regulation and International Engagement, Office of Fossil

Energy,

VIA: fergas@hq.doe.gov

DATE: 22 March 2016

RE: FE Docket No. 12-32-LNG - Comments on Jordan Cove Energy Project, L.P.; Amendment of Application for Long-Term, Authorization To Export Liquefied Natural Gas to Non-Free Trade Agreement Nations

Please accept the following comments from Oregon Wild regarding the proposed Jordan Cove Energy Project, L.P.; Amendment of Application for Long-Term, Authorization To Export Liquefied Natural Gas to Non-Free Trade Agreement Nations, https://www.federalregister.gov/articles/2016/03/03/2016-04733/jordan-cove-energy-project-lp-amendment-of-application-for-long-term-authorization-to-export. Oregon Wild represents approximately 15,000 members and supporters who share our mission to protect and restore Oregon's wildlands, wildlife and waters as an enduring legacy.

The Amendment seeks to increase the volume of LNG for which Jordan Cove requests export authorization from the equivalent of 292 Bcf/yr (0.8 Bcf/day) to the equivalent of 350 Bcf/yr of natural gas (0.96 Bcf/day).

We urge DOE to deny the application to amend the Authorization To Export Liquefied Natural Gas to Non-Free Trade Agreement Nations

because the Jordon Cove LNG Export Project and its associated 230 mile-long Pacific Gas Connector Pipeline are not in the public interest. In fact, we urge DOE to deny the underlying application for export authorization because it is no longer supported in light of FERC's finding that this project fails to provide public benefits.

On March 11, 2016, FERC made a finding that the Pacific Gas Connector pipeline does not provide public benefits that offset the significant adverse effects of the applicant exercising eminent domain on hundreds of private properties in the path of the Pacific Gas Connector Pipeline, and FERC said that without the pipeline there is not need for the Jordon Cover LNG Export Project. FERC's March 11 order said:

We find the generalized allegations of need proffered by Pacific Connector do not outweigh the potential for adverse impact on landowners and communities.

Because the record does not support a finding that the public benefits of the Pacific Connector Pipeline outweigh the adverse effects on landowners, we deny Pacific Connector's request for certificate authority to construct and operate its project, as well as the related blanket construction and transportation certificate applications.

http://www.ferc.gov/CalendarFiles/20160311154932-CP13-483-000.pdf

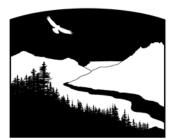
On March 22, 2016, pipeline applicant, Veresen, announced a "preliminary agreement" covering 25% of its pipeline capacity, but this is not a binding contract. It is just a last ditch effort to save their application. This is just another "generalized allegation of need" offered by the applicant. DOE should certainly not use this speculative non-binding preliminary agreement for a small fraction of its capacity to approve an expansion of export authorization.

Since this is an application to expand the export capacity of this project, we bring DOE's attention to several concerns that become more significant as the size of the project increases:

Increased export capacity means more LNG tankers in and out of the harbor. This will:

- increase navigation conflicts, both recreational and commercial. The LNG tankers require large exclusion zones for safety. These exclusion zones are long-lasting because the ships move slowly when in and near port. This imposes great hardship on local fishermen, recreational boaters, as well as other ships and commerce.
- increase the risk of shipping accidents;
- increase exposure to natural hazards such as earthquakes, tsunamis and Pacific storms:
- increase exposure to human error and accidents and sabotage involving planes and watercraft;
- increase pollution from the ships' engines while in port;
- increase water pollution and increase the risk of introducing invasive species from ballast water discharge, sewage spills, fuel spills, etc.
- Increased export capacity mean more fossil fuel use, more energy used for liquefaction, and ultimately more greenhouse gas emissions. This is an additive and cumulative adverse impact on earth's climate and ocean acidification.
- Increased export capacity and increased fossil fuel use also reduces incentives for much needed renewable energy investments in countries where the gas will be exported.
- Increased export capacity will cause increased local air quality impacts. Liquefying additional
 gas will require increased output from the South Dunes Powerplant. Moving more gas through
 the liquefaction trains, gas conditioning equipment, emergency flares, (and other fugitive
 emissions) will result in more leaks and emission of various wastes and by-products (both
 intentional and unintentional).

DOE may also "consider other factors bearing on the public interest ." We urge DOE to consider the following letter we sent to FERC last year addressing this project's lack of public benefits:



OREGON WILD

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Reference:

OEP/DPC/CB-2

Pacific Connector Gas Pipeline, LLC

Docket No. CP13-492-000

375.308(x)(3)

22 May 2015

TO: FERC, via e-comment

Subject: Jordon Cove / Pacific Gas Connector - public interest finding

Please accept the following comments from Oregon Wild concerning the Jordon Cove / Pacific Gas Connector - public interest finding. Oregon Wild represents over 15,000 members and supporters who share our mission to protect and restore Oregon's wildlands, wildlife, and water as an enduring legacy.

We urge FERC to weigh the evidence on both sides and find that Jordon Cove LNG Export Project and the Pacific Gas Connector Pipeline to be NOT in the public interest.

Our comments focus on two issues. First, the Jordon Cove LNG Export Project is not in the public interest. Weighing all the evidence, it is clear that this project will cause more public harm than good. Second, the Project is inconsistent with the Statewide Land Use Goals that prohibit activities that exceed the "carrying capacity" of our land, air, and water. This is related to the public interest comment but requires special attention.

The Jordon Cove LNG Export Project and Pacific Gas Connector Pipeline are not in the public interest.

FERC cannot view evidence of demand for gas as an indication of public benefit. First, demand for gas is really demand for energy and there are many competitive alternative sources of energy. Second, Fossil fuels are killing the planet through global climate change and ocean acidification. Evidence of demand for fossil fuels is evidence of public harm, not public benefit.

Any evidence that this project provides public benefits must be weighed against the overwhelming evidence that developing the Jordon Cove LNG Export Project, and all of its associated developments (Pacific Gas Connector Pipeline, South Dunes Energy Plant, fracking, dredge and fill of Coos Bay, etc.) will cause significant public harm including:

Taking private property through imminent domain in order to build the Pacific Gas Connector pipeline which is directly connected to the Jordon Cove LNG Project. There is a public interest is citizen's enjoying their private property rights.

Increased carbon emissions and climate impacts, plus ocean acidification. President of the United States just said that climate change threatens national security. Can there be any more clear evidence that the public interest is adversely affected by activities emit carbon and exacerbate climate change? This project is very bad for climate change because it is linked to fracking which results in significant methane leaks, and methane is much worse than CO2 for the climate. Also, export requires compressing and cooling the gas which requires a significant energy input, this fossil energy input erases any relative advantage that gas might enjoy over coal or oil.

Perpetuating dependence of fossil fuels. There is a strong public interest is moving the global economy away from fossil fuels which cause global climate change and other ecological harms. There is a strong consensus that renewable energy is much preferable from a social, economic, and ecological, and climate perspective. Exporting gas will cause continued dependence on undesirable energy sources.

Harming habitat for endangered species. Construction of the Pacific gas connector pipeline will result in the permanent destruction of suitable habitat for marbled murrelets, northern spotted owl, and other at risk species.

Loss of old growth forest. Mature & old-growth forests have tremendous value for wildlife habitat, carbon storage, scenic beauty, water quality, quality of life, etc. Building the PGC Pipeline will require the permanent loss of significant areas of mature & old-growth forest.

Degrading streams, wetlands, shorelines, water quality, etc. There is a public interest in protecting water quality and the natural function and beauty or streams, wetlands, and shorelines. The Jordon Cove LNG Export Project and the PGC Pipeline will adversely affect these important public values.

Decreased public safety. This project will interact with natural and human-caused hazards to public safety and will in all cases make things worse. There is a public interest in avoiding human safety risks associated with tsunamis, LNG leaks-explosions, landslides, fires, shipping accidents, aircraft accidents, floods, terrorism, etc.

Harm to business that rely on quality of life. There are many businesses in Coos, Douglas, and Klamath Counties that depend on quality of life to attract customers, and employees. Building the Jordon Cove LNG Export Project will degrade quality of life during and after construction and in the event of mishaps. This will have adverse economic consequences.

There is a public interest in maintaining affordable natural gas domestically and a stable market. Developing the Jordon Cove LNG Export Project will harm existing gas customers who depend on stable affordable gas supply.

Recreational activities around Coos Bay and along the pipeline route will be degrade by the Jordon Cove LNG Export Project and the PGC pipeline. Boats trying to use Coos Bay for fishing or transportation to and from fishing will be impeded and experience significant delays when LNG ships are moving in and out of the harbor.

Boom-bust economy in Coos Bay during construction. Coos Bay economy and quality of life will be disrupted by the huge influx of temporary workers who will come to Coos Bay during construction. The local economy will experience a negative shock when those workers leave.

This Jordon Cove LNG Export Project is being built to export gas extracted via hydraulic "fracking." This activity is causing significant harm to people and communities and the environment and climate.

Ground water and drinking water are being polluted. Property values are declining. Methane is leaking to the atmosphere and causing global climate change.

In February 2015 Oregon Wild organized a petition and more than 1300 people quickly agree with the statement that this LNG export Project is NOT in the public interest.

Petition Opposing the Jordon Cove LNG - Pacific Gas Connector Pipeline

We, the undersigned, urge all relevant state and federal agencies to reject the Jordon Cove LNG Export Terminal and the Pacific Gas Connector Pipeline.

- Liquefied Natural Gas (LNG) extracted via fracking harms our climate, water, and habitat. Methane leaks to the atmosphere throughout the production chain. Compressing gas to liquid uses large amounts of energy and cancels any argument that gas is a "bridge fuel." In order to protect our climate, we have to learn to say "NO" and leave fossil fuels in the ground.
- The proposed export terminal is located in a tsunami red zone. Tsunami waves may bounce around the bay and exceed the barriers designed to protect the LNG facilities.
- This project will harm the fragile ecosystem of Coos Bay and the North Spit. This includes impacts from construction, maintenance, shipping, ballast water, etc.
- The Pacific Gas Connector Pipeline from Coos Bay to Klamath Falls and beyond threatens to pollute drinking water, harm wetlands, and degrade scores of salmon bearing rivers and streams. Clearing the pipeline right-of-way will destroy thousands of acres of public forests, including old growth and habitat for endangered species.
- The proposed pipeline crosses scores of fish-bearing streams and two mountain ranges, the Coast Range and Cascades. It is unwise to build a pipeline through rugged coastal mountains that are pounded by severe winter storms and prone to landslides. There WILL be landslides and water pollution. The pipeline is also a safety hazard and a fire hazard. Outside of developed areas, rural residents are threatened by lower standards for pipeline construction.
- Use of eminent domain to seize private lands and allow a foreign company to access foreign markets will violate private property rights.
- Fracking should not be encouraged by creating an export market. Gas export will destabilize domestic markets for natural gas by tying those markets to international forces, likely increasing domestic gas prices and harming existing gas customers large and small. It makes no sense to build a multi-billion dollar export facility while energy prices are declining. The rapid bait-and-switch from LNG import to LNG export highlights the speculative and unsettling nature of this project.

Based on the overwhelming harms that will occur, the project is clearly NOT in the public interest and should be rejected.

Thank you for considering this petition. [1360 signatures as of 2-11-2015...]

Jordon Cove LNG Export Project Will Exceed the Carrying Capacity of the Land, Air, and Water

As mandated by the DLCD's Statewide Land Use Goals, Coos County needs to be concerned about climate change and its impacts on communities and ecosystems. Climate change will severely adversely affect Coos County through sea level rise, ocean acidification, increasing drought and fire hazard, potential influx of climate refugees, etc.

This project will directly and indirectly facilitate large scale emissions of CO2 and methane that will exceed the carrying capacity of our air water and exacerbate global climate change. LNG is NOT a "bridge fuel" because (1) the entire natural gas supply chain (especially fracking) leaks methane which is much worse for the climate than CO2, and (2) compressing and chilling natural gas to liquid form requires tremendous amounts of energy and erases any carbon efficiency otherwise attributable to natural gas compared to coal. It is unconscionable (and illegal) that a project of this scale does not fully address climate change in FERC analysis. Coos County is in a unique position to force FERC to address this issue because the county has jurisdiction over land use and the Statewide Goals include a mandate to avoid actions that would exceed the "carrying capacity" of our air and water. This project will contribute to unacceptable cumulative impacts to GHG emissions and ocean acidification which clearly exceed carrying capacity.

Coos County must strive to harmonize Jordon Cove's land use application with Oregon's Statewide Land Use Goals, for instance:

- Statewide Goal 5 says "Plans providing for open space, scenic and historic areas and natural resources should consider as a major determinant the carrying capacity of the air, land and water resources of the planning area. The land conservation and development actions provided for by such plans should not exceed the carrying capacity of such resources." OAR 660-015-0000(5).
- Statewide Goal 6 says "With respect to the air, water and land resources of the applicable air sheds and river basins described or included in state environmental quality statutes, rules, standards and implementation plans, such discharges shall not (1) exceed the carrying capacity of such resources, considering long range needs;..." OAR 660-015-0000(6) [Note, we cannot envision any "long-term needs" that would justify wrecking the climate or the oceans.]
- Statewide Goal 19 says "all actions by local, state, and federal agencies that are likely to affect the ocean resources and uses of Oregon's territorial sea shall be developed and conducted to conserve marine resources and ecological functions for the purpose of providing long-term ecological, economic, and social values and benefits..." OAR 660-015-0010(4) [Ocean acidification will not conserve ecological functions associated with shell-organisms.]

See DLCD Compilation of Statewide Planning Goals. http://www.oregon.gov/LCD/docs/goals/compilation_of_statewide_planning_goals.pdf.

DLCD defines "carrying capacity" as a "Level of use which can be accommodated and continued without irreversible impairment of natural resources productivity, the ecosystem and the quality of air, land, and water resources." There is a large body of science indicating that we are already beyond the level of CO2 in our atmosphere that can be described as

safe. The changes to our climate and our oceans caused by CO2 already emitted may already be irreversible. Global warming is caused by the cumulative build-up of greenhouse gases, especially carbon, in the atmosphere. Each additional increment of carbon adds to the harm caused to our climate and our oceans.

The carrying capacity of our atmosphere has already been exceeded, and any further net emissions of greenhouse gases, including but not limited to CO2 and other GHG emitted by building this project (and increasing LNG use) will exacerbate the exceedance.

Respected experts say that the atmosphere might be able to safely hold 350 ppm of CO2.[1] So when we were at pre-industrial levels of about 280 ppm, we had a cushion of about 70 ppm which represents millions of tons of GHG emissions. Now that cushion is completely gone. We have already vastly exceeded the safe level of carbon emissions. We are at 400 ppm CO2 and still rising. So, what is the safe level of additional emissions (from logging or any other activity)? It's zero, or negative. There is no safe level of additional emissions that our earth systems can tolerate. In fact, we need to be removing carbon, not adding carbon to the atmosphere.[2] How could we do that? By growing forests. Logging moves us away from our objective while conservation moves us toward our objective.

The Commentary for the Oslo Global Climate Principles says -

PwC (Price Waterhouse Cooper) warns that at current rates of decarbonisation[3] of 0,9%, "we would be heading towards the worst projected scenario of the IPCC, leading to a significant chance of exceeding 4 (degrees) Celsius of warming".[4] The World Bank is even more pessimistic:

"(...) the likelihood of 4 (degrees) C warming being reached or exceeded this century has increased, in the absence of near-term actions and further commitments to reduce emissions. The report reaffirms the International Energy Agency's 2012 assessment that in the absence of further mitigation action there is a 40 percent chance of warming exceeding 4 (degrees) C by 2100 and a 10 percent chance of it exceeding 5 (degrees) C in the same period.

The 4 (degrees) C scenario does not suggest that global mean temperatures would stabilize at this level; rather, emission scenarios leading to such warming would very likely lead to further increases in both temperature and sea-level during the 22nd century".[5]

[T]here is a limited amount of time within which measures to avoid passing the twodegree threshold can adequately be taken – i.e., that there is an urgent need to take these measures.

Oslo Global Climate Principles, Commentary, March 2015. http://www.osloprinciples.org/oslo-principles-commentary/

In addition, much of the excess CO2 in the atmosphere eventually ends up dissolved in the oceans where it dissolves and forms carbonic acid. The carrying capacity of our oceans in terms of pH has also been exceeded, so any further net emissions of CO2 to the atmosphere will also result in further exceedances of ocean acidification. CO2 has a very long residence time in the atmosphere before it is dissolved in the ocean, so there is a large degree of "committed acidification" that must be accounted for. Approximately half of carbon emitted to the atmosphere is absorbed by the oceans where it contributes to acidification

and serious adverse ecological consequences. John Pickrell 2004. Oceans Found to Absorb Half of All Man-Made Carbon Dioxide, National Geographic News, July 15, 2004. http://news.nationalgeographic.com/news/2004/07/0715_040715_oceancarbon_2.html;

Craig Welch 2013. Sea Change: Pacific Ocean Takes Perilous Turn. Ocean acidification, the lesser-known twin of climate change, threatens to scramble marine life on a scale almost too big to fathom. Seattle Times series.

http://apps.seattletimes.com/reports/sea-change/2013/sep/11/pacific-ocean-perilous-turn-overview/

<u>overview/</u>
Thank you for considering all the evidence about the public interest and for following the mandatory state requirements about keeping emissions within the carrying capacity of our land, air, and water.
Sincerely,
/s/ Doug Heiken
Note: If any of these web links in this document are dead, they may be resurrected using the Wayback Machine at Archive.org. http://wayback.archive.org/web/
footnotes:
[1] http://www.350.org/about/science.
[2] "To get back to 350 ppm, we'll have to run the whole carbon-spewing machine backwards sucking carbon out of the atmosphere and storing it somewhere safely By growing more forests, growing more trees, and better managing all our forests,

[3] The term "decarbonisation" is a used in the PWC report, and refers to the development and adoption of technologies, especially energy technologies, that do not emit carbon and greenhouse gases.

..." http://blog.cleanenergy.org/2013/11/26/exploring-biocarbon-tools/comment-page-

1/#comment-375371

[4] PwC, Two degrees of separation: ambition and reality, Low Carbon Economy Index, September 2014 p. 3.

[5] Turn Down the Heat, Climate Extremes, Regional Impacts and the Case for Resilience, report 78424, June 2013, p. xv. Interestingly, the message in the updated report of 2014 (nr. 92704 v2) is more concise. The figures are still the same; e.g., the last paragraph has been deleted (p. xviii; see also p. 5).

Sir	ncere	ely	,
/s	/		

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