Companies and Organizations (CO)

CO1 – Little Susitna Construction

20190806-0009 FERC PDF (Unofficial) 08/06/2019

CP17-178

LITTLE SUSITNA CONSTRUCTION

GENERAL CONTRACTOR AA8966
ELECTRICAL CONTRACTOR AA1155 (IBEW Members, Inside & Outside Work)
MECHANICAL CONTRACTOR AA0213
ARCHITECTS & PLANNERS
CONSULTING ENGINEERS
CONSTRUCTION MANAGEMENT

July 29, 2019

RE: AGDC Alaska LNG EIS Comments

OFFICE OF EXTERNAL AFFAIRS
2019 AUG -6 A 10:49
FEDERAL ENERGY REGULATORY COMMISSION

Mr. Neil Chatterjee, Chairman
Federal Energy Regulatory Commission
888 First Street NE
Washington, DC 20426

Dear Commissioner Chatterjee:

I received 3 volumes of the above project's Draft Environmental Impact Statement (EIS) from your office. I did not ask for this copy. I have reviewed this 3 volume Draft EIS reporting which I have the following comments based on my 42 years of work for the oil industry giants ARCO, Conoco Phillips, and BP oil producers on Alaska's North Slope Oil Field and Consulting advice with China' Sinopec Oil Company in our submissions of a State of Alaska AGIA proposal in 2008 to build the Alaska Gas Pipeline and Liquified LNG plants at the Valdez port.

I find the reports did not address the following very important points:

A The cost of LNG delivery today to Japan or China seaports is between $6.75 to $7.75 per 1 million BTU and this price will remain for the next 10 years without much change because LNG supply is more than the demand. Yet, according to my calculations, if the LNG plant and gas pipeline is built today without cost overruns, it would cost $12.57 to $14.27 per 1 million BTU delivered to Japan and China sea ports. My costs are based on the following: CO1-1

1) Oil and gas producers charge a wellhead cost of 1,000,000 BTU ($3.00).

2) Gathering gas stations (separate oil, gas, and CO_2 costs and putting the gas into the Pipeline System ($1.00).

3) Cost to pump gas 800 miles with 8 to 10 pump stations and annual maintenance cost of the pipeline and pump stations ($1.50).

821 "N" Street, Suite 207 Anchorage, Alaska 99501 PHONE (907) 274-7571; FAX (907) 277-3300; E-MAIL littlesu@ak.net
Architects & Civil - Structural - Mechanical - Electrical Engineers - Construction Management
Licensed in Alaska, Alabama, California, Georgia, Hawaii, Idaho, Louisiana, Mississippi, Missouri, North Dakota, Oregon, Texas, Washington

CO1-1 The market/economics of the Project are beyond the scope of the EIS.

CO1 – Little Susitna Construction (cont'd)

20190806-0009 FERC PDF (Unofficial) 08/06/2019

4) Construction debt retirement (at 6% interest for 50 years) to the pipeline, pump stations, North Slope Gas Gathering Plants, Kenai LNG Plant, Marine Terminal to export the LNG for the proposed $42 billion dollars as per AGDC proposed, without backup ($4.20). CO1-1

5) The cost overrun of construction of the pipe line on land $25 billion. Minimum, it can be much more, up to $40 billion ($2.50 to $5.00).

6) The cost overrun of a pipeline laying across the Cook Inlet which can cost $24 billion extra. A good example was that Chevron's original budget was $34 billion and they spent an extra $17 billion over the original plan of $34 billion to $51 billion in Western Australia for a pipeline project of just 67 miles of underwater pipeline construction ($3.10).

7) Cost overruns in the Kenai LNG plant and Marine Export Terminal of $5 billion ($0.50).

8) Extra cost to borrow extra money for cost overruns ($3.00).

9) The existing AK oil pipeline was budgeted to cost $ billion to build in1972. When it was complete the total cost was $7 billion, 700% cost overrun. AGDC had awarded a sole source contract to the same contractor who built the oil pipeline to build this gas line. If he can get 700% change orders, I don't know how many billions extra he would ask for and receive.

10) The AGDC would not allow Alaska engineering firms to participate in the EIS draft preparation, only Texas firms could work on the draft EIS so that the true cost would not be revealed to the public and FERC. All are sole source contracts just like the construction contractor without surety bond requirements

Based on the above cost estimate, even if the AGDC pipeline is built and exports LNG, it will be losing a proposal, because it costs almost two to three times the current price to deliver the 1 million BTU to Japan and China seaports.

My cost analysis is based on today. China Sinopec, China Petroleum and Japan INPEX Corp and if the project is completed in the next 8 years as proposed, it would cost another 21% to 25% due to inflation, which will cost $18.70 to $21.20 per 1,000,000 BTU LNG delivered to Japan and China seaports.

It is a losing proposition for the USA and Alaska.

B. The 3 volume Draft EIS report did not address that the NOAA has declared the Alaska Cook Inlet Beluga Whale as an Endangered Species, and the whole Cook Inlet from Homer to Anchorage has been declared an Endangered Species Sanctuary Area. No one can build marine terminals bringing 40 ships to unload LNG per month, or 480 ships per year, which can block the Beluga Whales from migrating from Homer's Katchemak Bay to the Turnagain CO1-2

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Licensed in Alaska, Alabama, California, Georgia, Hawaii, Idaho, Louisiana, Mississippi, Missouri, North Dakota, Oregon, Texas, Washington

CO1-2 Impacts on Cook Inlet beluga whales are discussed in section 4.8.1 of the final EIS and in section 7.4 of the Biological Assessment, which is provided as appendix O of the final EIS. We are not aware of a designation for an "Endangered Species Sanctuary Area" in Cook Inlet.

CO1 – Little Susitna Construction (cont'd)

20190806-0009 FERC PDF (Unofficial) 08/06/2019

Arm for breeding their youth every summer. CO1-2

There is no solution for this major problem.

My company, LSCC, Inc., gave up our Turnagain Arm Tidal Energy Project in 2012 for this reason, and what has changed that will allow the AGDC Pipeline to build and operate without damage to the Beluga Whale Endangered species?

C. AGDC is an empty shell corporation. It has no assets, no cash, and hired P.R. Man, Keith Meyer, to con U.S. Government and Chinese Government to get money so he can get $750,000 per year (salary + bonus) for his job as president of the corporation–the highest paid person as an Alaska State employee. Thank goodness the new Governor fired this man earlier this year. CO1-3

The Alaska Constitution does not allow AGDC P.R. men to spend their Permanent Fund money (currently $66 Billion) in risky investments.

AGDC is planning to use this $66 billion to guarantee the $42 billion financed by Bank fo China loans, and if the loan is in default, Bank of China will take the $42 billion back from the Alaska Permanent Fund without a question, and Alaska will have an unfinished pipeline and, if complete, it will lose money on every 1 million BTU of LNG that is sold. The cost is $15.73 to $17.32 and China and Japan can buy all the LNG they want for $6.75 to $7.75 and this cost may go up anywhere from $18.70 to $21.20 per 1 billion BTU.

D. Conclusion. STOP the project and the state will be forced to borrow money to finish the project. It is a losing proposal and Alaska will lose its Permanent Fund of $66 Billion to the Bank of China. If this project is profitable, then why did the 3 big oil companies give up on this project, including selling their LNG plant at the Kenai site?

Sincerely,

Dominic S.F. Lee, P.E.
Alaska Professional Engineer and 12 other states since 1974

cc: Cheryl A. LaFleur
Richard Glick
Kevin J. McIntyre
Bernard McNamee

821 "N" Street, Suite 207 Anchorage, Alaska 99501 PHONE (907) 274-7571; FAX (907) 277-3300; E-MAIL littlesu@ak.net
Architects & Civil - Structural - Mechanical - Electrical Engineers - Construction Management
Licensed in Alaska, Alabama, California, Georgia, Hawaii, Idaho, Louisiana, Mississippi, Missouri, North Dakota, Oregon, Texas, Washington

CO1-3 Comment noted.

CO1 – Little Susitna Construction (cont'd)

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CO2 – Trustees for Alaska

20190909-0006 FERC PDF (Unofficial) 09/09/2019

TRUSTEES FOR ALASKA
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FILED
SECRETARY OF THE
COMMISSION
2019 SEP -9 P 4:27
REGULATORY COMMISSION

August 29, 2019

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

via first class mail

Re: Request for Extension of the Public Comment Period for the Alaska LNG Project Draft Environmental Impact Statement and Request for Additional Documents, Docket No. CP17-178-000 CO2-1

Dear Secretary Bose:

I am writing to request an extension of time for the public comment period on FERC's draft Environmental Impact Statement (DEIS) for the Alaska LNG Project. Trustees for Alaska is reviewing the DEIS on behalf of several clients and it is clear that there is additional information needed from the applicant before the DEIS can be meaningfully reviewed by FERC or by members of the public. As of August 28, 2019, these documents identified by FERC as necessary for review prior to the close of the DEIS comment period, were not yet available on the FERC website for this project:

- Updated Construction Emission Calculations. DEIS at 4-897.
- Updated General Conformity Analysis. DEIS at 4-897.
- Revised CALPUFF air dispersion modeling. DEIS at 4-907.
- Revised impact tables for NAAQS/AAAQS, PSD Increment, and all air quality-related-values. DEIS at 4-907
- Updated annual emission calculations for operation of the Liquefaction Facilities to reflect the anticipated maximum and average number of LNG Carriers and support vessels. DEIS at 4-926.
- Quantitative demonstration of whether maximum or average number of vessels would result in exceedances of any NAAQS, deposition, and visibility impact analysis (and all supporting data and narrative). DEIS at 4-926.
- Class I and Sensitive Class II Mitigation Plan including all relevant data. DEIS at 4-937.
- Updated Project Blasting Plan. DEIS at 4-112.
- All public water wells within 500 feet of the project. DEIS at 4-126, 127.
- Complete waterbody crossing dataset. DEIS at 4-462, 501.
- Updated information and photo simulations on four Known Observation Points as indicated. DEIS at 4-569.
- Updated noise impact calculations to reflect use of the DMT crossing method. EIS at 4-947.
- Additional Engineering and Technical Information as requested in DEIS Section 4.18.9. DEIS at 4-1067 to 4-1071.

CO2-1 See the responses to comments CM3-1, CM3-7, and CM6-4. The draft EFH and Biological Assessments were provided as appendices to the draft EIS and made available for public review. EFH consultation for the Project is now complete (see the updates to table 1.6-1 and section 4.7.4 of the final EIS). Any resulting decisions from the NMFS and FWS, including the Biological Opinion, will follow all applicable regulations.

CO2 – Trustees for Alaska (cont'd)

20190909-0006 FERC PDF (Unofficial) 09/09/2019

The applicant has also changed the project description and committed to provide more detailed project and resource information for a route modification impacting Denali National Park. The applicant has stated it will update the relevant sections of the DEIS by October 4, 2019, which is after the currently scheduled close of public comments. *See* Project Description Change Letter from AGDC to FERC at 1, August 16, 2019, and Attachment at 1 of 13. CO2-1

FERC has also requested consultation with the National Marine Fisheries Service and the U.S. Fish and Wildlife Service under the Endangered Species Act given the possibility that this project will likely adversely affect several species included Cook Inlet beluga whales, spectacled eiders, and polar bears. *See* Letter from FERC to USFWS, July 11, 2019 and Letter from FERC to NMFS, July 11, 2019a. FERC has also requested that NMFS consult with FERC on Essential Fish Habitat that could be adversely affected by the project. FERC to NMFS, July 11, 2019b. Ideally, the agencies' Biological Opinions on impacted species and Essential Fish Habitat Assessment would be available before public comments on the potential impacts of the project are due to FERC.

Given the complexity of the issues involved in this massive project, the impacts that could occur to many public resources, and the key information that is still not available to the public, I am requesting that FERC extend the comment period for an additional 30 days after the applicant has provided the needed information. Assuming all information is available by October 4, 2019, this would extend the comment period to November 4, 2019. Please also provide through public posting, email, or regular post any of the above documents that are currently in FERC's possession, but not yet available on the elibrary website.

Thank you for your attention to this matter. I would appreciate a reply as soon as possible so that we can inform our clients and experts if there will be additional time to review the additional information for inclusion in our comments.

Sincerely,

Valerie L Brown

Valerie Brown
Legal Director, Trustees for Alaska

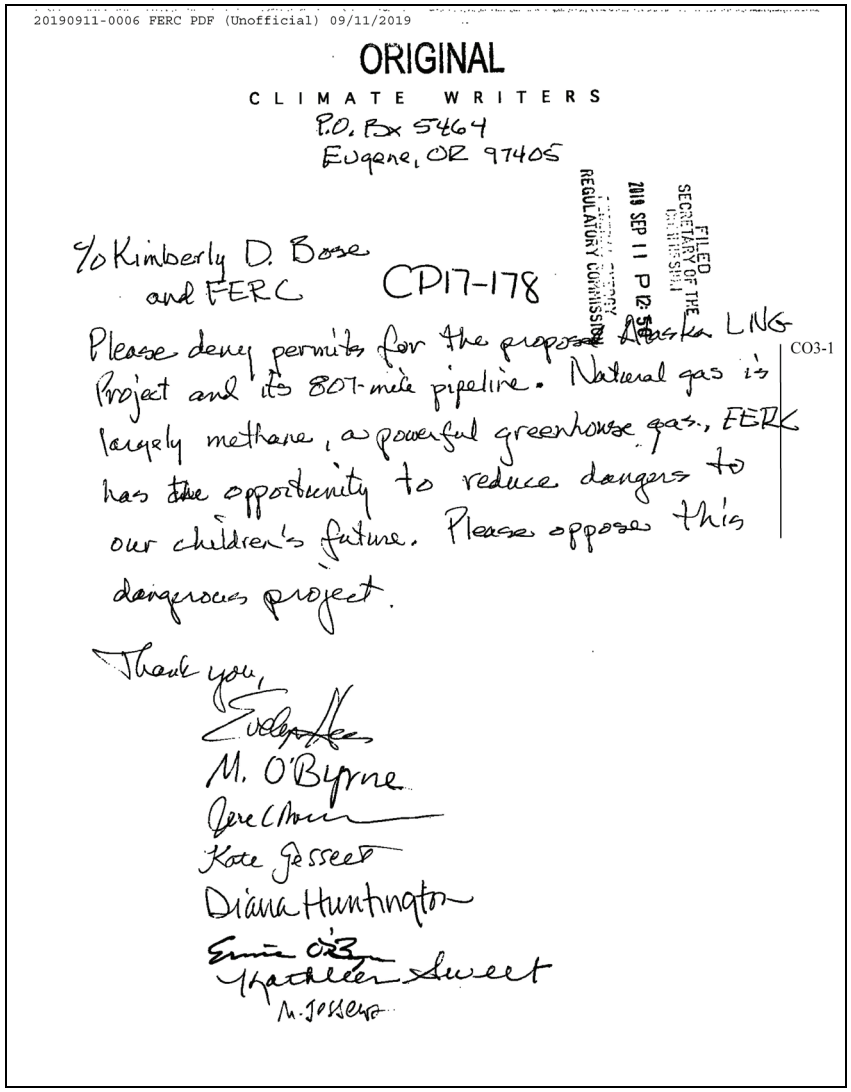
CO2 – Trustees for Alaska (cont'd)

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CO3 – Climate Writers



20190911-0006 FERC PDF (Unofficial) 09/11/2019

ORIGINAL

CLIMATE WRITERS
P.O. Box 5464
Eugene, OR 97405

FILED
SECRETARY OF THE
COMMISSION
2019 SEP 11 P 12:
REGULATORY COMMISSION

To Kimberly D. Bose
and FERC CP17-178

Please deny permits for the proposed Alaska LNG Project and its 807-mile pipeline. Natural gas is largely methane, a powerful greenhouse gas. FERC has the opportunity to reduce dangers to our children's future. Please oppose this dangerous project. CO3-1

Thank you,
M. O'Byrne
Kate Jesseet
Diana Huntington
Kathleen Sweet
M. Jesseet

CO3-1 Comment noted.

CO3 – Climate Writers (cont'd)

20190911-0006 FERC PDF (Unofficial) 09/11/2019

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CO4 – Climate Writers

20190911-0007 FERC PDF (Unofficial) 09/11/2019

ORIGINAL

CLIMATE WRITERS

FILED
SECRETARY OF THE
COMMISSION
2019 SEP 11 P 12:51
FEDERAL ENERGY
REGULATORY COMMISSION

9/4/19

M. O'Byrne
86813 Central Rd
Eugene, OR 97402

CP17-178

To Whom it may concern.
c/o Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission.

The proposed Alaska LNG Project, including the 807 mile pipeline from North Slope to Nikiski should not be built. Natural gas is 85% more methane, a powerful greenhouse gas. Certainly a percentage of the methane will enter the atmosphere through accidents, liquefaction or transportation. It will substantially add to global warming. We need to wind down fossil fuel use, not add to it. CO4-1

Thank you for listening
Marietta O'Byrne

M. Gerdes
Kate Gessert
Kathleen Sweet
Jere C. Thomson
Diana Huntington

CO4-1 Comment noted.

CO4 – Climate Writers (cont'd)

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CO5 – Climate Writers

20190911-0008 FERC PDF (Unofficial) 09/11/2019

ORIGINAL

FILED SECRETARY OF THE COMMISSION SEP 11 P 2:51 FEDERAL ENERGY REGULATORY COMMISSION

CLIMATE WRITERS
86070 Cougar Lane
Eugene, Oregon 97402
September 4, 2019

To whom it May Concern:
(c/o Kimberly D. Bose)

CP17-178

The proposed Alaska LNG project, including the 807-mile pipeline from the North Slope to Nikiski, should not be built. The project is fundamentally flawed. Natural gas, liquid or otherwise, is 85% or more methane, a powerful greenhouse gas. Methane leaks and other accidental releases in the course of extraction, transportation, and liquefaction, as well as use, assure that a percentage of the methane will enter the atmosphere. A project of this scale will contribute a lot to global heating at a time when, according to the IPCC, we need to be winding down on fossil fuel use to avoid catastrophic climate change. CO5-1

Sincerely yours,
Kate Gessert
Kathleen Sweet
M. O'Byrne
Jere C Brenczewski
Diana Huntington
M. Gessert

CO5-1 Comment noted.

CO5 – Climate Writers (cont'd)

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CO6 – Trustees for Alaska

20190917-5013 FERC PDF (Unofficial) 9/16/2019 7:58:14 PM

TRUSTEES FOR ALASKA
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September 16, 2019

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

via efile

Re: Request for Compressor Station Modeling Data and Extension of the Public Comment Period for the Alaska LNG Project Draft Environmental Impact Statement, Docket No. CP17-178-000

Dear Secretary Bose:

I am writing to add to the request I sent on August 29, 2019 (and efiled on September 3, 2019). The discussion of compressor station modeling, DEIS 4-912 to 4-924, does not match the modeling report in Appendix E of Resource Report 9. It appears that the modeling was updated since April 14, 2017, but the information is not included in the DEIS or any appendix. Also there are no analyses provided for the discussion of visibility and acid deposition impacts in the DEIS or the attachments, though the DEIS references that the applicant did these analyses. CO6-1

Please provide updated information on compressor station modeling, and the analyses for visibility and acid deposition impacts, as well as the information previously requested, while there is still time to review and comment on it.

Given the amount of missing data and the need to give the public an opportunity to meaningfully review the DEIS, please extend the comment period out past the time the applicant has supplied this missing information, as well as the additional documents requested in my earlier letter. Thank you for your attention to this matter. CO6-2

Sincerely,

Valerie Brown
Legal Director, Trustees for Alaska

CO6-1 An updated version of the air quality impact analysis for the compressor stations and heater station, including modeled visibility and acid deposition impacts, was filed by AGDC on November 11, 2017 (Accession No. 20171012-5306). The footnote in section 4.15.5.2 of the final EIS referencing the location of the modeling report in FERC's eLibrary has been updated to include this reference.

CO6-2 See the responses to comments CM3-1, CM3-7, and CM6-4.

CO6 – Trustees for Alaska (cont'd)

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Document Content(s)

2019 09 16 TFA to FERC re need air modeling.PDF.....1-1

CO7 – Kenai Peninsula Economic Development District

20190923-0031 FERC PDF (Unofficial) 09/23/2019

ORIGINAL

14896 Kenai Spur Highway, Suite 103-A • Kenai, AK 99611
Phone: (907) 283-3335 • Fax: (907) 283-3913
www.kpedd.org

Leadership to enhance, foster and promote economic development

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COMMISSION
2019 SEP 23 P 2:55
FEDERAL ENERGY REGULATORY COMMISSION

Federal Energy Regulatory Commission
888 First Street NE, Room 1A
Washington, DC 20426
Project Docket Number CP17-178-000

September 12, 2019

The Kenai Peninsula Economic Development District would like to extend its support of the LNG project in Nikiski Alaska, as proposed by the Alaska Gasline Development Corporation. The economic opportunities provided by this project not only benefit our community and state, but also strengthen our nation's position as a global authority in the international energy market. CO7-1

Connection to the Interior Gas Utility will provide assurance of a long-term, economic energy supply for Fairbanks and North Pole residents, commercial and industrial users. This project has the potential to supply smaller communities along the pipeline with affordable and reliable natural gas to residents. Interconnection of the main gas pipeline to the existing Southcentral pipeline network will extend resource capabilities for residents and commercial users. This project will also support and encourage new resource development projects.

Over the course of eight years, the Alaska LNG project will create 29,100 construction jobs, 980 operations jobs and roughly $7.1 billion of materials and services will be purchased in Alaska. This project will provide significant economic opportunities for Alaskan businesses including trucking, marine pilots, tug operators, construction companies, equipment suppliers, hotels, car rentals and state air carriers. The Alaska Railroad and Southcentral ports would also realize significant economic opportunity in transportations of project related supplies.

This project has the potential to reposition Alaska as a national energy authority and become an economic driver for the U.S. We ask that you please support the Alaska LNG project as proposed by the Alaska Gasline Development Corporation and we thank you for your time.

Respectfully,

Tim Dillon
Executive Director
Kenai Peninsula Economic Development District
Tim@kpedd.org

Alaska Regional Development Organization (ARDOR)
The State of Alaska Department of Commerce, Community and Economic Development certified KPEDD as an ARDOR in 1989.

Economic Development District (EDD)
The U.S. Department of Commerce, Economic Development Administration (EDA) recognized KPEDD as an Economic Development District in 1988.

CO7-1 Comment noted.

CO7 – Kenai Peninsula Economic Development District (cont'd)

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Document Content(s)

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CO8 – Cruz Construction

20190925-5109 FERC PDF (Unofficial) 9/25/2019 3:13:58 PM

Cruz Construction, Inc., Palmer, AK.
For 30 years, Cruz Construction, Inc. has collaborated with the State and oilfield producers to build Alaska and develop its natural resources. We understand well that resource development, especially oil and gas, is fundamental to our statehood and the principal driver of Alaska's economy. CO8-1

Because we believe that continued efforts in natural resource development is the way forward, we would like to express our support of the Alaska LNG Project. The Alaska LNG Project aligns with Alaska's core responsibilities and principles by developing a valuable natural resource for the economic benefit of the State. Additionally, the Project would generate a substantial number of jobs and opportunities for Alaskans and small businesses.

We look forward to the advancement of Alaska's future with the Alaska LNG Project at the forefront.

Regards,

David C. Cruz
President

CO8-1 Comment noted.

CO8 – Cruz Construction (cont'd)

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CO9 – International Union of Operating Engineers

20190930-5000 FERC PDF (Unofficial) 9/27/2019 5:08:44 PM

Josh Swanson, Bothell, WA.
September 27, 2019

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

Re: Alaska LNG Project - Docket Number (CP17-178-000)

The Honorable Secretary Bose:

The purpose of this letter is to inform you that the International Union of Operating Engineers, Local 302 is in full support of the Alaska Liquified Natural Gas (LNG) Project as proposed by the Alaska Gasline Development Corporation in Nikiski, AK be selected as the preferred alternative siting of the LNG plant and marine terminal. CO9-1

The Alaska LNG project is an incredible opportunity for Alaska with its job creation and positive economic outcomes, greenhouse gas emission reductions, stable energy infrastructure, increased port capacity creating more commerce and trade opportunities. These benefits will be achieved with minimal and controlled interruption to recreation areas, wildlife, and the habitat through the use of best practice management and proper mitigation strategies.

The fact of the matter is that this project is tripling down and leveraging a significant private sector construction investment by: Creating thousands of family-wage jobs and a new economic engine for Alaskans from construction to operation and maintenance to ancillary services and indirect jobs; Improving environmental standards with significant greenhouse gas reductions both in-state and abroad, and Improving the energy infrastructure by providing an affordable in-state energy supply for the citizens of the state.

There is more than sufficient evidence that this project, in its entirety, can be managed and developed with minimal impact to the environment and wildlife and the overall benefits far exceed the costs and moving forward on this project should not be delayed. Impact management and mitigation has been taken into account for this entire project ensuring for as little environmental impact as possible.

On behalf of the members of IUOE, Local 302 and their families, I urge you to take whatever actions that are necessary to see this project through to approval. Frankly, this is a project without a downside and with an enormous upside for Alaskans and the world at large.

Sincerely,

CO9-1 Comment noted.

CO9 – International Union of Operating Engineers (cont'd)

20190930-5000 FERC PDF (Unofficial) 9/27/2019 5:08:44 PM

Daren Konopaski
Business Manager and International Vice President
International Union of Operating Engineers, Local 302

CO9 – International Union of Operating Engineers (cont'd)

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CO10 – International Union of Operating Engineers

20190930-5019 FERC PDF (Unofficial) 9/27/2019 5:19:13 PM

September 27, 2019

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

Re: Alaska LNG Project - Docket Number (CP17- 178- 000)

CO10-1

The Honorable Secretary Bose:

The purpose of this letter is to inform you that the International Union of Operating Engineers, Local 302 is in full support of the Alaska Liquified Natural Gas (LNG) Project as proposed by the Alaska Gasline Development Corporation in Nikiski, AK be selected as the preferred alternative siting of the LNG plant and marine terminal.

The Alaska LNG project is an incredible opportunity for Alaska with its job creation and positive economic outcomes, greenhouse gas emission reductions, stable energy infrastructure, increased port capacity creating more commerce and trade opportunities. These benefits will be achieved with minimal and controlled interruption to recreation areas, wildlife, and the habitat through the use of best practice management and proper mitigation strategies.

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On behalf of the members of IUOE, Local 302 and their families, I urge you to take whatever actions that are necessary to see this project through to approval. Frankly, this is a project without a downside and with an enormous upside for Alaskans and the world at large.

Sincerely,

Daren Konopaski
Business Manager and International Vice President
International Union of Operating Engineers, Local 302

CO10-1 Comment noted.

CO10 – International Union of Operating Engineers (cont'd)

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Document Content(s)

AK LNG FERC Letter.DOCX.....1-1

CO11 – Greater Fairbanks Chamber of Commerce

20191001-5001 FERC PDF (Unofficial) 9/30/2019 6:41:50 PM

Jinnel Choiniere, Fairbanks, AK.
September 30, 2019

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission (FERC)
888 First Street NE, Room 1A
Washington, DC 20426
Project Docket # CP17-178-000

Submitted electronically

Dear Ms. Bose,

The Greater Fairbanks Chamber of Commerce believes that the Alaska Gasline Development Corporation's (AGDC) AK LNG Project is acceptable and appropriate, as proposed in FERC's recently released Draft Environmental Impact Statement. Developing and bringing to market Alaska's extensive northern reserves of natural gas has been talked about and broadly desired by many Alaskan citizens for over 50 years. The challenges are substantial and include the high cost of doing business on the North Slope; the lack of essential infrastructure to bring Alaska's gas to market (via pipeline, liquefaction and LNG shipping); fiscal uncertainty with regard to commodity pricing; taxes and royalties and credibly reaching the difficult decision point where a carefully conceptualized and evaluated "AK LNG Project" is found to be environmentally acceptable under the federal NEPA process. Despite these obstacles, we believe the AK LNG project is a viable option to increase access to lower-cost energy in Fairbanks. CO11-1

Given that AGDC has agreed that it will implement best management practices, while following modern avoidance, minimization and mitigation measures, and comply with the various requirements regularly applied by the U.S. Army Corps of Engineers, Coast Guard, the National Park Service (for the Denali Alternative, if selected) and FERC's rigorous environmental and construction inspection programs, it is indeed anticipated that the undeniable environmental impacts caused by this project would be significant, but in balance with the substantial benefits derived from the Project's 30-year life. Some examples of these desirable benefits are:

- The DEIS states that project construction would result in economic benefits and business opportunities throughout Alaska from worker spending, purchases of materials and services (pages 4-602 and 4-605), supplies and payment of state and local taxes.

- The ongoing operations jobs both along the pipeline and on the North Slope, in Nikiski and Anchorage would gird and sustain our existing oil and gas industry.

- Construction of this large natural gas pipeline and several off-take laterals, would supply most Alaskans with access to natural gas and clearly improve air quality (Volume 3, page 4-877), while reducing

CO11-1 Comment noted.

CO11 – Greater Fairbanks Chamber of Commerce (cont'd)

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greenhouse gas emissions by decreasing the burning of wood and coal for space heat and electric power generation. CO11-1

- For the greater Fairbanks/North Pole area this access to reasonably priced natural gas, via a 34+ mile lateral pipeline, would spur increases in the use of our Interior Gas Utility piped mainlines and substantially aid in the required PM-2.5 decreases now demanded by the U.S. Environmental Protection Agency.

- We continue to advocate for a pricing methodology that includes the cost of the lateral pipeline in the overall project plan. Further, the in-state natural gas price should not include the liquefaction costs in prices or hook-up fees. Finally, in contrast to export markets, in-state natural gas prices should reflect Alaska's proximity to the source of the LNG. We urge AGDC to use consistent pricing across the state. CO11-2

Thank you for the opportunity to comment on the AK LNG Project. We look forward to the completion of the EIS, and opportunity for Alaska to move ahead with final design and construction of this project, if – as the future unfolds – it is determined to be economically viable.

The Greater Fairbanks Chamber of Commerce represents over 700 business members throughout Interior Alaska. We work to advocate for the best business environment, promote economic strength and growth for Interior Alaska, and to develop the resources and networks enterprising people use to share knowledge.

Respectfully,

Marisa Sharrah
President/CEO

Rebecca Dean
Board Chair

CO11-2 Comment noted.

CO11 – Greater Fairbanks Chamber of Commerce (cont'd)

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Document Content(s)

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CO12 – Anchorage Chamber of Commerce

20191015-0019 FERC PDF (Unofficial) 10/15/2019

ANCHORAGE CHAMBER of COMMERCE

1016 W. Sixth Avenue, Suite 303
Anchorage, AK 99501

2019 OCT 15 P 2:47

October 2, 2019
Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission (FERC)
888First Street NE, Room 1A
Washington, DC 20426
Project Docket # CP17-1787-000

Dear Secretary Bose:

The Anchorage Chamber of Commerce is the oldest and largest business organization in Alaska and currently has over 920 members representing nearly 50,000 employees. Our long and storied history is based on our support of creating a prosperous and responsible business environment. The oil and gas industries have been pillars of the Alaska economy for over 40 years and have proven to be responsible stewards of the environment while creating jobs for Alaskans and wealth for our state. CO12-1

The Anchorage Chamber supports the recommendation that the Alaska LNG Project (AKLNG), as proposed by the Alaska Gasline Development Corporation, in Nikiski, Alaska be selected as the preferred alternative for the siting of the LNG plant and marine terminal.

Our members have ranked energy security in Southcentral Alaska as a major concern. Since most of our electrical power is generated from natural gas, and the vast majority of our homes and businesses are heated with natural gas, energy security comes down to providing long-term stable supplies of natural gas to Southcentral Alaska. By connecting the existing Southcentral pipeline network to the gas fields of the North Slope, AKLNG would provide stable, affordable energy for our membership for many years to come.

AKLNG would also create jobs and provide significant economic opportunity for businesses currently operating in Alaska. For example trucking, marine pilots, tug operators, construction companies, equipment suppliers, hotels, car rental and in-state air carriers would directly benefit from the construction of the project, with multiplier effects spreading the impact even more broadly.

Estimates show creation of 29,000 construction jobs over an eight year period, and 980 long-term operations jobs, of which approximately 345 will be created within the Municipality of Anchorage. There would obviously be an indirect stimulus to many other sectors, particularly in the oil and gas, mining support services, construction, transportation, professional services, and scientific and technical services.

T 907.272.2401 www.anchoragechamber.org F 907.272.4117

CO12-1 Comment noted.

CO12 – Anchorage Chamber of Commerce (cont'd)

20191015-0019 FERC PDF (Unofficial) 10/15/2019

In conclusion, the Anchorage Chamber of Commerce recognizes the important benefits that the AKLNG can bring to our city and state, and the board of directors wholeheartedly supports moving ahead with the Alaska LNG Project. CO12-1

Best Regards,

Joy Merriner
Chair of the Board of Directors

Bruce Bustamante
President & CEO

T 907.272.2401 www.anchoragechamber.org F 907.272.4117

CO12 – Anchorage Chamber of Commerce (cont'd)

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Document Content(s)

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CO13 – Alaska District Council of Laborers

Alaska District Council of Laborers

Laborers' International Union of North America
2501 Commercial Drive • Suite 140 • Anchorage, Alaska 99501
907.276.1640 • Fax: 907.274.7289 • info@alaskalaborers.com

October 2, 2019

Joey Merrick
Business Manager
Secretary-Treasurer
District Council

Business Manager
Laborers' Local 341

Scott Eickholt
President
District Council

Business Manager
Laborers' Local 942

Jordan Adams
Vice President
District Council

Business Manager
Public Employees Local 71

Federal Energy Regulatory Commission
Submitted through eFiling: http://www.ferc.gov

Re: Docket No. CP17-178-000; Comment in Support of the Draft Environmental Impact Statement for the Alaska LNG Project

Dear Secretary Bose:

The Alaska District Council of Laborers is writing in support of the Alaska LNG Project application filed with the Commission. The Alaska District Council of Laborers represents 5,500 Alaskans working in construction, the oil and gas industry, the public sector, tourism, and health care. Laborers work in the oil and gas industry from the North Slope to the Valdez Marine Terminal. Specifically, the Alaska District Council of Laborers urges the Commission to support the Alaska LNG Project, as proposed by the Alaska Gasline Development Corporation, with the siting of the LNG plant and marine terminal in Nikiski, Alaska as the preferred alternative. CO13-1

The Alaska LNG project presents vast benefits and opportunities, including both the reduction of greenhouse gas emissions and economic benefits for Alaskans such as job opportunities and affordable gas. By replacing the burning of wood and coal with natural gas, the project will reduce greenhouse gas emissions. Similarly, international potential gas sales will provide access to a cleaner energy source. According to the Draft Environmental Impact Statement (DEIS), worker spending, purchases of materials, supplies and taxes would all contribute to economic benefits from the project. For instance, $7.1 billion in materials and services will be purchased in Alaska, and the project will create jobs and bring significant economic opportunity in the form of transportation of project-related supplies.

The Alaska LNG project would not only provide valuable employment opportunities in construction and operations, it would provide increased opportunities in the many industries supporting the oil and gas industry. These related industries include mining support services, transportation, professional, scientific, and technical services. Construction job totals alone would rise to 29,100 over eight years, peaking around the fourth year in the project at 7,620 jobs. In terms of jobs in operations, these positions would be concentrated in

CO13-1 Comment noted.

CO13 – Alaska District Council of Laborers (cont'd)

the gas treatment plant; mainline pipeline, compressor and meter stations; and the liquefaction plant. These operations positions would total around 980 with a projected total annual wages of around $385 million. CO13-1

In addition to providing a surge of construction and long-term operations jobs, the Alaska LNG project would bring clean, affordable natural gas to Alaskans. By providing in-state delivery of natural gas, air quality conditions would improve in the state. With a connection to the Interior Gas Utility, there would be a long-term, economic energy supply for both residents and commercial users in Fairbanks and North Pole. Similarly, interconnecting the main gas pipeline with the existing infrastructure in Southcentral Alaska will guarantee long-term energy supplies to that region of the state. The additional in-state access to natural gas will benefit residential users, commercial and industrial users, as well as new resource development projects.

Based on these significant economic and air quality benefits that are thoroughly documented in the DEIS, the Alaska District Council of Laborers strongly supports the recommendation of the Alaska Gasline Development Corporation that Nikiski, Alaska be chosen as the preferred alternative for locating the LNG plant and marine terminal. The Alaska District Council further supports the recommendation by the National Park Service and Environmental Protection Agency to install an interconnection to provide natural gas to Denali National Park and Preserve and the Denali Borough. The National Park Service is willing to convert existing operations and the bus fleet to natural gas, which would improve air quality. The DEIS also reports that, with the use of best management practices, impacts to wildlife will not be significant. It concludes that most impacts of the project would not be significant and would be reduced to minor impacts with the implementation of the proposed minimization and mitigation measures. The Alaska Gasline Development Corporation has addressed public concerns related to the development of the gas pipeline and liquefaction facilities, and the establishment of Local Subsistence Implementation Councils will be effective to identify community concerns and to make sure that impacts on subsistence activities are minimized.

The Alaska District Council therefore strongly encourages the Commission to recommend that the Alaska LNG Project, as proposed by the Alaska Gasline Development Corporation, with the LNG plant and marine terminal being located in Nikiski, Alaska be chosen as the preferred alternative. Thank you for the opportunity to comment.

Respectfully submitted,

A.J. Merrick II

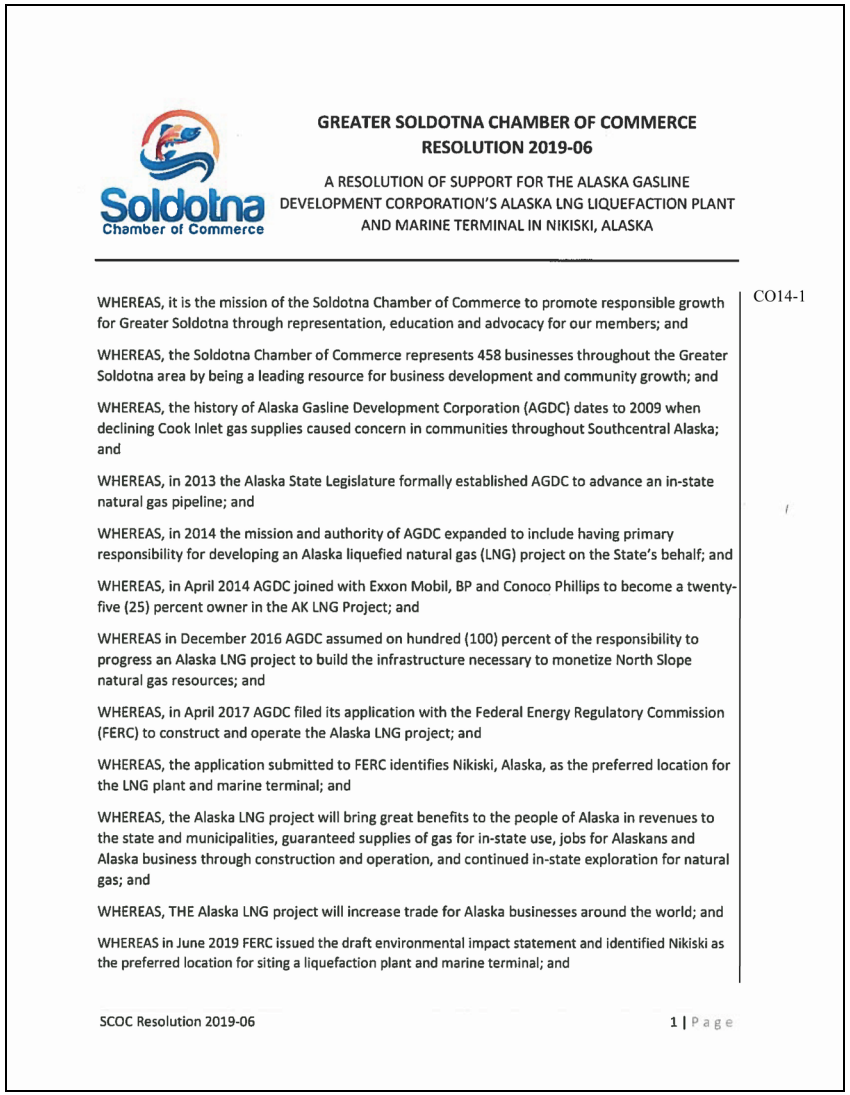
A.J. "Joey" Merrick II

CO13 – Alaska District Council of Laborers (cont'd)

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Document Content(s)

CP17-178-000 AK Laborers Cmt DEIS Alaska LNG Project.PDF.....1-2

CO14 – Soldotna Chamber of Commerce



GREATER SOLDOTNA CHAMBER OF COMMERCE
RESOLUTION 2019-06

A RESOLUTION OF SUPPORT FOR THE ALASKA GASLINE DEVELOPMENT CORPORATION'S ALASKA LNG LIQUEFACTION PLANT AND MARINE TERMINAL IN NIKISKI, ALASKA

CO14-1

WHEREAS, it is the mission of the Soldotna Chamber of Commerce to promote responsible growth for Greater Soldotna through representation, education and advocacy for our members; and

WHEREAS, the Soldotna Chamber of Commerce represents 458 businesses throughout the Greater Soldotna area by being a leading resource for business development and community growth; and

WHEREAS, the history of Alaska Gasline Development Corporation (AGDC) dates to 2009 when declining Cook Inlet gas supplies caused concern in communities throughout Southcentral Alaska; and

WHEREAS, in 2013 the Alaska State Legislature formally established AGDC to advance an in-state natural gas pipeline; and

WHEREAS, in 2014 the mission and authority of AGDC expanded to include having primary responsibility for developing an Alaska liquefied natural gas (LNG) project on the State's behalf; and

WHEREAS, in April 2014 AGDC joined with Exxon Mobil, BP and Conoco Phillips to become a twenty-five (25) percent owner in the AK LNG Project; and

WHEREAS in December 2016 AGDC assumed on hundred (100) percent of the responsibility to progress an Alaska LNG project to build the infrastructure necessary to monetize North Slope natural gas resources; and

WHEREAS, in April 2017 AGDC filed its application with the Federal Energy Regulatory Commission (FERC) to construct and operate the Alaska LNG project; and

WHEREAS, the application submitted to FERC identifies Nikiski, Alaska, as the preferred location for the LNG plant and marine terminal; and

WHEREAS, the Alaska LNG project will bring great benefits to the people of Alaska in revenues to the state and municipalities, guaranteed supplies of gas for in-state use, jobs for Alaskans and Alaska business through construction and operation, and continued in-state exploration for natural gas; and

WHEREAS, THE Alaska LNG project will increase trade for Alaska businesses around the world; and

WHEREAS in June 2019 FERC issued the draft environmental impact statement and identified Nikiski as the preferred location for siting a liquefaction plant and marine terminal; and

SCOC Resolution 2019-06 1 | Page

CO14-1 Comment noted.

CO14 – Soldotna Chamber of Commerce (cont'd)

WHEREAS the Chamber in January 2019 the Soldotna Chamber passed a resolution in support of locating the liquefaction plant in Nikiski; and

CO14-1

NOW THEREFORE BE IT RESOLVED that the Soldotna Chamber of Commerce reaffirms its support for the location of the Alaska Gasline Development Corporation's Alaska LNG Liquefaction Plant and Marine Terminal in Nikiski, Alaska.

BE IT FURTHER RESOLVED that copies of this resolution be sent to U.S. Senator Lisa Murkowski, U.S. Senator Dan Sullivan, U.S. Congressman Don Young, Alaska Governor Michael Dunleavy, Alaska Senator Peter Micciche, Alaska Representative Gary Knopp, Alaska Representative Ben Carpenter, and Kenai Peninsula Borough Mayor Charlie Pierce.

Board President
Jim Stogsdill

September 13, 2019
Date

Board President-Elect
Pamela Parker

September 13, 2019
Date

SCOC Resolution 2019-06

2 | Page

CO14 – Soldotna Chamber of Commerce (cont'd)

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Document Content(s)

Soldotna Chamber Resolution 2019-06.PDF.....1-2

CO15 – Resource Development Council

20191003-5117 FERC PDF (Unofficial) 10/3/2019 2:10:56 PM

Founded 1975

Executive Director
Marleanna Hall

2019-2020
Executive Committee
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Scott Jepsen, Sr. Vice President
Mike Satre, Vice President
Lori Nelson, Secretary
Lance Miller, Treasurer
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Keith Silver
Joe Sprague
Chad Steadman
Phil Steyer
John Sturgeon
Jan Trigg
Tim Williams
Sam Wolfe

Ex-Officio Members
U.S. Senator Lisa Murkowski
U.S. Senator Dan Sullivan
Congressman Don Young
Governor Michael J. Dunleavy

RESOURCE DEVELOPMENT COUNCIL
Growing Alaska Through Responsible Resource Development

October 3, 2019

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

Re: Alaska LNG Project Draft Environmental Impact Statement, Docket Number: CP17-178-000.

Dear Ms. Bose:

The Resource Development Council for Alaska, Inc. (RDC) is writing to encourage the Federal Energy Regulatory Commission (FERC) to move expeditiously to a Final Environmental Impact Statement (FEIS) and a positive Record of Decision on the Alaska Liquified Natural Gas (LNG) Project. Should the Alaska LNG Project move forward, it would be one of the most important projects to Alaska's economy. The $43 billion project would be the largest integrated natural gas/LNG project of its kind. CO15-1

RDC is an Alaskan business association comprised of individuals and companies from Alaska's oil and gas, mining, forest products, tourism and fisheries industries. RDC's membership includes Alaska Native corporations, local communities, organized labor, and industry support firms. RDC's purpose is to encourage a strong, diversified private sector in Alaska and expand the state's economic base through the responsible development of our natural resources.

The Alaska LNG Project would provide significant economic benefits to Alaskans from the Arctic coast to the southern reaches of the state through the creation of thousands of jobs and billions of dollars in new revenues to the State of Alaska and the federal government. Other benefits include access to a generation of domestically-produced clean natural gas for homes and businesses. The project is expected to generate 29,000 jobs during construction and approximately 1,000 jobs during operation.

Connection to the Interior Gas Utility would provide a long-term, economic energy supply for Fairbanks and interior communities. Interconnection of the main gas pipeline to the existing Southcentral pipeline network would provide long-term energy supplies for residential, commercial and industrial users. The additional in-state natural gas could also support new resource development projects in need of affordable energy.

The Draft Environmental Impact Statement found that most project impacts would not be significant and would be reduced to minor impacts with the implementation of proposed avoidance, minimization, and mitigation measures. Moreover, a 40-plus year track record in Alaska has demonstrated that oil and gas development can coexist with traditional subsistence activities, cultural resources, wildlife, and the environment.

121 West Fireweed Lane, Suite 250, Anchorage, Alaska 99503
907-276-0700 • resources@akrdc.org • akrdc.org

CO15-1 Comment noted.

CO15 – Resource Development Council (cont'd)

20191003-5117 FERC PDF (Unofficial) 10/3/2019 2:10:56 PM

CO15-1

In Alaska, the project would reduce greenhouse gas emissions through the use of natural gas. Through potential sales, it would also help reduce greenhouse gas emissions and provide clean energy to a significant portion of the world population.

RDC acknowledges that there are special interests that oppose further development of fossil fuels in the Arctic and elsewhere. However, oil and gas development in Alaska could ultimately prove indispensable as forecasts indicate our nation's energy demands will increase over ten percent in the next quarter century. Despite sharp increases in alternative energy sources, the majority of these growing energy demands will continue to be satisfied through the use of fossil fuels, and as along as there is a market for oil and gas, the resources should be developed and produced here in Alaska where operations and emissions are strictly regulated and best management activities are employed to avoid and minimize impacts.

RDC encourages FERC to move forward to the FEIS and a positive Record of Decision. Thank you for the opportunity to comment.

Sincerely,

Carl Portman
Deputy Director

CO15 – Resource Development Council (cont'd)

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Document Content(s)

AK LNG Comments.PDF.....1-2

CO16 – BP Exploration

20191003-5171 FERC PDF (Unofficial) 10/3/2019 4:09:52 PM

bp

Amy MacKenzie

Counsel
Phone 907-564-4119
Email: amy.mackenzie@bp.com

BP Exploration (Alaska) Inc.
900 E. Benson Boulevard
Anchorage, AK 99508

P.O. Box 196612
Anchorage, AK 99519-6612

October 3, 2019

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

Re: *Alaska LNG Project, Docket No. CP17-178-000*
Comments of BP Exploration (Alaska) Inc. on the Draft Environmental Impact Statement

Dear Secretary Bose:

CO16-1

On April 17, 2017, the Alaska Gasline Development Corporation ("AGDC") filed, pursuant to Section 3(a) of the Natural Gas Act and Part 153 of the regulations of the Federal Energy Regulatory Commission ("FERC" or "Commission"), an application to site, construct, and operate an integrated liquefied natural gas ("LNG") project for the exportation of natural gas produced on the North Slope of the State of Alaska (the "AKLNG Project" or the "Project"). On June 28, 2019, Commission staff issued a Draft Environmental Impact Statement ("DEIS") for the Project, requesting comments on or before October 3, 2019.

Project facilities will be used for the purpose of liquefying supplies of natural gas from Alaska. In particular, the Prudhoe Bay Unit ("PBU") and the Point Thomson Unit ("PTU") production fields on the Alaska North Slope for export in foreign commerce and for in-state deliveries of natural gas. As operator of the PBU since the 1970s and holder of a significant interest in the PTU, BP Exploration (Alaska) Inc. ("BPXA") intervened in the AKLNG Project docket and filed a letter of support for the Project dated June 5, 2017. BPXA continues to be very supportive of the Project and supports the overall quality, content, and conclusions of FERC's DEIS. Given BPXA's extensive experience and expertise on the Alaska North Slope, BPXA offers the DEIS comments contained herein to add to the record and assist the Commission in its National Environmental Policy Act review. BPXA also supports comments provided by AGDC and the Alaska Oil and Gas Association.

Mitigation of Impacts to Polar Bears

CO16-2

While the DEIS adequately discusses potential impacts to polar bears, BPXA respectfully notes that the Alaska oil and gas industry, in consultation with the U.S. Fish and Wildlife Service ("Service"), has implemented on-the-ground programs that have well-documented success in protecting polar bears and mitigating the potential impacts of human-bear interactions associated with industry activities in northern Alaska. As noted in section 5.1.8 of the DEIS (page 5-28), AGDC would provide an Avoidance and Interaction Plan that addresses polar bears. BPXA expects and requests that this plan include best practices implemented on the North Slope for

CO16-1 Comment noted.

CO16-2 Comment noted.

CO16 – BP Exploration (cont'd)

mitigation of polar bear impacts. Implementation of those best practices will maintain the excellent North Slope track record for managing human/bear interactions and mitigate polar bear impacts, including decreasing and potentially eliminating the potential for additional impacts related to the Project. CO16-2

Mitigation of Impacts to Caribou

The DEIS omits reference and discussion of certain published, peer-reviewed scientific literature indicating that oil and gas exploration and production activities have insignificant or minor impacts on caribou. Admittedly, there has been considerable controversy around this issue. Therefore, a comprehensive discussion of all literature is necessary for a complete understanding of this topic. We respectfully request that the Commission review and include discussion of the following articles: CO16-3

- Cronin, M. A., W. B. Ballard, J. Truett, and R. Pollard. 1994. Mitigation of the effects of oil field development and transportation corridors on caribou. LGL Alaska Research Associates, Inc, Anchorage, Alaska
- Cronin, M.A., B.J. Pierson, S.R. Johnson, L.E. Noel and W.B. Ballard. 1997. Caribou Population density in the Prudhoe Bay Region of Alaska. The Journal of Wildlife Research 2:59-68
- Noel, L.E., R.H. Pollard, W.B. Ballard, and M.A. Cronin. 1998. Activity and use of active gravel pads and tundra by caribou, *Rangifer tarandus granti*, within the Prudhoe Bay Oil Field, Alaska. Canadian Field Naturalist 112:400-409
- Noel, L.E., K.R. Parker, and M.A. Cronin. 2004, Caribou distribution near an oilfield road on Alaska's North Slope, 1978-2001. Wildlife Society Bulletin 32:757-771
- Joly, K., C. Nellemann and I. Vistnes. 2006. A reevaluation of caribou distribution near an oilfield road on Alaska's North Slope: WILDLIFE SOCIETY BULLETIN 34: 866-869
- Noel, L.E., K.R. Parker, and M.A. Cronin. 2006. Response to Joly et al. (2006) A Reevaluation of Caribou Distribution Near and Oilfield Road on Alaska's North Slope. WILDLIFE SOCIETY BULLETIN 34:870-873

Taken together, the above literature indicates that there have been limited negative impacts of the oilfields on caribou populations. The most current literature supports that long-term displacement of the caribou herd is unlikely, with the possible exception of calving. In addition, the articles above document some positive impacts of the fields. For instance, it has been specifically observed that caribou will often congregate on oilfield roads and gravel pads as well as in the shade of buildings and pipelines for insect relief. Caribou have also been observed to become habituated to infrastructure or facilities. In addition, modern design and construction standards for pipelines, along with operational controls, have been demonstrated to effectively mitigate impacts on caribou. For instance, crossing ramps and elevating pipelines five or seven feet or higher above grade provides opportunity for animals to pass over or under the structures. It is important to note that the potential for significant impacts on caribou movement would be mitigated by the AGDC's installation of the PTTL with a minimum pipeline height of 7 feet. Other design or operational controls include spacing between roads and pipeline crossings, traffic

CO16-3 We considered information provided in these references in our analysis. See the response to comment SA2-6.

CO16 – BP Exploration (cont'd)

controls (speed limits and reduced vehicle numbers), and non-glare coatings. Because omission of relevant literature can lead to biases and mislead policy decisions, the Final Environmental Impact Statement ("FEIS") should be revised to include consideration of the above scientific literature. CO16-3

Minor Suggested Edits to DEIS

CO16-4

BPXA has identified the following minor corrections that it respectfully requests be made in the FEIS:

- Page 2-4 2.1.3.1 GTP

  The gaseous stream of CO2 and H2S would be combined into a single GTP byproduct stream and sent to the PBU Treated Gas ~~Dehydration~~ Distribution System.

- 4.19.2.2 PBU MGS Project

  The PBU MGS Project would include a ~~expand~~ 5-acre expansion of the CGF pad, requiring about 150,000 cubic yards of granular fill material to allow installation of a valve module and a metering module for feed gas. Three new feed gas, currently designed as 48-inch-diameter lines, and a propane gas pipeline would be constructed from the PBU CGF to the new valve module on the CGF Pad.

  Construction of the PBU MGS Project facilities would occur during winter seasons over a 4~~—6-year~~ period beginning in Year 1 and ending in Year 57 of the Alaska LNG Project. ~~Drilling would begin in Year 5 and be completed in Year 9 of the Alaska LNG Project.~~

- Page 4-1127

  The PBU MGS Project would require a ~~new~~ 5-acre expansion to an existing pad and ~~at least~~ up to 44 miles of new by-products and gas feed pipelines.

Thank you for the opportunity to submit these comments.

Sincerely,

Amy J. MacKenzie

Amy J. MacKenzie

CO16-4 Sections 2.1.3.1, 4.19.2.2, and 4.19.4.4 have been updated to address this comment.

CO16 – BP Exploration (cont'd)

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Document Content(s)

Comments of BPXA on Draft EIS.PDF.....1-3

CO17 – ExxonMobil

20191003-5019 FERC PDF (Unofficial) 10/3/2019 12:29:06 AM

ExxonMobil Alaska Production, Inc.
P. O. Box 196601
Anchorage, Alaska 99519-6601
907-564-3689 Telephone
906-564-3789 Facsimile

Darlene M. Gates
President

ExxonMobil

October 3, 2019
ER-2019-OUT-284

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

Re: ExxonMobil Comments on the Federal Energy Regulatory Commission's (FERC) Draft Environmental Impact Statement (DEIS) for the Alaska LNG Project (FERC No. CP17-178-000)

Dear Ms. Bose,

ExxonMobil Alaska Production Inc. (ExxonMobil) is pleased to submit the following comments in support of the FERC AKLNG DEIS. The DEIS is an important opportunity for public comment and input on its proposed findings. ExxonMobil notes that the Alaska Oil and Gas Association (AOGA) has prepared additional comments on the DEIS. ExxonMobil supports and joins in those more detailed comments. CO17-1

The DEIS represents a significant milestone for the AKLNG Project NEPA review and permitting. Completion of a Final EIS and agency approval of the AKLNG Project will in turn comprise an important step toward realizing access to Alaska's vast but as yet untapped North Slope natural gas resources.

ExxonMobil's history in Alaska goes back nearly 100 years. Our leasing of oil and gas resources at Prudhoe Bay and Point Thomson began soon after Statehood more than 50 years ago. ExxonMobil was instrumental in the discovery and development of Prudhoe Bay, which remains a significant oil producing field and an as yet unrealized major source of natural gas. ExxonMobil discovered the Point Thomson field and is the operator of the Point Thomson Unit which alone contains an estimated 8 trillion cubic feet of natural gas, nearly 25% of the currently available supply on the North Slope. As the largest owner of natural gas resources in Alaska, ExxonMobil shares the common goal with the State, and all Alaskans to develop and commercialize this significant natural gas resource.

ExxonMobil fully appreciates and supports the role of the AKLNG Project in potentially bringing stranded North Slope natural gas to market as liquefied natural gas. Just as Alaska oil development brought economic prosperity to Alaskans, modernized infrastructure and improved healthcare, education, sanitary living conditions, transportation, waste management and access to power and emergency services, the commercialization of this gas could bring multiple levels of benefits to Alaska and the United States.

CO17-1 Comment noted.

CO17 – ExxonMobil (cont'd)

20191003-5019 FERC PDF (Unofficial) 10/3/2019 12:29:06 AM

Construction of the AKLNG Project would represent an enormous investment in the future of Alaska. It would not only create high quality jobs during construction but also permanent jobs needed for operation of new facilities on the North Slope, at Nikiski, and elsewhere. The Project would create many opportunities not just for the Alaska oil and gas support industry, but also for Alaska businesses of many different kinds. It is expected that AKLNG would help create new incentives for exploration, development and investment in Alaska oil and gas by providing the infrastructure to market future natural gas discoveries. AKLNG could also provide a new long term source of revenue for the State and local governments which could help meet State and local needs and budgets. The overall boost to the Alaska economy could be significant. CO17-1

AKLNG would also provide a new and more accessible supply of natural gas within Alaska. Communities now reliant on less efficient fuels could realize improvements in air quality and health standards from increased use of natural gas where practicable. The same is true of exported liquefied natural gas, which could help replace less efficient fuels in the market. Bringing Alaska liquefied natural gas to market would further support the US energy supply, regional alliances and commercial ties.

These factors firmly support a finding that the AKLNG Project is in the public interest. At the same time, the DEIS represents a substantial and comprehensive analysis of the Project, including potential impacts and mitigations. The DEIS supports the conclusion that environmental impacts can be mitigated to a level that will not significantly impact wildlife, the natural environment or the quality of life for Alaska's citizens.

The Project has adopted many best management practices and mitigation measures that have been proven effective from previously permitted oil and gas developments. While the Project is broad in its geographic scope, the extensive experience and track record of industry in Alaska working with regulatory agencies, the State and local communities provides a significant basis of assurance that the Project's environmental impacts will be limited to the greatest extent possible and to a fully acceptable level.

ExxonMobil also fully supports adoption of Alternative B as the preferred alternative. We further hope and anticipate that DEIS will lead to a Final EIS in timely fashion and thereafter support an expeditious issuance of necessary permits.

In addition, ExxonMobil notes that it has made a copy of its 2018 Annual Report on Point Thomson caribou monitoring available to AOGA. The 2018 Annual Report is based upon cumulative monitoring and analysis of potential impacts to caribou from the Point Thomson Export Pipeline conducted since Project construction began in 2013. The Report was prepared by Alaska wildlife experts ABR for ExxonMobil as a condition of North Slope Borough (NSB) approval of the Point Thomson Project. We believe the Report is relevant to consideration of caribou impacts in the DEIS. Since it is an ExxonMobil report, we attach a copy here. In doing so, we certify that it is an accurate copy of the report as filed with the NSB Department of Wildlife Management and Department of Planning and Community Services in November 2018 as required by NSB Ordinance Serial No. 75-06-61. CO17-2

In closing, ExxonMobil would like to thank FERC, AGDC, the State of Alaska and other Cooperating Agencies for their diligent efforts and expertise in bringing the Project to this point. We also appreciate the engagement of the many Alaskan organizations, local governments and individuals in this effort, including Native Alaskan tribal organizations, corporations, and individuals who have participated in supporting this Project.

CO17-2 We considered information provided in this reference in our analysis. See the updates to section 4.6.1.3 of the final EIS. Also see the response to comment SA2-6.

CO17 – ExxonMobil (cont'd)

20191003-5019 FERC PDF (Unofficial) 10/3/2019 12:29:06 AM

Sincerely,

Darlene M. Gates
President

Attachment:
Caribou Monitoring Study In The Point Thomson Area, Northern Alaska, 2018 Annual Report, Prepared for ExxonMobil Alaska Production Inc. By Alexander K. Prichard, Joseph H. Welch, and Brian E. Lawhead, ABR, Inc.—Environmental Research & Services," November 28, 2018.

CO17 – ExxonMobil (cont'd)

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CO18 – Alyeska Pipeline

Alyeska pipeline SERVICE COMPANY

P.O Box 196660 ANCHORAGE, ALASKA 99519-6660 TELEPHONE (907) 787-8700

Sally Kucko
General Counsel & Vice President

October 3, 2019 APSC Letter No. 43290

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

Re: FERC Docket No. CP17-178-000, Alaska LNG Project (Project)
Draft Environmental Impact Statement (DEIS)

Dear Secretary Bose:

Alyeska Pipeline Service Company (Alyeska) provides these comments as agent for the Trans Alaska Pipeline System (TAPS) owners to supplement Alyeska's comments filed on December 3, 2015 and April 4, 2019 during Scoping and DEIS development. The northern half of the Project is routed along 400 miles of both the Dalton Highway and TAPS from its origin on the North Slope to a mid-point near Livengood. Four manned TAPS facilities are located in this segment, Pump Stations 1, 4 and 5 and the Yukon Response Base. CO18-1

Table 1.6-1 in the DEIS lists the Alyeska letter of non-objection as a major approval. Please note that any non-objection for access to the TAPS rights-of-way, which are held by the TAPS Owners, would be conditioned on the Project proponent's promise to mitigate the risks associated with the Project's proximity to TAPS. The details of such mitigation are best captured in a variety of agreements and licenses with the project proponent covering such activities as crossings, parallel construction, encroachments, road use, material site development and airport access and maintenance.

Thank you for covering concerns related to TAPS protection, such as failure consequence analysis and the Yukon River crossing, in the DEIS. AGDC continues to comply with the written agreement with Alyeska throughout this FEL 1 phase, which agreement produced the 2016 TAPS Engineering Impact Study. Alyeska stands ready to continue this engagement in the next phase of the Project to plan for and assure compatibility with TAPS.

For any questions, please contact the Alyeska Lands Manager, Peter Nagel, at (907)787-8170.

Sincerely,

Sally Kucko

c: Intervenors
Erika Reed, TAPS Federal Authorized Officer, USBLM
Tom Stokes, State Pipeline Coordinator, ADNR
Frank Richards, Sr. Vice President, AGDC

CO18-1 Comment noted. Table 1.6-1 of the final EIS has been updated to address this comment.

CO18 – Alyeska Pipeline (cont'd)

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CO19 – General Contractors of Alaska

20191004-5020 FERC PDF (Unofficial) 10/3/2019 5:17:07 PM

ASSOCIATED GENERAL CONTRACTORS of ALASKA

8005 SCHOON STREET, SUITE 100 • ANCHORAGE, ALASKA 99518
TELEPHONE (907) 561-5354 • FAX (907) 562-6118

October 3, 2019

Secretary Kimberley Bose
Federal Energy Regulatory Commission
888 First Ave. NE
Washington, DC 20426

Re: Docket No. CP17-178-000 for the Alaska LNG Project

Dear Secretary Bose,

The Associated General Contractors of Alaska (AGC) is writing to express our strong support for the Alaska LNG Project. We want to encourage you to move promptly towards a Final Environmental Impact Statement (FEIS) and a positive Record of Decision on the AK LNG project. CO19-1

AGC is a construction trade association representing over 640 contractors, specialty contractors, suppliers and manufacturers in Alaska. Within our membership is much of Alaska's industrial and commercial construction industry. AGC's membership builds Alaska, we know how to do it professionally, efficiently, and environmentally friendly. AGC is confident this project can be built in an environmentally responsible manner, as was the Trans-Alaska Pipeline System (TAPS), which was constructed over 40 years ago. The construction of this project will utilize proven technologies and best management practices that will enable safe operations while minimizing environmental impacts. The DEIS states that impact on recreation areas during construction would be temporary and minor. Alaskan construction projects have shown that oil and gas development can co-exist with wildlife, and the environment.

This project is positioned to become the foundation of Alaska's economy in the 21st century. The DEIS states numerous benefits to Alaska's economy, including: 1) This project's construction would result in economic benefits throughout Alaska from worker spending, purchases of materials, supplies, and taxes. 2) $7.1 billion of materials and services will be purchased in Alaska. 3) It would create 29,100 construction jobs over eight years and approximately 980 permanent jobs, creating economic statewide activity with total annual wages of $385 million. 4) Alaska will see increased employment opportunities in most industries, with particular growth expected in construction, equipment suppliers, and trucking (among other industries). Not only would Alaska's economy benefit, but so would our environment. This project will allow for clean natural gas for Alaskan homes and businesses and will reduce greenhouse gas emissions by the use of natural gas. For these and many other reasons, AGC supports this project and urges the FERC to move promptly toward the FEIS and a Positive Record of Decision.

Sincerely,

Alicia Siira
Executive Director

CO19-1 Comment noted.

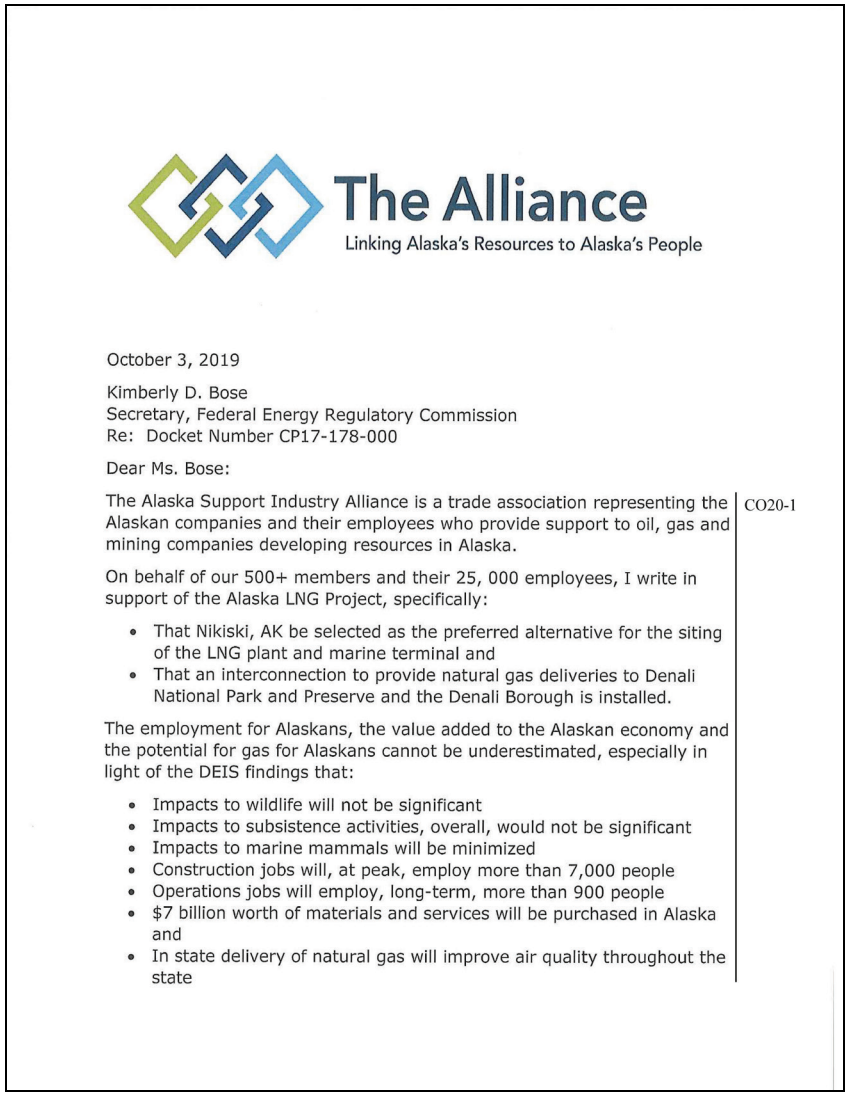
CO19 – General Contractors of Alaska (cont'd)

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CO20 – The Alaska Support Industry Alliance



The Alliance
Linking Alaska's Resources to Alaska's People

October 3, 2019

Kimberly D. Bose
Secretary, Federal Energy Regulatory Commission
Re: Docket Number CP17-178-000

Dear Ms. Bose:

The Alaska Support Industry Alliance is a trade association representing the Alaskan companies and their employees who provide support to oil, gas and mining companies developing resources in Alaska. CO20-1

On behalf of our 500+ members and their 25, 000 employees, I write in support of the Alaska LNG Project, specifically:

- That Nikiski, AK be selected as the preferred alternative for the siting of the LNG plant and marine terminal and
- That an interconnection to provide natural gas deliveries to Denali National Park and Preserve and the Denali Borough is installed.

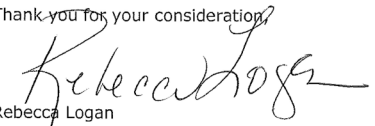
The employment for Alaskans, the value added to the Alaskan economy and the potential for gas for Alaskans cannot be underestimated, especially in light of the DEIS findings that:

- Impacts to wildlife will not be significant
- Impacts to subsistence activities, overall, would not be significant
- Impacts to marine mammals will be minimized
- Construction jobs will, at peak, employ more than 7,000 people
- Operations jobs will employ, long-term, more than 900 people
- $7 billion worth of materials and services will be purchased in Alaska and
- In state delivery of natural gas will improve air quality throughout the state

CO20-1 Comment noted.

CO20 – The Alaska Support Industry Alliance (cont'd)

Thank you for your consideration,



Rebecca Logan

CEO

The Alaska Support Industry Alliance

CO20 – The Alaska Support Industry Alliance (cont'd)

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Document Content(s)

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CO21 – Denali Citizens Council

20191004-5034 FERC PDF (Unofficial) 10/3/2019 9:13:54 PM



Denali Citizens Council

www.denalicitizens.org mail@denalicitizens.org P.O. Box 78, Denali Park, AK 99755 (907) 244-2510

Federal Energy Regulatory Commission
Online Filing
Docket No. CP17-178-000

I, Nancy Bale, am submitting these comments regarding the Draft Environmental Impact Statement (DEIS) for the Alaska LNG Pipeline (Docket CP17-178-000) on behalf of the Board of Directors and approximately 300 members of the Denali Citizens Council (PO Box 78, Denali Park, Alaska 99755). The Council, founded in Cantwell in 1974, provides education and advocacy on important land and wildlife issues in the gateway communities of Denali National Park. Our members, many of whom live and work along the proposed route of a large diameter pipeline adjacent to Denali National Park, would only support a project that can be accomplished in an environmentally appropriate and fiscally responsible manner. We are unsure that this can be done, given the many foreseeable impacts of a large diameter gas pipeline running through our communities, private properties and important recreational lands.

1. **The Trans Alaska Pipeline (TAPS) corridor is a preferable route** for this line, but was insufficiently considered in the DEIS CO21-1
    a. In fact, as we have reviewed materials associated with construction of a large diameter pipeline along the Parks Highway along the entire distance between Fairbanks and Anchorage, we've concluded that the impacts and fiscal uncertainties of this project in our region are simply too great, and we would favor the alternative discussed in section 3.8.1.1, which stipulates a large diameter line along the TAPS corridor either to export, or more likely to an LNG facility in southcentral Alaska, with spur lines to centers of need such as Fairbanks and Anchorage. This large diameter line is likely to be more fiscally sustainable and eliminates the complications associated with setting aside an entirely new right of way for much of the line, as would be needed with the Mainline Alternative.
    b. The routing of the proposed Mainline Alternative pipeline through the Healy Canyon will be a construction nightmare, what with the adjacent vertical rock walls that would need to be moved, the dangers to the contractors working underneath the guaranteed rockfall, and the delays to important interstate and tourist traffic. Additionally, we have serious concerns with the practicability of the Cook Inlet crossing, having heard that the ships have not been built yet that can lay the proposed heavy concrete-coated pipeline in an ocean environment with a 30 foot tide.
    c. Despite the fact that we feel the proposed Mainline Alternative is neither feasible nor desirable as described, we still wish to comment on the DEIS. We support routing any proposed natural gas pipeline along the existing TAPS corridor. This corridor has been set aside and is previously disturbed for the purpose of getting petroleum products to tidewater. As far as the LEDPA is concerned, this alternative affects fewer wetland acres

CO21-1 Comment noted. See the updates to section 3.8.1.1 of the final EIS. The COE would determine the LEDPA for the Project.

CO21 – Denali Citizens Council (cont'd)



than does the Mainline Alternative. The DEIS inappropriately dismissed this route with little analysis, citing some negatives associated with transit through Thompson Pass and constructing an LNG facility in Valdez. The minimal discussion of these impacts constitutes an incomplete analysis.

2. **The Denali Alternative is suggested but insufficiently analyzed in the DEIS.** Though it is not an element of the preferred alternative, we are concerned that it may become the preferred route in the FEIS. FERC claims that their hands would be tied by the difference in acreage crossed by the pipeline installation in wetlands, which would lead the Corps to direct the Denali Alternative to be the LEDPA. This difference of 20 acres within a project that is estimated to disturb over 8,000 acres (p.4-227) should not be a defining reason to choose the Denali Alternative. The unspoken reason is that AGDC would like to save money, although it is never stated how much money would be saved. Given this preference it is notable that the Denali Alternative discussion and evaluation suffers from the type of errors and omissions that should be caught before releasing a Draft. CO21-2
    a. For example:
        i. In contrast to the difficult aerial crossing of the Park Road Fault at Lynx Creek in the Mainline Pipeline Alternative, the crossing of that same fault in the Denali Alternative is evaluated as follows: *"The Denali Alternative would cross the Park Road Fault in the Nenana River floodplain, where the risk of soil liquefaction in the event of a major earthquake is present. Design measures to mitigate liquefaction risk, as discussed in section 4.1.3, are available to be employed at this location, if the Denali Alternative is constructed."* However, the route shown on the Denali Alternative map (Figure 3.6.2-1) does not cross the fault in the Nenana River floodplain. The fault crossing has been planned as an above-ground facility north of Riley Creek that would be visible from almost a mile of Parks Highway traffic through DNPP. *"The pipeline would have an above-ground segment in the vicinity of the fault crossing. The existing vegetation buffer may not be sufficient to screen the above-ground segment from view, including views from existing trails at a higher elevation."* (Least Adverse Environmental Effects Report, NPS, 2018, accessed online at NPS PEPC) CO21-3
        ii. The visibility of the pipeline ROW through DNPP is under-represented in Appendix E. Page 3-25 in the Denali Alternative text reports "*Long-term visual impacts would result from vegetation maintenance within the permanent right-of-way, and landform changes, including earthwork and rock formation alteration, pipeline markers, and new aboveground structures such as MLVs."*
        None of the simulations in Appendix E show visibility impacts on the east side of the Parks Highway (heading south from the Nenana River pedestrian bridge), including from the Healy Overlook Trail, until the proposed ROW is in the ARR area on top of the terrace south of Riley Creek, and that only from the KOP sitting within 10 feet of the pipeline route. CO21-4

CO21-2 See the response to comment CM3-7.

CO21-3 See the updates to sections 3.6.2, 4.1.3.10, 4.10.2.2, and appendix S of the final EIS.

CO21-4 The comment correctly notes that there are no specific views from east of the Parks Highway. Most of the KOPs in appendix E of the draft EIS (now incorporated into appendix S of the final EIS) do include views of areas east of the Parks Highway, albeit from a distance. Very little NPS land is east of the Parks Highway along the Mainline Pipeline route through the DNPP, and this area contains comparatively few trails or developed recreation facilities. The KOPs within DNPP were developed by AGDC in coordination with the NPS.

CO21 – Denali Citizens Council (cont'd)



iii. The Mainline Alternative requires a Mainline Valve, which includes a helipad, at MP 538.8. Does the Denali Alternative include an MLV in the park and why would it not be shown on the map, if the map is up to the standards used in Appendix B? CO21-5

iv. The Denali Alternative includes a new access road 0.8 miles long (Table 3.6.2-1). This road would need to be substantial in structure and width to accommodate the large equipment used to install a pipeline. This access road appears on no map in the DEIS and is therefore impossible to evaluate as to impacts, including an evaluation by AGDC in Appendix E. CO21-6

v. Any route going through DNPP would need a specialized Vegetation Management Plan. Leaving berms of whatever trees, brush and other organic material that is scraped off the surface of the 110-150 foot ROW are not suitable in a National Park. CO21-7

vi. The section of the proposed route that ascends the slope south of Riley Creek is a terrace edge covered in boulders. The section of the proposed route that is between the south ARR crossing and the Nenana River cut is on a landscape that is glacial moraine in origin, and the surface in many places is also studded with boulders. A Boulder Management Plan needs to be in place and enforced so that the pipeline ROW does not litter the park landscape with rows of orphaned boulders. They need to be removed and saved at the park for park reclamation projects. CO21-8

vii. The pipeline move from the west side of the Parks Highway south of the Nenana River pedestrian bridge to the east side needs to be an open cut to eliminate the typical 800 foot long disturbance needed for boring and installation under the road. An open cut was approved by ADOTPF about 7 years ago for the park's sewer line in that same area. CO21-9

viii. It is not clear why any new access road is needed in the park. The northern sections of the proposed Denali Alternative are adjacent to the Parks Highway. The sections south of the southern ARR crossing can be accessed via the park's transfer station road and the east side of the Nenana River cut can be accessed by the Mainline Route heading north from around MP545. CO21-10

In conclusion, the DNPP alternative, not a preferred alternative in the DEIS, and insufficiently analyzed in the DEIS, must be more thoroughly analyzed before an FEIS is put forward. If this alternative suggests itself, it will require at least a Supplemental EIS, to further analyze its impacts to our community and national park.

CO21-5 The proposed Mainline Pipeline route, inclusive of the Denali Alternative, does not include an MLV in the DNPP.

CO21-6 The final EIS has been updated to incorporate access roads along the Denali Alternative, which is now part of the proposed route.

CO21-7 We defer to the NPS on vegetation management requirements in the DNPP. Sections 4.5.2.3 and 4.5.8.3 of the final EIS have been updated to address comments from the NPS on Project activities in the DNPP with regard to restoration and NNIS. AGDC would be required to comply with any conditions identified in the NPS right-of-way permit for the Project.

CO21-8 Comment noted.

CO21-9 AGDC is proposing a conventional horizontal bore crossing of the Parks Highway at MP 537.3, which would avoid direct impacts on the road. As discussed in section 2.2.2.2 of the final EIS, pipeline installation across roads would be conducted in accordance with road crossing permits. Table 1.6-1 of the final EIS includes the road crossing permits required for the Project.

CO21-10 Two new roads are proposed within the DNPP at the Nenana River No. 6 crossing (approximate MP 543). These roads would be used to move vehicles and equipment around the construction area at the crossing. There are no existing roads near the crossing that could reasonably be used for access during construction. Construction and use of the access roads would be subject to approval of the NPS through the issuance of a right-of-way permit for the Project.

CO21 – Denali Citizens Council (cont'd)



3. **Local residents are concerned regarding impacts to the relatively undisturbed lands in the Yanert Valley**. Our concerns, voiced in prior comments, have yet to be satisfactorily addressed. CO21-11
    a. An access road to the pipeline on the 17b easement leaving the Parks Highway at approximately MP 227 is shown to become permanent after the construction is complete. This easement, granted as access to state lands across Ahtna lands, was originally intended to be a narrow trail. Converting it into a road will permanently alter access and use patterns on both state and tribal lands in the vicinity, creating a variety of unknown future impacts that were insufficiently analyzed in the DEIS.
    b. Although local residents may benefit from jobs during construction, there is minimal likelihood that the local community between Healy and Cantwell will obtain access to gas take-off from this high pressure line. The Denali Borough Community, in general, including the national park, is being asked to bear the impacts of construction and increased infrastructure with no additional benefit of access to inexpensive gas.

4. **We find it disingenuous for pipeline backers to suggest that access to gas for Denali National Park buses could possibly be a benefit of this project**. In any case, the massive impacts and costs of a take-off project are not analyzed in the DEIS, additionally reducing the accuracy of this document in predicting true, cumulative impacts. CO21-12

5. **Thawing Permafrost and recent acceleration of melting events along the route of the pipeline near Healy require additional analysis.** CO21-13
    a. Construction of the pipeline, given its profound thermal signature, requires excavation in areas of permafrost and discontinuous permafrost in the Healy-Denali region. It will confront recent changes in soil dynamics related to climate change. This DEIS has not sufficiently considered the additional geologic and financial burden associated with this unprecedented warming trend.

Changing financial and environmental conditions over the past several years should cast doubt on the preferred alternative in this DEIS, especially in the Denali region, between Healy and Cantwell**.** Inadequate analysis of impacts in the Denali region makes the document, as written, less accurate and predictive. CO21-14

Considering this, and on behalf of our local and regional members, the Denali Citizens Council asks that, until further scientific analysis of and economic impacts, and consideration of other viable alternatives, FERC defer publication of a FEIS for the Alaska LNG project. CO21-15

Sincerely,
/s/ Nancy Bale

For the DCC Board: Nancy Bale, Steve Carwile, Nan Eagleson, Charlie Loeb, Hannah Ragland

CO21-11 Section 4.9.5.1 of the final EIS has been revised to address this comment.

CO21-12 A delivery point for the DNPP has not been proposed for the Project. See the discussion in section 4.19.2.5 of the final EIS.

CO21-13 Section 4.2.5.2 of the final EIS includes a discussion of the results of a geothermal model analyzing Project impacts on permafrost both with and without a climate-warming scenario. Section 4.18.10 of the final EIS discusses Project design of the Mainline Pipeline in relation to areas identified as being susceptible to frost heave and thaw settlement.

CO21-14 Comment noted.

CO21-15 See the response to comment CM3-7.

CO21 – Denali Citizens Council (cont'd)

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CO22 – Trustees for Alaska

20191003-5114 FERC PDF (Unofficial) 10/3/2019 1:46:39 PM

TRUSTEES FOR ALASKA

PROTECT | DEFEND | REPRESENT

Via Efile

October 3, 2019

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

Re: Comments on the Draft Environmental Impact Statement for the Alaska LNG Project Draft Environmental Impact Statement, Docket No. CP17-178-000

Dear Secretary Bose:

Trustees for Alaska submits these comments on behalf of National Parks Conservation Association. The comments address the Federal Energy Regulatory Commission (FERC) Draft Environmental Impact Statement (DEIS) on the Alaska LNG Project Draft Environmental Impact Statement. This public process, required by the National Environmental Policy Act, helps to ensure that FERC fully understands, discloses, and analyzes the effects of the proposal. This is especially important here, because the size and scope of this project will impact much of Alaska and is projected to impact public lands and resources across the state including Denali, Gates of the Arctic and Lake Clark National Park and Preserve and other federal public lands. CO22-1

NPCA has identified several serious deficiencies with the DEIS that make it impossible to ensure that impacts to national parks are fully analyzed and mitigation plans are in place to minimize or eliminate project impacts. To comply with the law, and fully protect the federal land resources that will be impacted by this project, FERC needs to address the inadequate and outdated air impacts analysis, adequately consider alternatives for both the portion of the route through Denali National Park and for mitigation alternatives for controlling air quality impacts, provide the missing data and anlaysis that have not yet been submitted by the applicant, and re-issue the DEIS with an opportunity for public comment. Allowing the applicant to submit new information, cure deficiencies, and create mitigation plans after the public comment process has closed circumvents the purposes of NEPA and applicable NEPA regulations.

1026 W. Fourth Avenue, Suite 201, Anchorage, AK 99501
Phone: 907.276.4244 Fax: 907.276.7110 www.trustees.org

CO22-1 Comment noted. See the responses to the specific comments below.

CO22 – Trustees for Alaska (cont'd)

20191003-5114 FERC PDF (Unofficial) 10/3/2019 1:46:39 PM

The comments attached to this letter, along with the included two technical reports, demonstrate that FERC cannot legally move forward based on the information currently before it. FERC should extend the public comment period and supplement its NEPA analysis. Thank you for your consideration of these comments. CO22-2

Sincerely,

Valerie Brown
Trustees for Alaska
vbrown@trustees.org
(907) 433-2014

Bridget Psarianos
Trustees for Alaska
bpsarianos@trustees.org
(907) 433-2011

Enc. NPCA Comments
Attachment 1 – Report from Dr. Howard Gebhart
Attachment 2 – Report from Megan Williams and Exhibits 1-5
Attachment 3 – 2011 MOU Regarding Air Quality Analysis and Mitigation for Federal Oil and Gas Decisions through the NEPA Process

CO22-2 Comment noted. See the responses to comments CM3-1, CM3-7, and CM6-4.

CO22 – Trustees for Alaska (cont'd)

20191003-5114 FERC PDF (Unofficial) 10/3/2019 1:46:39 PM

Comments on the Draft Environmental Impact Statement for the Alaska LNG Project, Docket No. CP17-178-000

Comments submitted on behalf of National Parks Conservation Association

Prepared by Trustees for Alaska
Submitted to the Federal Energy Regulatory Commission
October 3, 2019

CO22 – Trustees for Alaska (cont'd)

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LIST OF ACRONYMS

AGDC	Alaska Gasline Development Corporation
AQRV	Air Quality Related Value
CEQ	Council on Environmental Quality
DEIS	Draft Environmental Impact Statement
EIS	Environmental Impact Statement
EPA	U.S. Environmental Protection Agency
FERC	Federal Energy Regulatory Commission
FWS	U.S. Fish and Wildlife Service
MOU	Memorandum of Understanding
NEPA	National Environmental Policy Act
NMFS	National Marine Fisheries Service
NPCA	National Parks Conservation Association
PSD	Prevention of Significant Deterioration
RFI	Requests for Information

CO22 – Trustees for Alaska (cont'd)

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INTRODUCTION

CO22-3

The National Parks and Conservation Association is concerned about the scope of impacts this project will have on National Park resources in Alaska, particularly Gates of the Arctic National Park, Lake Clark National Park, Denali National Park and Preserve, and other federal lands. These impacts are reasonably forseeable from the proposed project alone, and cumulatively when considered in conjunction with other projects in the region. The air quality analyses, modeling and associated reports are incomplete, based on unrepresentative and outdated information, and likely underestimate the impacts of the Alaska LNG project to protected federal lands. In order for the EIS to provide the public with a full and accurate understanding of the project's impacts, FERC must update its modeling and air quality analyses, consider a full range of alternatives for the route through Denali National Park and for mitigating the reasonably forseeable significant air impacts, provide all missing data and analysis, and make the additional information available to the public through a supplemental notice with opportunity for comment. Even with these deficiencies, and as discussed below and in the attached air quality reports, projected adverse air quality impacts, especially for Air Quality Related Values (AQRVs) such as visibility and acid deposition at designated Class I PSD areas and sensitive Class II areas are significant. The DEIS fails to identify mitigation measures to reduce and/or eliminate these impacts, let alone ensure such a mitigation plan will be enforceable to safeguard public lands from impacts.

CO22-4

As the DEIS is currently presented, including the information made available on the FERC docket as of October 2, 2019, FERC has failed to both provide a comprehensive environmental review and adequately consider the potentially significant negative environmental impacts of this project.

NPCA has previously requested that FERC extend the time for public comment until information missing from the DEIS is provided by the applicant or other agencies. Letter from NPCA to FERC dated September 3, 2019, Letter from NPCA to FERC dated September 16, 2019, and NPCA Motion to Intervene and Protest, dated September 30, 2019. Counsel for NPCA made an additional request for the missing information and for more time for public comment at FERC's public meeting in Anchorage, Alaska on September 12, 2019. NPCA's air expert has identified additional information that is missing. Williams, 2019 and Section IV below. NPCA has not received the requested information, or a response to its request for an extention of the time to comment.

I. FERC'S DEIS FAILS TO MEET APPLICABLE LEGAL REQUIREMENTS, PARTICULARLY NEPA AND CAA REQUIREMENTS.

As the lead agency, FERC must ensure this process complies with the National Environmental Policy Act (NEPA) and the Clean Air Act (CAA).

CO22-3 Comment noted. See the responses to the specific comments below.

CO22-4 Comment noted. See the responses to comments CM3-1, CM3-7, and CM6-4.

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A. FERC's DEIS Fails to Comply with NEPA

CO22-5

NEPA is "our basic national charter for protection of the environment."[1] NEPA's analysis and disclosure goals are two-fold: (1) to ensure informed agency decision making, and (2) to ensure public involvement.[2] NEPA requires that federal agencies prepare a detailed EIS for any major Federal action that may significantly affect the quality of the human environment.[3] By focusing the agency's attention on the environmental consequences of its proposed action, NEPA "ensures that important effects will not be overlooked or underestimated only to be discovered after resources have been committed or the die otherwise cast."[4] NEPA "is not designed to postpone analysis of an environmental consequence to the last possible moment;" it is "designed to require such analysis as soon as it can reasonably be done."[5]

CO22-6

FERC's DEIS fails to comply with NEPA in multiple respects. Indeed, FERC should supplement the DEIS and re-release it for public comment. FERC fails to consider all air impacts, a reasonable range of alternatives, fails to acknowledge and address considerable missing information, and fails to properly evaluate mitigation measures.

B. FERC Fails to Ensure Compliance with Clean Air Act Requirements for Denali, Gates of the Arctic and Lake Clark National Park and Preserve and Other Federal Lands

CO22-7

The Clean Air Act establishes the highest level of air quality protection for 156 designated national parks and wilderness areas. These places, referred to as "Class I areas," are protected through the enforcement of Clean Air Act provisions including the Prevention of Significant Deterioration Program (PSD). The PSD program is intended to "protect, preserve and enhance the air quality in national parks, national wilderness areas, national monuments, national seashores and other areas of special national or regional natural, recreational, scenic or historic value." 42 U.S.C §7470(2). These protected areas are to have the best air quality in the country, attaining or exceeding the minimum levels mandated by the National Ambient Air Quality Standards, protecting public welfare and safeguarding air quality related values (AQRVs). To achieve this objective, the PSD program affords Class I areas such as Denali National Park and Preserve, the highest level of protection from industrial sources of pollution. Importantly the Clean Air Act requires assurance that "… any decision to permit increased air pollution in any area [] is made only after careful evaluation of all the consequences of such a decision and after adequate procedural opportunities for informed public participation in the decisionmaking process. 42 U.S.C §7470(5).

The Organic Act requires the National Park Service to leave park resources and values "unimpaired for the enjoyment of future generations." 16 USC 1. This mandate extends to all units under National Park Service management units irrespective of Class designation under the

[1] 40 C.F.R. § 1500.1(a).
[2] *Robertson v. Methow Valley Citizen Council*, 490 U.S. 332, 349 (1989).
[3] 42 U.S.C. § 4332; 40 C.F.R. § 1508.18(b)(4).
[4] *See also Marsh v. Or. Nat. Res. Council*, 490 U.S. 360, 371 (1989))).
[5] *Kern v. U.S. Bureau of Land Mgmt.*, 284 F.3d 1062, 1072 (9th Cir. 2002).

CO22-5 Comment noted.

CO22-6 Comment noted. See the responses to comments CM3-1, CM3-7, and CM6-4.

CO22-7 See the responses to comments FA1-62 and FA3-78.

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CAA. Satisfying this statutory mandate compels cooperative engagement with other agencies including FERC. CO22-7

Through the Clean Air Act, Congress established "as a national goal the prevention of any future, and remedying of any existing, impairment of visibility in the mandatory class I Federal areas which impairment results from manmade air pollution"[6] where visibility has been determined to be an important value.[7] "Manmade air pollution" is defined as "air pollution which results directly or indirectly from human activities[.]"[8] Congress adopted the visibility protection program to protect the ―intrinsic beauty and historical and archeological treasures‖ of specific public lands.[9] In 1999, EPA promulgated regulations to reduce and ultimately eliminate regional haze in Class I Areas.[10] This promulgation was in part due to the recognition that haze problems are caused by human made air pollution and that the nation's precious natural resources should be protected from such impacts for the use and enjoyment by future generations. Particulate matter (PM), volatile organic compounds (VOCs), nitrogen oxides (NO_X), sulfur dioxide (SO_2), and ammonia (NH_3) contribute directly to haze or form haze after being converted in the atmosphere. These air pollutants contribute to the deterioration of air quality and reduced visibility in our nation's national parks, wilderness areas, and wildlife refuges. Haze is a general term to describe the extent to which air pollution diminishes visibility. Regional haze impairs a viewer's ability to see long distances, color and geologic formation. While some haze causing particles result from natural processes, most result from anthropogenic sources of pollution.

Class I and Class II increments establish permissible amounts of sulfur dioxide, nitrogen oxide, and particulate matter that may be emitted over baseline levels by a pollution source affecting an area. 42 U.S.C. § 7473 (b)(1)&(2). The national ambient air quality standards (NAAQS) prescribes the maximum concentration of a specific pollutant in a defined area. When a given area's pollution level is lower than the maximum level of a pollutant allowed under the NAAQS, the difference between the baseline concentration and NAAQS concentration defines the available increment. The permitting agency doles out portions of the available increment to emitting sources of pollution through the permitting process. An increment is considered spent or consumed when the limits of the NAAQS are reached.[11] While the regulatory authority could allow the entire increment to be used, increasing emissions that would exceed the Class I or Class II Increment threshold and thereby potentially cause damage to the area or areas constitute a violation of PSD. 42 U.S.C. § 7475(d)(2)(a); 40 CFR 51.166(p). Because consumption of particulate matter increment presents as an issue even in the flawed record modeling and where FERC is obligated to assess all reasonably foreseeable impacts from development, the agency must assess increment consumption and potential PSD violations from the AK LNG project.

NEPA Section 102, 42 USC § 4332 provides:

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[6] 42 U.S.C. §7491(a)(1).
[7] 42 U.S.C. §7491(a)(2).
[8] 42 U.S.C. §7491(g)(3).
[9] *See* H.R. REP. NO. 95-294, at 203–04 (1977).
[10] Regional Haze Regulations, 64 Fed. Reg. 35,714-35,774 (July 1, 1999); see 40 C.F.R. 51.300-51.309).
[11] 40 C.F.R. §52.21(b) & (d).

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The Congress authorizes and directs that, to the fullest extent possible: (1) the policies, regulations, and public laws of the United States shall be interpreted and administered in accordance with the policies set forth in this Act. CO22-7

The policies set forth in NEPA Section 101, 42 USC § 4331, include the federal government's obligation to:

1. fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;
2. assure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings;
3. attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences;
4. preserve important historic, cultural, and natural aspects of our national heritage, and maintain, wherever possible, an environment which supports diversity, and variety of individual choice;
5. achieve a balance between population and resource use which will permit high standards of living and a wide sharing of life's amenities; and
6. enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

The AK LNG project will emit visibility impairing pollutants including particulate matter and nitrogen oxides. NPS has identified visibility impairment, amongst other air quality related values as a concern from this development. Dr. Gebhart has identified increment consumption as being of concern as well. Gebhart, 2019. Where FERC is failing to assure no further degradation to visibility and prevent future impairment its DEIS is directly at odds with the Clean Air Act and FERC's NEPA obligations. Where FERC fails to protect other AQRVs and assure compliance with PSD increment, the agency is likewise inhibiting protection of air quality and taking an action at odds with Clean Air Act and NEPA requirements.

FERC has failed to provide information sufficient to accurately assess impacts to visibility, AQRVs, and PSD increment it is unclear at best and more likely improbably that the agency is satisfying its NEPA obligation to "attain the widest range of beneficial uses of the environment without degradation" or otherwise act in accordance with the Clean Air Act.

C. BLM Right-of-way

We further note that AGDC would need to obtain a right-of-way grant from the Bureau of Land Management (BLM) for crossing lands managed by the BLM.[12] Under the Federal Land Policy and Management Act of 1976 (FLPMA), the BLM has authority to regulate the use, occupancy, and development of federal public lands and take whatever action is required to prevent unnecessary or undue degradation of these lands.[13] FLPMA provides that rights-of-way "shall be granted, issued or renewed … consistent with … any other applicable laws."[14] Thus, BLM should require FERC to submit right-of-way or other special use permit CO22-8

[12] FERC Alaska LNG DEIS vol. 1 at 1-7.
[13] 43 U.S.C. § 1732.
[14] 43 U.S.C. § 1764(a) (1996).

CO22-8 Comment noted. The BLM's responsibilities are discussed in section 1.2.7 of the final EIS.

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authorizations and require that all mandates of FLPMA Title V and its implementing regulations are adhered to, as well as the Clean Air Act.[15] CO22-8

Important substantive requirements flow from FLPMA's ROW provisions. First, BLM must honor the requirement that the right-of-way grant "do no unnecessary damage to the environment." The right-of-way permit "shall contain terms and conditions which will . . . minimize damage to scenic and esthetic values and fish and wildlife habitat and otherwise protect the environment."[16] Thus, BLM has an independent legal mandate to ensure that FERC's right-of-way grant does not unnecessary and undue degredation to the public lands and ensure that its right-of-way grant is consistent with other applicable laws, such as NEPA and the Clean Air Act.

D. The "Sensitive Class II" Land Designation used by Federal Agencies is Consistent with the Clean Air Act and the NPS Organic Act

The State of Alaska's comments to FERC, submitted on October 2, 2019, include correspondence between the Alaska Department of Environmental Conservation (ADEC) and federal agencies regarding the State's objection to the consideration of "Sensitive Class II" areas. In both the State's comments and ADEC's June 27, 2018 letter to Joe Balash, Assistant Secretary of Land and Minerals Management and Susan Combs, Acting Assistant Secretary for Fish, Wildlife and Parks, the State requests removal of the "Sensitive Class II" term. It argues that the term "Class II Sensitive Area" born out of a 2011 Memorandum of Understanding (MOU) between Department of Interior, the Environmental Protection Agency and the Department of Agriculture conflicts with other Clean Air Act requirements. The MOU defines "Class II Sensitive Area" as "an area identified by the affected agency on a case-by-case basis." Alaska states that "special protections for Class II areas only exist due to this memorandum." This is incorrect. This definition exists in the 2011 MOU, and is a term specifically honored by the sister federal agencies. But it is also valid, separate from the MOU, and not at odds with the requirements of the Clean Air Act. Alaska offers no support in suggesting otherwise. It is unfortunate and immaterial that the Department of Interior subsequently withdrew the June 27, 2018 letter in its letter to FERC of July 2019. Similarly, ADEC states that the phrase "nationally designated protected areas" could likewise be misleading. CO22-9

At bottom the Organic Act of the National Park Service establishes that the agency's mission is twofold to (1) conserve national park resources and (2) provide for their use and enjoyment "in such a manner and by such means as will leave them unimpaired" for future generations. 16 U.S.C. § 1. The Wilderness Act provides for a similar directive, to leave wilderness areas unimpaired for present and future generations. 16 U.S.C. §§ 1131-1136. The Clean Air Act provides that an express purpose of the PSD program is "to preserve, protect, and enhance the air quality in national parks, national wilderness areas, national monuments, national seashores, and other areas of special national or regional natural, recreational, scenic, or historic value…"42. U.S.C. § 7470(2). As stated in the Federal Land Manager Air Quality Guidance document, Appendix C:

The designation of a Park or Wilderness as Class I or II does not dictate the

[15] *See* 43 C.F.R. pt. 2800 (BLM FLPMA grant regulations).
[16] *Id.* § 1765(a)(ii).

CO22-9 See the response to comment SA2-7.

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management goals for it; these are identified in the enabling legislation. The designation only determines which options are available to meet the goals. Class I Parks or Wildernesses, for instance, can be protected through AQRV analysis, whereas the protection of Class II Parks and Wildernesses can be achieved using BACT requirements. CO22-9

Indeed, these federal laws and guidance make clear that protection of the public lands set aside comes with requisite management and resource protection obligations of federal agencies. While the Clean Air Act affords Class I areas distinct and heightened protections, such protections do not come at the expense of the necessary safeguarding of other parks, preserves and wilderness areas. Regardless of whether these areas are referred to as "Sensitive Class II areas," "nationally designated protected areas," or otherwise named, what is significant is that they merit protection because federal laws have established that they are to be specifically and specially protected. These laws charge Federal Land Managers, including the National Park Service, with an affirmative obligation to protect these lands and their resources. As such, NPCA supports FERC's approach and urges the agency to abide by the Sensitive Class II area designation that land managers deem appropriate and as has been used in interagency agreements, the federal land managers own guidance, and which is supported firmly in enabling legislation.

II. FERC Fails to Consider the Full Range of Impacts of the Alaska LNG Project to Air Quality.

The Alaska LNG Environmental Impact Statement (EIS) must assess the direct, indirect, and cumulative effects of the proposed project on the human environment, as well as means to mitigate adverse environmental impacts.[17] The effects and impacts to be analyzed include ecological, aesthetic, historical, cultural, economic, social, and health impacts.[18] Direct effects are those that are caused by the project and that occur in the same time and place.[19] Indirect effects are those that are somewhat removed in time or distance from the project, but nonetheless reasonably foreseeable.[20] CO22-10

The EIS must consider actions that are connected with, or closely related to, the project in question.[21] NEPA requires that "connected actions" and "cumulative actions" be considered together in a single EIS.[22] "Connected actions" are defined as actions that: automatically trigger other actions which may require EISs; cannot or will not proceed unless other actions are taken previously or simultaneously; or are interdependent parts of a larger action and depend on the larger action for their justification.[23]

[17] 40 C.F.R. §§ 1502.16, 1508.25(c).
[18] *Id.* at § 1508.8.
[19] *Id.* at § 1508.8(a).
[20] *Id.* at § 1508.8(b).
[21] *Id.* at § 1508.25(a)(1).
[22] *Id.* at § 1508.25.
[23] *Id.* at § 1508.25(a)(1).

CO22-10 Comment noted.

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CO22-10

Indirect effects "are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable."[24] In contrast, "cumulative impact" is defined as "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions."[25] "Cumulative impacts" include those impacts "which when viewed with other proposed actions have cumulatively significant impacts."[26] Such impacts can result from individually minor but collectively significant actions taking place over a period of time.[27]

In its cumulative impacts analysis, FERC must take a "hard look" at all past, present and reasonably foreseeable future actions:

> [A]nalysis of cumulative impacts must give a sufficiently detailed catalogue of past, present, and future projects, and provide adequate analysis about how these projects, and differences between the projects, are thought to have impacted the environment . . . . Without such information, neither the courts nor the public . . . can be assured that the [agency] provided the hard look that it is required to provide.[28]

"Effects are reasonably foreseeable if they are sufficiently likely to occur that a person of ordinary prudence would take [them] into account in reaching a decision."[29] In an EPA NEPA guidance document, EPA noted:

> [P]rojects need not be finalized before they are reasonably foreseeable. "NEPA requires that an EIS engage in reasonable forecasting. Because speculation is . . . implicit in NEPA, [] we must reject any attempt by agencies to shirk their responsibilities under NEPA by labeling any and all discussion of future environmental effects as crystal ball inquiry." *Selkirk Conservation Alliance v. Forsgren*, 336 F.3d 944 (9th Cir. 2003). As the [EPA] also has noted, "reasonably foreseeable future actions need to be considered even if they are not specific proposals.[30]

FERC may not rely solely on the one-sided information and conclusions contained in the proponent's application. As the lead agency responsible for developing the EIS, FERC is obligated to obtain appropriate baseline data for the project area and do a thorough analysis of potential impacts from the proposed project.

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[24] *Id.* at § 1508.8(b).
[25] *Id.* at § 1508.7.
[26] *Id.* at § 1508.25(a)(2).
[27] *Id.*
[28] *Te-Moak Tribe of W. Shoshone v. Dep't of Interior*, 608 F.3d 592, 603 (9th Cir. 2010) (rejecting NEPA review for mineral exploration operation that failed to included detailed analysis of impacts from nearby proposed mining operations).
[29] *EarthReports Inc. v. Federal Energy Regulatory Commission*, 828 F.3d 949, 955 (D.C. Circuit 2016).
[30] Environmental Protection Agency, *Consideration of Cumulative Impact Analysis in EPA Review of NEPA Documents*, Office of Federal Activities, May 1999, at 12–13, https://www.epa.gov/sites/production/files/2014-08/documents/cumulative.pdf.

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FERC has failed to take a hard look at direct, indirect, and cumulative effects and has therefore failed to adequately consider the potential significant adverse impacts to air quality. CO22-11

FERC's air quality modeling analyses demonstrates that widespread and significant adverse impacts on air quality would occur at Denali National Park (Class I), Gates of the Artic National Park, Lake Clark National Park and other protected federal lands. These impacts occur from the components of the proposed project alone, and cumulatively when considering other sources in the region. The air quality analyses, modeling and associated reports are incomplete, based on unrepresentative and outdated information, and likely underestimate the impacts of the Alaska LNG project to protected federal lands. In order to provide the public with a full and accurate understanding of the project's impacts, FERC must update its modeling and air quality analyses, provide a mitigation plan and make such additional information available to the public through a supplemental notice with opportunity for comment. Even with these deficiencies, and as discussed below and in the attached air quality reports, the projected adverse air quality impacts, especially for Air Quality Related Values (AQRVs) such as visibility and acid deposition at designated Class I PSD areas and sensitive Class II areas are significant and the Draft EIS fails to identify mitigation measures to reduce and/or eliminate these impacts.[31] Without the proposed mitigation measures, neither FERC nor the public can ensure such a mitigation plan would be adequate and enforceable to safeguard public lands from impacts.

NPCA is providing FERC with two expert reports specific to air quality issues of the AK LNG Project (attached). The first is entitled "Technical Comments on Alaska LNG Project DRAFT Environmental Impact Statement (EIS) – Air Quality Sections" by Dr. Howard Gebhart of Air Resource Specialists Inc. Gebhart, 2019. The second is entitled "Air Quality Review of the Alaska LNG Project Draft Environmental Impact Statement" by Megan Williams. Williams, 2019. Both these reports are incorporated into NPCA's comments on the DEIS by reference. Key findings from these reports are briefly summarized here. CO22-12

One of the foundational requirements of NEPA is to compel a cumulative assessment of environmental impacts from a development project. Compliance with this mandate here necessitates a comprehensive air quality assessment addressing the cumulative impact of all parts of the AK LNG project including all Compressor and Heat Stations, the Liquefaction Facility and the Gas Treatment Plant. The air quality impacts of these facilities cannot properly be understood in isolation of each other. It is therefore necessary for FERC to model cumulative air quality impacts of all project components using current and relevant emissions data. Among other modeling deficiencies, the DEIS does not include impacts from the compressor and heater stations in the cumulative impact analysis. This is a significant flaw in the DEIS that must be remedied for FERC to meet its NEPA obligations. Williams, 2019 at 7. These facilities will impact the same national parks and wildlife refuges as other project facilities including the Liquefaction Facility. These impacts must all be included in FERC's assessment of cumulative impacts.

[31] See Attachment 3 – 2011 MOU Regarding Air Quality Analysis and Mitigation for Federal Oil and Gas Decsions through the NEPA Process for information about Class II Sensitive Areas.

CO22-11 As discussed in section 4.15.5 of the final EIS, most modeled air quality impacts associated with the Project would be below significance thresholds. Also see the response to comment CO22-7.

CO22-12 Section 4.15.5 of the final EIS has been updated to include revised air dispersion modeling filed by AGDC on September 25, 2019 in response to Staff Recommendation 70 of the draft EIS (Accession No. 20190925-5027). The cumulative impacts analysis in section 4.19 of the final EIS includes the three projects referenced in the comment.

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The National Park Service previously commented on this shortcoming, stating that such a cumulative analysis is necessary as it is "the only way to effectively evaluate the direct effects of all LNG facilities to [Air Quality Related Values] in Class I and Sensitive Class II areas."[32] The cumulative impact analysis must include all existing and reasonably foreseeable development sources including the Greater Mooses Tooth 1and 2, Nanushuk, and Willow development projects. CO22-12

FERC must update and provide additional information including additional modeling and data on the magnitude of projected impacts from the numerous emitting sources, the various time periods of operation and during specific operational events. According to Dr. Gebhart, the DEIS is based on outdated air models and relies on outdated emissions data. Gebhart, 2019 at 1, 6. For example, Dr. Gephart finds that the construction-related emissions appear outdated and the maritime emissions were not calculated based on the maximum number of vessels. Gebhart, 2019 at 2. Both Dr. Gephart and Ms. Williams find numerous additional data deficiencies including that FERC does not provide modeling results for the years when construction, start-up, and operational activities will occur simultaneously or for flaring activities during start-up and maintenance at the Gas Treatment Plant and Liquefaction Facilities. Gebhart, 2019 at 2; Williams, 2019 at 3, 19. CO22-13

FERC must update and disclose the magnitude of those concurrent impacts in the DEIS in order for the public to be able to assess their significance, including (1) predicted exceedances of national ambient air quality standards (NAAQS) regardless of whether those exceedances are projected outside of what FERC defines as "Normal Operations" as well as (2) significant visibility and ecosystem impacts from operation of the proposed project. Accordingly, the modeling and impact analyses must be redone using: the current versions of EPA approved air dispersion models; current, complete and accurate emissions information for both project and non-project emission sources; and a comprehensive impact assessment based on corrected and disclosed information. CO22-14

There are numerous missing elements of reporting and analysis rendering the record incomplete and potential emissions and their impact unknown. Williams, 2019 and Section IV below. This information must be analyzed, and the environmental impacts disclosed. For example, the modeling of the Liquefaction Facility and Gas Treatment Plant shows that emissions from the Liquefaction Facility would contribute to visibility impairment on 13 days per year at Lake Clark National Park and that emmissions from the Gas Treatment Plant would contribute to visibility impairment on 15 days per year at Arctic National Wildlife Refuge. Visibility impairment at additional Class I areas is also projected even in this limited model. Williams, 2019. The DEIS and underlying Resource Report do not include a complete analysis of the impacts of the compressor or heater stations on visibility in nearby Class I and Sensitive Class II areas and fails to assess the combined effect of emissions from multiple compressor CO22-15

[32] *See, e.g.,* FERC Alaska LNG DEIS Resource Report No. 9 Appendix D at 98 and 100 for modeled visibility and deposition impacts at Denali National Park from the Liquifaction Facility and FERC Alaska LNG DEIS Resource Report No. 9 at 9-69 and 9-72 for modeled visibility and deposition impacts at Denali National Park from the Main Pipeline compressor stations.

CO22-13 Section 4.15.4 of the final EIS has been updated with revised construction emissions. Section 4.15.5.3 of the final EIS has been updated with revised marine emissions for the Liquefaction Facilities. Sections 4.15.4.1 and 4.15.4.3 of the final EIS acknowledge that simultaneous construction, startup, and operation of the Liquefaction Facilities could lead to short-term air quality impacts greater than those anticipated during normal operation. However, AGDC has developed an ambient air quality monitoring plan to monitor air quality in the vicinity during this period.

CO22-14 See the response to comment CO22-13. AGDC submitted modeling analyses based on versions of EPA approved air dispersion models that were current at the time the analyses were completed and which we believe appropriately characterize the potential impacts of the air emissions associated with the Project.

CO22-15 The compressor stations and heater station are not PSD sources; therefore, a full Class I impact analysis for these sources is not required under the CAA and PSD permitting guidance. We believe that the information provided in section 4.15.5.2 of the final EIS sufficiently characterizes the potential impacts of air quality emissions from the compressor stations and heater station on Class I and Class II nationally designated protected areas in proximity to the proposed air quality emissions sources. See the response to comment CO22-12.

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stations to protected public lands. *Id.* Moreover, the information provided on the impacts relative to the compressor and heater stations are inconsistent. *Id.* CO22-15

The Tuxedni Wilderness within the Alaska Maritime National Wildlife Refuge (NWR) is designated a Class I area, and the Arctic, Kanuti, Yukon Flats, Koyukuk, Selawik, Nowitna, Kenai, Kodiak, and Alaska Maritime NWRs are considered sensitive Class II air quality areas. Williams, 2019. The project facilities would be within 300 kilometers (km) of these areas, which is a typical screening distance used by Federal Land Managers to assess potential air quality impacts from a facility on a sensitive area or resource. Williams, 2019 at 20. The project impact analyses shows significant ecosystem threats related to nitrogen deposition impacts from the Gas Treatment Plant at the Arctic National Wildlife Refuge; from the Liquefaction Facility at Denali National Park, Lake Clark National Park, Tuxedni National Park and Kenai National Wildlife Refuge; and from the Main Pipeline/Compressor and Heater stations at Gates of the arctic National Park, Denali National Park, Arctic National Wildlife Refuge, Yukon Flats National Wildlife Refuge, Kanuti National Wildlife Refuge, and Kenai National Wildlife Refuge. Increased nitrogen deposition at Denali National Park and Preserve is of significant concern to NPCA as its resources including wetlands and arctic vegetation may be harmed by increased nitrogen deposition related to the project. Williams, 2019 at 8, 12. While the DEIS presents an incomplete picture, the magnitude of these ecosystem impacts is clearly significant. Even the DEIS's limited and incomplete analysis shows that the nitrogen deposition threshold would be exceeded by two to over 387 times from single compressor stations at Denali National Park, Gates of the Arctic National Park, Yukon Flats National Wildlife Refuge, and Arctic National Wildlife Refuge. Williams, 2019 at 12. CO22-16

The project impact analyses shows significant sulfur deposition impacts from the Liquefaction Facility at Lake Clark National Park, Tuxedni National Park, and Kenai National Wildlife Refuge; and from the Main Pipeline/Compressor and Heater Stations at the Arctic National Wildlife Refuge. Denali National Park and Preserve and Gates of the Arctic are already identified by the National Park Service as being of moderate concern for sulfur deposition because these ecosystems are highly sensitive to acidification. Williams, 2019 at 9. While the DEIS's incomplete assessment of ecosystem impacts is already alarming, it is incomplete, unrepresentative and likely to underestimate the actual impacts. CO22-17

The DEIS has no far-field air quality related value impact at the implicated public lands including Class I areas from the Main Pipeline/ Compressor and Heater stations. Nor does the DEIS assess the combined effect to Class I and Class II areas from the multiple compressor stations. These are necessary to depict the projected real-world impact of operations and to comply with NEPA. FERC must complete a thorough analysis of the impact of emissions from all project sources impacting the same area. Williams, 2019 at 3. Assessing these sources (including the compressor stations) and modeling their respective impacts to public lands in isolation of one another violates the letter and spirit of NEPA's requirements to provide a comprehensive and cumulative assessment of the direct impacts of the project. As a result, it is likely that air quality impacts would be predicted to be even more extensive than what is presented in the DEIS. Throughout the DEIS, FERC reports the need for updated emissions calculations and revised modeling analyses, to be submitted by the AGDC. However most material available in the record is outdated, unrepresentative analysis. CO22-18

CO22-16 See the response to comment FA1-11.

CO22-17 See the response to comment FA1-11.

CO22-18 See the response to comment CO22-12.

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There are also specific modeling deficiencies associated with different sources. The modeling for the Gasification Facility annual average emission rates used for emergency sources underestimate short term emissions that occur when these emergency sources are actually operational. Gephart, 2019 at 2-3. Other modeling problems in the DEIS include an incorrect method applied for converting nitrogen oxides to the regulated nitrogen dioxides; an outdated and no longer available method for assessing nitrogen oxide emission impacts to Class I areas was applied; no evaluation of how "secondary PM-2.5 concentrations are additive to the primary PM-2.5 emissions" in the modeling. Gephart, 2019 at 3. These flaws are especially problematic as Dr. Gebhart determines that if primary and secondary PM-2.5 were combined as necessary, any available increment in protected federal lands would be consumed. *Id*. This adverse impact is nowhere recognized in the DEIS and no mitigation measures are proposed or evaluated to avoid this consequence. Dr. Gephart identifies critical information absent from Appendix E, namely the modeling that the DEIS cites to as support for its impact assessment of the compressor stations. *Id*. at 3-4. Despite this glaring omission, Dr. Gephart also specifies that the assessment provided in Section 4.15 fails to adequately address increment consumption in Class I and II areas. *Id*. This is especially troubling as some compressor stations are within 5 km of Class I Denali National Park and Preserve yet no Class I PSD increment analysis is provided. *Id*. at 4. Dr. Gebhart also predicts that Class II increments will be violated. *Id*. In the modeling assessment for the Liquefaction Facility, Dr. Gebhart identifies numerous shortcomings including the failure to assess various flaring scenarios, unrealistic operational considerations at the combustion turbines, unexplained or unjustified meteorological data and approach, and improper or absent information related to maritime emissions. *Id*. at 2, 5-6. CO22-19

FERC directs AGDC to prepare and seek approval on a mitigation plan in consultation with federal land managers prior to construction that would reduce emissions of sulfur oxides and nitrogen oxides to mitigate visibility and deposition impacts from the project facilities such that they are below associated National Park Service thresholds. A directive to ready a mitigation plan at a later date is entirely insufficient. It is incumbent on FERC as the lead agency to produce additional, comprehensive, updated analysis and mitigation plans to address the significant projected impacts and create a legally sufficient DEIS. The plan must contain enforceable emissions mitigating measures to ensure the protection of air quality and compliance with all applicable standards including standards under the Clean Air Act. The so-called mitigation plans referenced in the DEIS are insufficient, based on incomplete information, not enforceable, and do not reflect the assumptions made in the air quality impact analysis. There is no schedule for availability or review of an adequate mitigation plan. FERC must set forth a plan detailing a mitigation plan and how it will ensure compliance with all applicable requirements. The agency must also make the mitigation plan available to the public for review and comment as part of a revised or supplemental DEIS process. CO22-20

While some additional materials were provided by AGDC and made available to the public on September 18, 2019 – with an October 3, 2019 deadline it is entirely unreasonable for the public to carefully review and provide meaningful feedback on the nearly 2000 pages of additional information reflecting updated construction emissions and an Air Conformity Report. Even with the additional documents, key information is still missing from the record, including an updated and revised air quality modeling analysis for the Gas Treatment Plant, Main Pipeline/Compressor and Heater stations and Liquefaction Facilities and all other emissions sources associated with the project. CO22-21

CO22-19 See the response to comment FA3-79.

CO22-20 See the responses to comments FA1-11 and CO22-7.

CO22-21 See the response to comment CM6-4.

CO22 – Trustees for Alaska (cont'd)

CO22-22

FERC's requests to the applicant and requests by commenters for updated and revised modeling underscore the need for this information to be provided to the public. Updated models that are representative of the project's cumulative impacts and related information are fundamental to an understanding of the range and scale of project impacts including on effected national parks and wildlife refuges, National Ambient Air Quality Standards, Prevention of Significant Deterioration Increment and all Air Quality Related Values.

CO22-23

In addition to updated models, as discussed in Ms. Williams' report, the EIS and later submitted documents are still missing additional information requested by FERC. Williams, 2019; and Section VI. below. Revised emissions calculations from the Liquification Facility and associated impacts from the LNG carriers and support vessels as well as a modeling report for the Main Pipeline that includes impacts from offsite sources have not yet been provided as of October 2, 2019. The DEIS analysis should be updated, mitigation plans developed, and the DEIS should be supplemented with an additional notice and comment period.

III. FERC Fails to Consider a Reasonable Range of Alternatives

CO22-24

The DEIS fails FERC's legal obligation — and NEPA's core mandate — to study in depth and disclose the environmental consequences of reasonable alternatives to the agency's preferred course of action. NEPA requires that an EIS include "alternatives to the proposed action."[33] The analysis of alternatives is the "heart" of an EIS.[34] An agency must "[r]igorously explore and objectively evaluate all reasonable alternatives" to a proposed action.[35] The purpose of the alternatives requirement is to analyze a variety of impacts and present a range of choices to the decision maker.[36] The "touchstone" of the inquiry is "whether an EIS's selection and discussion of alternatives fosters informed decision-making and informed public participation."[37] Accordingly, the EIS must include an evaluation of "all reasonable alternatives," and provide the decision maker with a "range of alternatives" from which to elect.[38] Consistent with NEPA's basic policy objective to protect the environment, this includes more environmentally protective alternatives.[39] It also includes reasonable alternatives submitted by the public at scoping.[40] "The existence of a viable but unexamined alternative renders an [EIS] inadequate."[41] The range of alternatives in the DEIS is legally inadequate. FERC must comply with its legal obligations under NEPA to consider a reasonable range of alternatives.

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[33] 42 U.S.C. § 4332(2)(C)(iii).
[34] 40 C.F.R. § 1502.14.
[35] 40 C.F.R. § 1502.14(a).
[36] 40 C.F.R §§ 1502.14, 1505.1(e).
[37] *State of Cal. v. Block*, 690 F.2d 753 (9th Cir. 1982) (citation omitted).
[38] 40 C.F.R. §§ 1502.14(a), 1505.1(e).
[39] 40 C.F.R. § 1500.2(e) (agencies must "[u]se the NEPA process to identify and assess reasonable alternatives to proposed actions that will avoid or minimize adverse effects of these actions upon the quality of the human environment"); *see also, e.g.*, *Kootenai Tribe of Idaho v. Veneman*, 313 F.3d 1094, 1121-22 (9th Cir. 2002) (citing cases), *abrogated on other grounds by The Wilderness Soc'y v. U.S. Forest Serv.*, 630 F.3d 1173, 1178-80 (9th Cir. 2011) (en banc).
[40] *See* 40 C.F.R. §§ 1501.7, 1502.1
[41] *Mont. Wilderness Ass'n v. Connell*, 725 F.3d 988, 1004 (9th Cir. 2013) (quotations and citation omitted).

CO22-22 See the response to comment CO22-12.

CO22-23 See the updates to section 4.15.5.3 of the final EIS and the response to comment CO22-7.

CO22-24 Comment noted.

CO22 – Trustees for Alaska (cont'd)

In defining what is a "reasonable" range of alternatives, NEPA requires consideration of alternatives "that are practical or feasible" and not just "whether the proponent or applicant likes or is itself capable of carrying out a particular alternative"; in fact, "[a]n alternative that is outside the legal jurisdiction of the lead agency must still be analyzed in the EIS if it is reasonable."[42] CO22-24

The DEIS does not comply with NEPA's mandate, including in the two ways described below.

A. FERC Fails to Fully Consider Reasonable Alternatives for the Route through Denali National Park

National parks are an important part of our nation's heritage and are generally created to protect undisturbed landscapes and provide visitors an opportunity to experience America's spectacular places. The pipeline's impacts on national parks require special consideration, but those impacts have not received a thorough analysis in the DEIS. The lack of appropriate analysis of air quality impacts is discussed above in these comments. Information is similarly lacking for the discussion of the pipeline route through or around Denali. CO22-25

NPCA is not opposed to the proposed pipeline traveling through Denali National Park if that option poses fewer adverse impacts than the route around the eastern boundary. In the 2012 ASAP EIS, NPCA supported the route variation that paralleled the Parks Highway through Denali because it was using a previously disturbed corridor and had fewer impacts than the route around the park through the roadless Yanert Valley. In keeping with this position, NPCA also supported the 2013 Denali National Park Improvement Act allowing the pipeline to travel seven miles through the park along or near the highway.

Unfortunately, the analysis in the DEIS does not provide enough information for the public or agencies to weigh the benefits of possible, proposed routes around and through Denali. CO22-26

As an initial problem, the proposed Denali alternative was chosen by the applicant as its preferred option in the midst of the comment period. That change has made commenting on the pipeline more difficult for the public concerned about the pipeline in Denali and has also significantly limited the information available to the public. According to a letter from AGDC on August 16, 2019, AGDC "intends to continue working with the National Park Service and submit more detailed project and resource information needed to update the affected sections of the DEIS by October 4, 2019." The public comment period ends October 3, 2019. This new information should be included in a supplement to the DEIS with an appropriate public comment period. CO22-27

[42] Council on Environmental Quality, *Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations*, *Questions 2A and 2B*, *available at* https://www.energy.gov/sites/prod/files/2018/06/f53/G-CEQ-40Questions.pdf; *see also,* 40 C.F.R. §§ 1502.14, 1506.2(d).

CO22-25 See the response to comment CM3-7. The applicability of the Denali National Park Improvement Act is discussed in section 1.2.8 of the final EIS.

CO22-26 Comment noted.

CO22-27 See the response to comment CM3-7.

CO22 – Trustees for Alaska (cont'd)

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In addition, according to the DEIS, FERC chose not to analyze a route that followed the Parks Highway all the way through Denali because NPS believes that route could impact important wetlands adjacent to the highway. While the cost to important wetlands is a possible reason to choose one route over another, the DEIS does not address the other costs and benefits of the alternative route or provide enough information on route and construction techniques to evaluate the danger to the wetlands. Further analysis is needed to allow the public and FERC to weigh the benefits and costs of each alternative route. CO22-28

The DEIS must also more fully address mitigation for the damage of Denali National Park resources by the pipeline and accompanying infrastructure. This project will impact vegetation, may spread invasive plants, will add light pollution to the park and surrounding area's night skies, and impact several scenic overviews within the region. Congress created the portion of Denali affected by this pipeline for the "preservation of animals, birds and fish" and "preservation of natural curiosities and their scenic beauty." The extent of committed mitigation from project sponsors is an important element in determining which alternative will have the least impacts on park and gateway community resources. (It is worth noting that the route along the Parks Highway and through Denali National Park represents a massive savings for ADGC and it is appropriate for the agency to commit to reinvesting some of that savings in mitigation to protect the national park and the surrounding Denali Borough.) CO22-29

The DEIS must include consideration of revegetation and invasive plant mitigation and ensure that NPS standards are met within and near Denali.[43] The DEIS must also include mitigation to minimize light pollution by following the International Dark Sky Guidelines and to minimize visual impacts of the project. CO22-30

Finally, after appropriate analysis and comment has occurred, NPCA urges AGDC and FERC to strongly consider placing one of the proposed route's five gas interconnection points in or near Healy. The placement of an interconnection point in the area could potentially allow the park to convert its bus fleet to compressed natural gas and to otherwise limit its emissions. CO22-31

B. FERC Fails to Consider Reasonable Alternatives to Mitigate Air Quality Impacts

FERC should have but did not consider reasonable alternatives to eliminate or mitigate the exceedance of established deposition, visibility and increment thresholds including employing well-established pollution reduction strategies. CO22-32

FERC's DEIS is deficient in at least three respects when it comes to PSD increment consumption. First, FERC's DEIS fails to determine the current extent of PSD increment consumption in the affected area. Second, FERC's DEIS fails to examine the extent to which emissions from the preferred alternative cause or contribute to any PSD increment violation. Third, to the extent the preferred alternative causes or contributes to any PSD increment violation, FERC's DEIS fails to rigorously explore and objectively evaluate reasonable alternatives to eliminate any PSD increment violations. Gephart, 2019 at 6. By failing to follow these three essential steps, FERC's DEIS is fatally flawed.

[43] The DEIS is currently lacking revegetation and invasive plans that should be part of the public review process. *See e.g.* DEIS at 4-877, 5-51, 5-53.

CO22-28 Avoidance of wetlands is an appropriate reason for routing away from the Parks Highway. We note that the COE identified the same route as the Denali Alternative (now incorporated into the Mainline Pipeline route for the Project) as the LEDPA for ASAP. The COE will determine the LEDPA for the Project.

CO22-29 The Denali Alternative has been incorporated into the proposed Mainline Pipeline route for the Project. Impacts and mitigation measures associated with this route are included in our environmental analysis in section 4 of the final EIS. See the response to comment CM3-7.

CO22-30 Sections 4.5.2.3 and 4.5.8.3 of the final EIS, respectively, discuss revegetation and NNIS mitigation in the DNPP. As discussed in section 4.10.2.2 of the final EIS, AGDC would develop a lighting plan for the Healy Compressor Station that conforms to International Dark Sky Association Guidelines.

CO22-31 See the discussion regarding in-state gas interconnections in section 4.19.2.6 of the final EIS.

CO22-32 Our analysis is not intended to replace the air permitting process, but to disclose potential impacts associated with the Project. Section 4.15.5 of the final EIS provides the results of air quality modeling demonstrating that operation of the aboveground facilities associated with the Project would not result in a PSD increment violation. The PSD sources associated with the Project (GTP and Liquefaction Facilities) are under review by ADEC, which is responsible for verifying the results of the modeling analysis and ensuring the Project does not cause or contribute to any PSD increment violations.

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CO22-33

Emission control strategies are feasible and widely used yet not required under the DEIS for various components of the project. For example, the Liquefaction Facility could be but is not subject to continuous use of the thermal oxidizer to control emissions.[44] There is no corresponding mitigation measure that requires continuous operation of the thermal oxidizer. Heaters at the Gas Treatment Plant could be subject to limited use consistent with modeled operating assumptions but are not. Dust suppression practices on all unpaved roads and requirements for all diesel vehicles to use diesel particulate filter technology should have been made part of a reasonable alternative to control construction related emissions. Mitigation measures that are expressed in vague terms by FERC such as turbines and generators compliant with applicable Clean Air Act standards and/or enforceable requirements related to the "optimization of Project design parameters such as stack heights, building heights (which affect downwash), and efficiency assessments of electric power and process heat uses."[45]

Measures such as these are required in a reasonable alternative to mitigate emissions impacts.

IV. FERC FAILS TO OBTAIN AND INCLUDE MISSING INFORMATION IN THE DEIS.

CO22-34

For the purpose of evaluating significant impacts in the EIS, if there is incomplete information relevant to reasonably foreseeable significant adverse impacts and the information is "essential to a reasoned choice among alternatives and the overall costs of obtaining it are not exorbitant," the information must be gathered and included in the EIS.[46]

If information essential to reasoned choice is unavailable or if the costs of obtaining it are exorbitant (excessive or beyond reason), FERC must make a statement to this effect in the EIS. FERC must discuss what effect the missing information may have the agency's ability to predict impacts to the particular resource. If the information relevant to reasonably foreseeable significant adverse impacts cannot be obtained because the overall costs of obtaining it are exorbitant or the means to obtain it are not known, FERC must include within the EIS or EA:

1. a statement that such information is incomplete or unavailable;
2. a statement of the relevance of the incomplete or unavailable information to evaluating reasonably foreseeable significant adverse impacts on the human environment;
3. a summary of existing credible scientific evidence which is relevant to evaluating the reasonably foreseeable significant adverse impacts on the human environment, and
4. the agency's evaluation of such impacts based upon theoretical approaches or research methods generally accepted in the scientific community.[47]

For the purposes of this section, "reasonably foreseeable" includes impacts which have catastrophic consequences, even if their probability of occurrence is low, provided that the

[44] FERC Alaska LNG DEIS Resource Report No. 9 Appendix D at 28
[45] FERC Alaska LNG DEIS Resource Report No. 9 at 9-98
[46] 40 C.F.R. § 1502.22(a); *see also* 43 C.F.R. § 46.125.
[47] 40 C.F.R. § 1502.22

CO22-33 Comment noted.

CO22-34 See the response to comment CM6-4.

CO22 – Trustees for Alaska (cont'd)

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analysis of the impacts is supported by credible scientific evidence, is not based on pure conjecture, and is within the rule of reason.[48] CO22-34

This requirement helps "insure the professional integrity, including scientific integrity, of the discussions and analyses" in an EIS.[49] It also ensures that the agency has necessary information before it makes a decision, preventing the agency from acting on "incomplete information, only to regret its decision after it is too late to correct."[50] "[T]he very purpose of NEPA's requirement that an EIS be prepared for all actions that may significantly affect the environment is to obviate the need for [ ] speculation by insuring that available data is gathered and analyzed prior to the implementation of the proposed action."[51] Accordingly, NEPA's missing information regulation "clearly contemplates original research if necessary."

There is a substantial amount of baseline data missing or out of date that FERC had to address before the agency can meaningfully evaluate and comply with numerous statutory mandates for permitting this project and the public can fully understand the potential impacts from the proposal. FERC's failure to address or obtain this lacking information renders its DEIS deficient and necessitates a supplemental EIS. It is not adequate for the information to be made available after the public comment period has closed. The simple remedy is for FERC to supplement the DEIS while keeping the comment period open, or to issue a revised DEIS with the additional information and a new comment period.

Additional information is required in many critical areas to fully evaluate the impacts of the proposed project and to develop necessary mitigation measures, stipulations or BMPs. These areas include, but are not limited to: CO22-35

- Updated Construction Emission Calculations. DEIS at 4-897.
- Updated General Conformity Analysis. DEIS at 4-897.
- Revised CALPUFF air dispersion modeling. DEIS at 4-907.
- Revised impact tables for NAAQS/AAAQS, PSD Increment, and all air quality-related-values. DEIS at 4-907
- Updated annual emission calculations for operation of the Liquefaction Facilities to reflect the anticipated maximum and average number of LNG Carriers and support vessels. DEIS at 4-926.
- Quantitative demonstration of whether maximum or average number of vessels would result in exceedances of any NAAQS, deposition, and visibility impact analysis (and all supporting data and narrative). DEIS at 4-926.
- Class I and Sensitive Class II Mitigation Plan including all relevant data. DEIS at 4-937.
- Updated Project Blasting Plan. DEIS at 4-112.
- All public water wells within 500 feet of the project. DEIS at 4-126, 127.

[48] 40 CFR 1502.22(b)
[49] 40 C.F.R. § 1502.24.
[50] *Churchill County v. Norton*, 276 F.3d 1060, 1072–73 (9th Cir. 2001) (quoting *Blue Mountains Biodiversity Project v. Blackwood*, 161 F.3d 1208, 1216 (9th Cir. 1998)).
[51] *Found. for N. Am. Wild Sheep v. U.S. Dep't of Agric.*, 681 F.2d 1172, 1179 (9th Cir. 1982).

CO22-35 See the response to comment CM6-4.

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CO22-35

- Complete waterbody crossing dataset. DEIS at 4-462, 501.
- Updated information and photo simulations on four Known Observation Points as indicated. DEIS at 4-569.
- Updated noise impact calculations to reflect use of the DMT crossing method. EIS at 4-947.
- Additional Engineering and Technical Information as requested in DEIS Section 4.18.9. DEIS at 4-1067 to 4-1071.
- Updated compressor station modeling discussed in DEIS, but not available in Appendix E of Resourse Report 9.
- Missing analyses referenced by DEIS in the discussion of visibility and acid deposition impacts
- Appendix E, Figures 2 and 3 to Resource Report 9
- Construction Emission Control Plan
- Fugitive Dust Control Plan
- Open Burning Control Plan
- Accurate Modeling for years when construction, start-up, and operational activities occur simultaneously
- Modeling for flaring activities at the Gas Treatment Plan and Liquefaction Facilities outside of "normal operations"
- Full assessment of visibility and ecosystem impacts from operation, including impacts of the compressor or heater stations on nearby Class I and Sensitive Class II areas
- Updated Main Pipeline Modeling Report

V. FERC MUST RE-ISSUE THE DEIS WITH ADDITIONAL OPPORTUNITY FOR PUBLIC COMMENT.

CO22-36

For all of the reasons described above, FERC's DEIS should be supplemented and re-released for public comment. To achieve NEPA's goals, the statute requires federal agencies to "[e]ncourage and facilitate public involvement in decision's which affect the quality of the human environment."[52] To help guarantee public participation and informed decisions, the language of an EIS must be "clear," "be written in plain language," and presented in a way that "the public can readily understand."[53] It must also be "supported by evidence that the agency has made the necessary environmental analyses."[54] "The information must be of high quality" because "[a]ccurate scientific analysis . . . and public scrutiny are essential to implementing NEPA."[55]

[52] 40 C.F.R. § 1500.2(d).
[53] *Earth Island Inst. v. U.S. Forest Service*, 442 F.3d 1147, 1160 (9th Cir. 2006); 40 C.F.R. § 1502.8; *see also Or. Envtl. Council v. Kunzman*, 817 F.2d 484, 493 (9th Cir. 1987) ("An EIS must be organized and written so as to be readily understandable by governmental decisionmakers and by interested non-professional laypersons likely to be affected by actions taken under the EIS.").
[54] 40 C.F.R. § 1502.1; *see also* 40 C.F.R. § 1502.8.
[55] 40 C.F.R. § 1500.1(b).

CO22-36 See the responses to comments CM3-1, CM3-7, and CM6-4.

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In responding to public comments on a DEIS, an agency may: (1) "[m]odify alternatives including the proposed action;" (2) "[d]evelop and evaluate alternatives not previously given serious consideration by the agency;" (3) "[s]upplement, improve, or modify its analyses;" (4) "[m]ake factual corrections;" or (5) "[e]xplain why the comments do not warrant further agency response, citing the sources, authorities, or reasons which support the agency's position."[56] "If changes [in an EIS] in response to comments are minor and are confined to the responses described in paragraphs (a)(4) and (5) of this section, agencies may write them on errata sheets and attach them to the statement instead of rewriting the draft statement."[57] CO22-37

Conversely, non-minor changes that require modified or new alternatives or analyses generally require revision or supplementation of the DEIS.[58] Agencies shall supplement a draft statement where "[t]here are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts."[59] The agency may prepare supplements when the agency determines that the purposes of NEPA will be furthered by doing so.[60]The agency must then seek public comment on the revised DEIS.[61] An EIS that fails to enable meaningful public review and understanding of the agency's proposal, methodology, and analysis of environmental consequences violates NEPA.[62] FERC's DEIS will need to be supplemented for at least three reasons: it fails to take a hard look at the impacts of the air quality impacts from the proposed project; it fails to analyze a reasonable range of alternatives in the ways detailed above, and it fails to include key information and analysis, including mitigation measures and plans. Fixing these shortcomings will result in an EIS that contains significant new information bearing on the LNG project. CO22-38

NEPA dictates that FERC take a "hard look" at the environmental consequences of a proposed action, including its direct, indirect, and cumulative effects.[63] The required hard look encompasses effects that are "ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historic, cultural, economic, social, or health, whether direct, indirect, or cumulative."[64] The numerous and significant gaps in information, analysis, and alternatives renders the DEIS impacts analysis deficient. As the Ninth Circuit has explained, "without establishing the baseline conditions . . . ,

[56] 40 C.F.R. § 1503.4(a).
[57] 40 C.F.R. § 1503.4(c).
[58] *See* 40 C.F.R. §§ 1503.4, 1502.9(a) & (c).
[59] 40 C.F.R. § 1502.09(c)(1).
[60] *Id.* at § 1502.09(c)(2).
[61] *See* 40 C.F.R. §§ 1502.9(a), 1503.1(a)(4); *see also California v. Block*, 690 F.2d 753, 771 (9th Cir. 1982) ("Only at the stage when the DEIS is circulated can the public and outside agencies have the opportunity to analyze a proposal and submit comment. No such right exists upon issuance of a final EIS.").
[62] *See, e.g.*, *California ex rel. Lockyer v. U.S. Forest Serv.*, 465 F. Supp. 2d 942, 948-50 (N.D. Cal. 2006) ("incomprehensible" national monument management plan and corresponding EIS violated NEPA where it contained conflicting and confusing statements regarding applicable standards for management).
[63] *Robertson*, 490 U.S. at 348; 42 U.S.C. § 4332(2)(C); 40 C.F.R. §§ 1502.16, 1508.7, 1508.8.
[64] 40 C.F.R. § 1508.8.

CO22-37 See the responses to comments CM3-1, CM3-7, and CM6-4.

CO22-38 The Commission's environmental staff prepared the EIS in compliance with NEPA to assess the anticipated environmental impacts from construction and operation of the Project. We note that the EIS was prepared by qualified individuals with input from the cooperating agencies. The draft EIS was a draft document, with the final EIS incorporating additional information and analyses as needed. The Commission, and other applicable agencies, will consider the findings in the final EIS during its decision-making process. See also the responses to comments CM3-1, CM3-7, CM4-19, and CM6-4.

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there is simply no way to determine what effect the proposed [action] will have on the environment and, consequently, no way to comply with NEPA." Many elements of the impacts analysis, including mitigation for a range of impacts from air pollution and the potential route through Denali, are incomplete, unsupported by the best available science, or otherwise inadequate. A revised DEIS, followed by an opportunity for the public to comment on new circumstances and information contained in FERC's analysis, is required. CO22-38

FERC's DEIS for the LNG project contains numerous gaps in information and analysis that seriously frustrate public review and understanding. Air quality issues are only partially addressed, with key elements of the DEIS analysis missing, incomplete, inaccurate, inconsistent with the best available science, or otherwise inadequate. NPCA and other commenters have highlighted many items of missing and incomplete information. To remedy these extensive gaps in information and analysis, a revised DEIS is necessary.

FERC's failure to analyze a reasonable range of alternatives also necessitates a revised DEIS. NEPA requires that an EIS analyze a range of reasonable alternatives. The analysis of alternatives is the "heart" of an EIS.[65] An agency must "[r]igorously explore and objectively evaluate all reasonable alternatives" to a proposed action.[66] Consistent with NEPA's basic policy objective to protect the environment, this includes more environmentally protective alternatives.[67] It also includes reasonable alternatives submitted by the public at scoping.[68] "The existence of a viable but unexamined alternative renders an [EIS] inadequate."[69] The "touchstone" of the inquiry is "whether an EIS's selection and discussion of alternatives fosters informed decision-making and informed public participation."[70] The new and revised alternatives that will be necessary to remedy the identified, significant gaps will not be "minor variation[s]" of the existing alternatives that are "qualitatively within the spectrum of alternatives that were discussed in the draft." To remedy the inadequate range of alternatives, a revised DEIS is necessary. CO22-39

[65] 40 C.F.R. § 1502.14
[66] 40 C.F.R. § 1502.14(a); *see also* 42 U.S.C. § 4332(2)(E) (agencies must "study, develop and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources.").
[67] 40 C.F.R. § 1500.2(e) (agencies must "[u]se the NEPA process to identify and assess reasonable alternatives to proposed actions that will avoid or minimize adverse effects of these actions upon the quality of the human environment"); *see also, e.g.*, *Kootenai Tribe of Idaho v. Veneman*, 313 F.3d 1094, 1121-22 (9th Cir. 2002) (citing cases), *abrogated on other grounds by The Wilderness Soc'y v. U.S. Forest Serv.*, 630 F.3d 1173, 1178-80 (9th Cir. 2011) (en banc).
[68] *See* 40 C.F.R. §§ 1501.7, 1502.1.
[69] *Mont. Wilderness Ass'n v. Connell*, 725 F.3d 988, 1004 (9th Cir. 2013) (quotations and citation omitted).
[70] *Id.* at 1005 (quotations and citation omitted).

CO22-39 Comment noted.

CO22 – Trustees for Alaska (cont'd)

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CONCLUSION

Thank you for considering these comments. If you have any questions regarding these comments, please do not hesitate to contact us at the numbers or email addresses below.

Sincerely,

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INDEX OF ATTACHED DOCUMENTS

Attachment 1. Gebhart, Howard, Technical Comments on Alaska LNG Project DRAFT Environmental Impact Statement (EIS) – Air Quality Sections. Air Resource Specialists Inc. Gebhart, 2019.

Attachment 2. Willams, Megan, Air Quality Review of the Alaska LNG Project Draft Environmental Impact Statement with Exhibts 1-5. Williams, 2019.

Attachment 3. 2011 MOU Regarding Air Quality Analysis and Mitigation for Federal Oil and Gas Decisions through the NEPA Process.

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