

Jody McCaffree
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March 23, 2016

By Electronic upload to Federal Regulations Portal at:
<https://www.federalregister.gov/articles/2016/03/03/2016-04733/jordan-cove-energy-project-lp-amendment-of-application-for-long-term-authorization-to-export>

Larine Moore;
Benjamin Nussdorf;
Cassandra Bernstein, Assistant General Counsel for Electricity and Fossil Energy;
U.S. Department of Energy (FE-34),
Office of Regulation and International Engagement,
Office of Fossil Energy,
P.O. Box 44375,
Washington, DC 20026-4375.

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

Dear U.S. Department of Energy:

In addition to the following comments previously filed in this proceeding, please accept these additional comments concerning the current Jordan Cove Amendment that seeks to increase the volume of LNG for which Jordan Cove requests export authorization from the equivalent of 292 Bcf/year (.8 Bcf/d) to the equivalent of 350 Bcf/year of natural gas (0.96 Bcf/day).

On March 24, 2014, the Department of Energy issued DOE/FE Order No. 3413, conditionally granting Jordan Cove's Application for .8 Bcf/day but has not yet issued a Final Order on the pending Application.

On March 11, 2016 the Federal Energy Regulatory Commission issued an Order that denied both the Jordan Cove LNG Export Project and the Pacific Connector Gas Pipeline due to the project not having contracts and not having met Public Interest requirements with respect to impacted landowners. **It makes no sense whatsoever to analyze increasing export volumes for a project that has already been denied by another Federal Agency.** (*FERC Order is attached as Exhibit A*).

On July 24, 2014, the Federal Aviation Administration determined that Jordan Cove's two (2) 160,000 cubic meter LNG Storage Tanks and two (2) Amine Gas Processing Towers were presumed hazards to air navigation. (*See FAA determinations attached as Exhibit B*)

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On January 14, 2015 and February 6, 2015, Jerry Havens , Distinguished Professor of Chemical Engineering at University of Arkansas, and James Venart, Professor Emeritus of Mechanical Engineering at University of New Brunswick, published two papers regarding the Jordan Cove LNG Export Terminal Draft Environmental Impact Statement under FERC Docket No. CP13-483. **Professor Havens and Professor Venart found significant discrepancies and problems with Jordan Cove’s hazard analysis for their LNG Export facility and determined the hazards had been significantly underestimated.** Safety measures incorporated into the proposed Jordan Cove LNG Export terminal actually increase the chance of a catastrophic failure and present a far more serious public safety hazard than regulators have analyzed and deemed acceptable. **These issues have yet to be addressed or resolved.** (See Exhibits C and D)

1. Problems documented in Prior Comments have still not been resolved

The current proposed export increase to non-free trade agreements nations is an approximate 20% increase in the export volume of an important energy resource product that should be kept and used domestically in the United States by Americans and American Businesses. All the issues we have already raised with respect this project only get worse with this increase. Rather than having to repeat over and over again the same issues that we have covered in detail already, please review our prior comments and concerns with respect to Jordan Cove’s request for increased LNG exporting volumes:

- CALNG / McCaffree August 6, 2012, Intervention. Protest and Comments:
http://www.fossil.energy.gov/programs/gasregulation/authorizations/Orders_Issued_2012/citizens_against_lng08_06_12.pdf
- CALNG / McCaffree September 12, 2012, Answer to Jordan Cove:
http://www.fossil.energy.gov/programs/gasregulation/authorizations/Orders_Issued_2012/Citizens_Against_LNG_Answer_to_JCEP_09_1.pdf
- CALNG / McCaffree 1-24-2013, Initial Comments on NERA study:
http://www.fossil.energy.gov/programs/gasregulation/authorizations/export_study/jody_mccaffree_lam01_24_13_Final.pdf (Comments minus exhibits attached as Exhibit E)
- CALNG / McCaffree 2-25-2013, Rebuttal Comments on NERA study:
http://www.fossil.energy.gov/programs/gasregulation/authorizations/export_study/reply_comments/Citizens_Against_LNG02_26_13.pdf
and
http://www.fossil.energy.gov/programs/gasregulation/authorizations/export_study/reply_comments/Citizens_Against_LNG02_25_13.pdf
(Comments minus exhibits attached as Exhibit F)
- CALNG / McCaffree July 21, 2014, Comments on Proposed Procedures for Liquefied Natural Gas Export Decisions. *Environmental Review Documents concerning Exports of*
McCaffree / CALNG - March 23, 2016 - FE-12-32 Comments

Natural Gas from the United States. LifeCycle Greenhouse Gas Perspective on Exporting Liquefied Natural Gas from the United States.
(Could not find a weblink to these comments.)

- CALNG / McCaffree February 12, 2016, Comments on U.S. DOE LNG Export Economic Consulting Studies
<https://fossil.energy.gov/App/DocketIndex/docket/DownloadFile/537>
<https://fossil.energy.gov/App/DocketIndex/docket/DownloadFile/538>
<https://fossil.energy.gov/App/DocketIndex/docket/DownloadFile/539>
<https://fossil.energy.gov/App/DocketIndex/docket/DownloadFile/540>
<https://fossil.energy.gov/App/DocketIndex/docket/DownloadFile/541>
Exhibit 27: http://www.rmi.org/Knowledge-Center/Library/S82-03_BrittlePowerEnergyStrategy
Exhibit 28: http://www.brattle.com/system/publications/pdfs/000/005/249/original/LNG_and_Renewable_Power_-_Risk_and_Opportunity_in_a_Changing_World.pdf?1452804455
Exhibit 29: <https://web.stanford.edu/group/efmh/jacobson/Articles/I/CountriesWWS.pdf>
Exhibit 30: <http://thesolutionsproject.org/infographic/#or>
Exhibit 31: <http://www.tai.org.au/sites/default/files/Ogge%202015%20Be%20careful%20what%20you%20wish%20for%20TAI.pdf>
(Above submittal attached as Exhibit G)

2. Export volumes used in the FERC NEPA process do not support Jordan Cove's current DOE Amendment Application.

The Jordan Cove Federal Energy Regulatory Commission (FERC) has recently denied the project in an Order that was issued on March 11, 2016, on the 5th anniversary of the earthquake and tsunami that devastated Japan in 2011. The Jordan Cove FERC EIS based their analysis on an export volume of 6 MMTPA and 90 shipments a year with a maximum allowable ship size of 148,000 cubic meters. Both these amounts are under what the DOE would be approving, thus making the FERC EIS NEPA process inadequate.

The FERC Jordan Cove Final EIS page 1-13 states:

1.3.1 Applicants' Objectives for the Proposed Project

*According to Jordan Cove's application, the Project is a market-driven response to the increasing availability of competitively priced natural gas from western Canadian and Rocky Mountain sources, and robust international demand for natural gas. **The newly proposed liquefaction terminal is designed to produce about 6 MMTPA (equivalent to about 0.9 Bcf/d of natural gas)**, and Jordan Cove intends to export that LNG by loading it onto vessels for overseas transport. 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. In addition to meeting Asian demand, Jordan Cove could serve American customers by providing LNG to Alaska and Hawaii.*

1 million metric tons of LNG = 48.7 billion cubic feet of Natural Gas¹ (See Exhibit H)
6 (million metric tons of LNG produced annually) X 48.7 = 292.2 billion cubic feet of natural gas produced annually

What FERC analyzed in the Jordan Cove Final EIS was based on 292.2 billion cubic feet of natural gas produced annually or .8 Bcf/d and not the 350 billion cubic feet of natural gas produced annually or .96 Bcf/d that Jordan Cove now wants to export.

This is a considerable difference and means more shipping impacts, hazards and the pollution both at the terminal and in the lower Coos Bay.

Final EIS Page 1-6 states:

While the waterway for LNG marine traffic is the same, the number of LNG vessels visiting the terminal is expected to increase from 80 vessels per year in the import proposal to 90 vessels per year for the export project.

The 148,000 maximum ship size that Jordan Cove can use was established per the July 1, 2008 Coast Guard Water Suitability Report² (See Exhibit I). The report determined that the Coos Bay was not currently suitable for the type and frequency of LNG marine traffic associated with this proposed project but could be made suitable. This has not occurred as of yet. With each shipment there would be a 500 yard Safety and Security zone around the LNG tanker ship. No one would be allowed to enter that zone without first obtaining permission from the Captain of the Port, who resides in Portland, OR Coast Guard offices some 200 miles away.

148,000 cubic meters LNG = 5,226,570.675 cubic feet LNG

5,226,570.675 X **600** = 3,135,942,405 cubic feet of natural gas

.8 Bcf/d X 365 = 292 Bcf/y

292,000,000,000 cubic ft a year for export / 3,135,942,405 cubic ft gas per shipment = **93 shipments or 186 harbor disruptions at high slack tide.**

148,000 cubic meters LNG = 5,226,570.675 cubic feet LNG

5,226,570.675 X **600** = 3,135,942,405 cubic feet of natural gas

.96 Bcf/d X 365 = 350 Bcf/y

350,000,000,000 cubic ft a year for export / 3,135,942,405 cubic ft gas per shipment = **112 shipments or 224 harbor disruptions at high slack tide.**

¹ <https://www.extension.iastate.edu/agdm/wholefarm/html/c6-89.html>

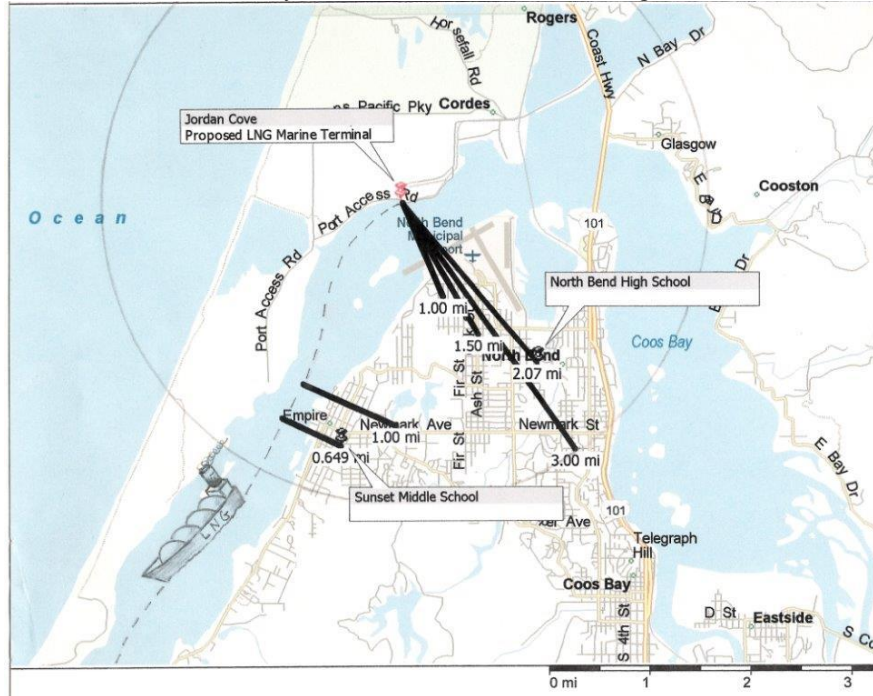
² U.S. Coast Guard Water Suitability Report / July 1, 2008 https://homeport.uscg.mil/cgi-bin/st/portal/uscg_docs/MyCG/Editorial/20080702/WSRscan.pdf?id=a0db951fa8584baded3114381489b12f59db4b64&user_id=2a47d4dbfd24ce2da39438e736cab2d6

3. Increased export volumes would mean increased hazards and impacts

As we have already explained in prior comments, there are safety and security issues already with the LNG tanker ships due to our narrow bay. Jordan Cove's LNG ships would have to transit during high slack tides which is the same tides that are used by others industries such as fishing, crabbing, shipping of wood products, etc. The Safety and Security zones would in some places cover the entire width of the Lower Coos Bay. A recent news article confirms that the lower bay is used by hundreds of other boaters, particularly in the summer months. (See Exb J)



Photo above: Coos County Board of Commissioner meeting at the Boathouse Auditorium on July 10, 2012.



LNG ships used by Jordan Cove would have a 40 foot draft and our narrow bay is dredged to only 37 feet. This is why they have to transit at high slack tides. Jordan Cove has insisted that they do not need to deepen and widen the bay for their project and the widening and deepening of the channel was not considered in the FERC Final EIS. Every LNG shipment would put us at risk and restrict other users of the Bay. In addition each increased shipment would also mean increased pollution and greenhouse gases. Ships are some of the biggest polluters out there. Attached find an article showing how 16 ships create as much pollution as all the cars in the world. (*See Exhibit K*). A 20% increase would be significant and this volume and impact was not considered in the FERC Final EIS and also not considered in multiple other Local, State and Federal permit processes that have been processed already using used the wrong 6 MMTPA or 292 Bcf/year volume. Those processes would all have to be redone.

The U.S. DOE cannot increase the volume amount of LNG export without a properly completed National Environmental Policy Act (NEPA) process which has not yet occurred even for the prior DOE export volume of 292 Bcf/yr (.8 Bcf/d) as was explained in multiple comments that were submitted to the FERC.

Citizens Against LNG / McCaffree FERC filings on Jordan Cove Draft and Final EIS under CP13-483-000, et. al.

- **December 14, 2014:**
http://elibrary.ferc.gov/idmws/file_list.asp?accession_num=20151214-5048
http://elibrary.ferc.gov/idmws/file_list.asp?accession_num=20151214-5051
- **September 9, 2015:**
http://elibrary.ferc.gov/idmws/file_list.asp?accession_num=20150909-5185
http://elibrary.ferc.gov/idmws/file_list.asp?accession_num=20150910-5011
- **Feb 24, 2015:**
http://elibrary.ferc.gov/idmws/file_list.asp?accession_num=20150224-5223
- **Feb 13, 2015:**
http://elibrary.ferc.gov/idmws/file_list.asp?accession_num=20150217-5145
http://elibrary.ferc.gov/idmws/file_list.asp?accession_num=20150217-5151

In any event, the recent FERC Order denying the Jordan Cove project is all the U.S. DOE needs to reject Jordan Cove's proposal for increased export volumes and also their original application. The Jordan Cove project cannot go forward without a properly completed NEPA process.

4. Market Conditions do not support the Jordan Cove project.

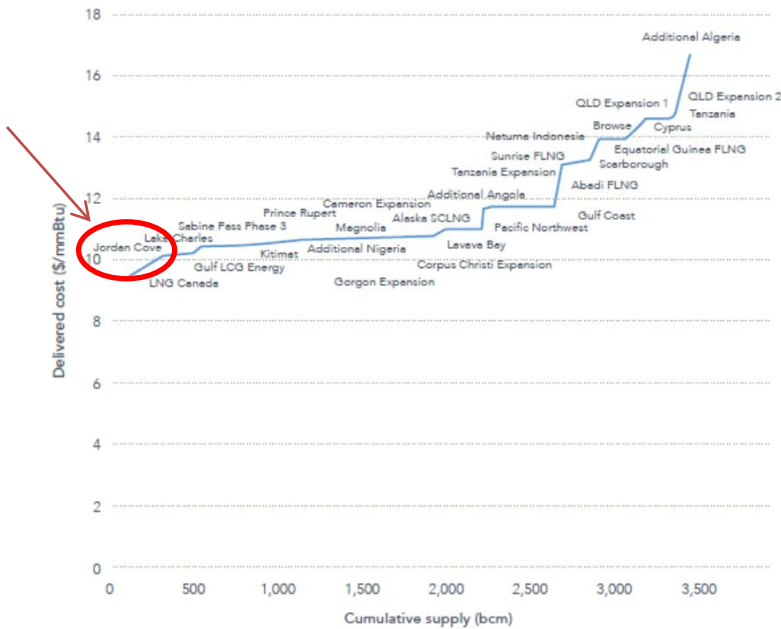
As has been explained time and time again and in detail in the attached February 12, 2016 comments that were submitted to the U.S. DOE concerning the DOE LNG Export Economic

Consulting Studies, there is currently an oversupply of LNG in the international market and the glut is predicted to last into the next decade. In addition, there are multiple LNG export projects that are under construction world-wide that have yet to even come on-line and when they do they will impact the market even more than it is right now which means the glut could extend well beyond what they have already predicted. The Jordan Cove project is not needed as explained in Exhibit G.

The task force of natural gas experts assembled by the Brookings Institution has stated that it will be increasingly unlikely that new liquefaction projects will be financed, beyond the ones that have been contracted and reached a final investment decision. The July 2015 Brookings Report, “An Assessment of U.S. Natural Gas Exports,” is attached as *Exhibit G’s Exb 20*.

A July 7, 2015, Sutherland LNG Blog Posting titled, “New Report Projects \$283 Billion of Planned LNG Projects Potentially Unneeded by 2025,”³ reported on a Carbon Tracker report: “Carbon Supply Cost Curves: Evaluating financial risk to gas capital expenditures.”⁴ Figure 11 on page 23 of the Carbon Tracker report list Jordan Cove as one of the many “not needed” LNG Export projects. The Carbon Tracker Report is attached as *Exhibit G’s Exb 21*.

Figure 11: LNG projects not needed in low demand scenario to 2035

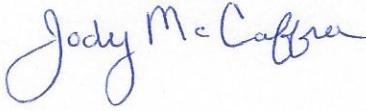


³ <http://www.lnglawblog.com/2015/07/new-report-projects-283-billion-of-planned-lng-projects-potentially-unneeded-by-2025/>

⁴ <http://www.carbontracker.org/wp-content/uploads/2015/06/CTI-gas-report-Final-WEB.pdf>

Please reject this proposal and deny both the previous and current Applications for the Jordan Cove Energy Project.

Sincerely,

A handwritten signature in blue ink that reads "Jody McCaffree". The signature is written in a cursive style with a large initial "J" and a long, sweeping underline.

Jody McCaffree

McCaffree / CALNG
Index for Exhibits
For March 23, 2016 Testimony on
Jordan Cove Energy Project Amendment to Application under FE-12-32-LNG

Exhibit A: March 11, 2016 Federal Energy Regulatory Commission Order that denied both the Jordan Cove LNG Export Project and the Pacific Connector Gas Pipeline

Exhibit B: July 24, 2014, Federal Aviation Administration determinations for Jordan Cove LNG Storage tanks and Amine Gas Processing Towers.

Exhibit C: January 14, 2015 Report by Jerry Havens , Distinguished Professor of Chemical Engineering at University of Arkansas, and James Venart, Professor Emeritus of Mechanical Engineering at University of New Brunswick, concerning the Jordan Cove LNG Export Terminal Safety Issues.

Exhibit D: February 6, 2015, Report by Jerry Havens , Distinguished Professor of Chemical Engineering at University of Arkansas, and James Venart, Professor Emeritus of Mechanical Engineering at University of New Brunswick, concerning the Jordan Cove LNG Export Terminal Safety Issues.

Exhibit E: CALNG / McCaffree 1-24-2013, Initial Comments on NERA study:
http://www.fossil.energy.gov/programs/gasregulation/authorizations/export_study/jody_mccaffree_lam01_24_13_Final.pdf

Exhibit F: CALNG / McCaffree 2-25-2013, Rebuttal Comments on NERA study:
http://www.fossil.energy.gov/programs/gasregulation/authorizations/export_study/reply_comments/Citizens_Against_LNG02_26_13.pdf

Exhibit G: CALNG / McCaffree February 12, 2016, Comments on U.S. DOE LNG Export Economic Consulting Studies

<https://fossil.energy.gov/App/DocketIndex/docket/DownloadFile/537>

<https://fossil.energy.gov/App/DocketIndex/docket/DownloadFile/538>

<https://fossil.energy.gov/App/DocketIndex/docket/DownloadFile/539>

<https://fossil.energy.gov/App/DocketIndex/docket/DownloadFile/540>

<https://fossil.energy.gov/App/DocketIndex/docket/DownloadFile/541>

Exhibit 27: [http://www.rmi.org/Knowledge-Center/Library/S82-](http://www.rmi.org/Knowledge-Center/Library/S82-03_BrittlePowerEnergyStrategy)

[03_BrittlePowerEnergyStrategy](http://www.rmi.org/Knowledge-Center/Library/S82-03_BrittlePowerEnergyStrategy)

Exhibit 28:

[http://www.brattle.com/system/publications/pdfs/000/005/249/original/LNG_and_Renewable_Power - Risk and Opportunity in a Changing World.pdf?1452804455](http://www.brattle.com/system/publications/pdfs/000/005/249/original/LNG_and_Renewable_Power_-_Risk_and_Opportunity_in_a_Changing_World.pdf?1452804455)

Exhibit 29: <https://web.stanford.edu/group/efmh/jacobson/Articles/I/CountriesWWS.pdf>

Exhibit 30: <http://thesolutionsproject.org/infographic/#or>

Exhibit 31:

<http://www.tai.org.au/sites/default/files/Ogge%202015%20Be%20careful%20what%20you%20wish%20for%20TAI.pdf>

Exhibit H: Natural Gas and Coal Measurements and Conversions from Iowa State University.

Exhibit I: U.S. Coast Guard Water Suitability Report / July 1, 2008

[https://homeport.uscg.mil/cgi-](https://homeport.uscg.mil/cgi-bin/st/portal/uscg_docs/MyCG/Editorial/20080702/WSRscan.pdf?id=a0db951fa8584baded3114381489b12f59db4b64&user_id=2a47d4dbfd24ce2da39438e736cab2d6)

[bin/st/portal/uscg_docs/MyCG/Editorial/20080702/WSRscan.pdf?id=a0db951fa8584baded3114381489b12f59db4b64&user_id=2a47d4dbfd24ce2da39438e736cab2d6](https://homeport.uscg.mil/cgi-bin/st/portal/uscg_docs/MyCG/Editorial/20080702/WSRscan.pdf?id=a0db951fa8584baded3114381489b12f59db4b64&user_id=2a47d4dbfd24ce2da39438e736cab2d6)

Exhibit J: *After a year of planning, Coos Bay has new marine patrol boat dock*

By KCBY ; Wednesday, March 16th 2016

<http://kcb.com/news/local/after-a-year-of-planning-coos-bay-has-new-marine-patrol-boat-dock>

Exhibit K: *How 16 ships create as much pollution as all the cars in the world*

By Fred Pearce ; 21 November 2009

<http://www.dailymail.co.uk/sciencetech/article-1229857/How-16-ships-create-pollution-cars-world.html>

**UNITED STATES OF AMERICA
DEPARTMENT OF ENERGY**

Jordan Cove Energy Project, L.P.)	FE Docket No. 12-32-LNG
)	
Amendment Application)	Jordan Cove Energy Project, L.P.;
)	Application for Long-Term
)	Authorization to Export 350 Bcf/yr
)	of Liquefied Natural Gas Produced from
)	Domestic and Canadian Natural Gas
)	Resources to Non-Free Trade Agreement
)	Countries for a 25-Year Period
)	

**JODY MCCAFFREE
NOTICE OF INTERVENTION, PROTEST AND COMMENTS**

On June 6, 2012, the Office of Fossil Energy at the Department of Energy posted in the Federal Register a Notice of receipt of an application (Application), filed on March 23, 2012, by Jordan Cove Energy Project, L.P. (Jordan Cove), requesting long-term, multi-contract authorization to export as liquefied natural gas (LNG) both natural gas produced domestically in the United States and natural gas produced in Canada and imported into the United States, in an amount up to the equivalent of 292 billion cubic feet (Bcf) of natural gas per year, 0.8 Bcf per day (Bcf/d), over a 25-year period, commencing on the earlier of the date of first export or seven years from the date the requested authorization is granted. The LNG would be exported from the proposed LNG terminal to be located on the North Spit of Coos Bay in Coos County, Oregon, to any country (1) with which the United States does not have a free trade agreement (FTA) requiring national treatment for trade in natural gas, (2) which has developed or in the future develops the capacity to import LNG via ocean-going carrier, and (3) with which trade is not prohibited by U.S. law or policy.

On March 24, 2014, the Department of Energy issued DOE/FE Order No. 3413, conditionally granting Jordan Cove's Application. DOE/FE has not yet issued a final order on the pending Application

On October 5, 2015, Jordan Cove Energy Project, L.P. (Jordan Cove) filed an amendment (Amendment) request of its pending U.S. Dept of Energy Application that was filed on March 23, 2012. The Amendment seeks to increase the volume of LNG for which Jordan Cove requests export authorization from the equivalent of 292 Bcf/yr to the equivalent of 350 Bcf/yr of natural gas (0.96 Bcf/day).

I, Jody McCaffree, personally have a substantial interest in the outcome of this proceeding because I live, work, socialize and recreate within 2 miles of the proposed facility and in the proposed hazardous burn zones of the LNG facility and would be negatively impacted by the proposed facilities operations. The facility poses safety and security risk, airport hazards, fire hazards, air quality hazards, loss of: recreational opportunities; cultural resources; wildlife observation; wildlife habitat; commercial oyster farming; fishing; clamming; crabbing; and timber production. None of the power produced by the facility would be available for use by the surrounding community or Oregonians. Increasing the amount of exported gas would mean more shipments of LNG in and out of the Coos Bay, increased risks and

hazards, including those coming from additional greenhouse gases. The project is not in the public interest and would increase energy costs for me and my family.

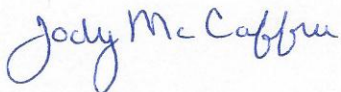
No other party is able to adequately represent my interest in this proceeding and it is for this reason I wish to intervene and be made a party, with all the rights attendant to such status, pursuant to 10 C.F.R. § 590.303(b).

I have participated as an individual and also as the volunteer executive director of the Citizens Against LNG Inc. in multiple land use hearings and appeals of decisions that involve the Jordan Cove Energy Project. I would like to go on record as being in full support of the Citizens Against LNG, Sierra club, Landowners United and Klamath-Siskiyou Wildlands Center motions to intervene, protest and comments filed previously in this proceeding.

Please send any correspondence to:

Jody McCaffree
PO Box 1113
North Bend, OR 97459
mccaffrees@frontier.com

Sincerely,



Jody McCaffree

CERTIFICATE OF SERVICE

A copy of this intervention will be served by e-mail on March 23, 2016 to all interveners that are currently found in the FE-12-32-LNG Service list for the Jordan Cove Project.

DATED: March 23, 2016