

Southern Oregon Climate Action Now

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June 2019

Public Comment on docket numbers CP17-494-000 and CP17-495-00

I write on behalf of 1500 Southern Oregonians who are Southern Oregon Climate Action Now in response to the Draft Environmental Impacts Statement (DEIS) developed by the Federal Energy Regulatory Commission (FERC) regarding the Jordan Cove LNG Export Facility / Pacific Connector Pipeline project.¹

The Mission of Southern Oregon Climate Action Now is to promote understanding and awareness regarding global warming and its climate change consequences, and promote individual and collective action to address this critical problem. In this vein, the testimony I offer will focus on the climate change impacts of the proposed project.

In the context of global warming and its climate change consequences, we have reached a point where it is critical that everyone, individually and collectively, undertake what steps they can to address the problem. If we fail to adjust the trajectory of accelerating fossil fuel use and greenhouse gas emissions that we are currently following, we will consign future generations to a planet and nation that are dramatically compromised in terms of their ability to support life as we know it^{2,3}. Each of us has a duty to future generations to do what we can to alter our current emissions trajectory. In connection with the Jordan Cove proposal, the Federal Energy Regulatory Commission has an opportunity to set us on a course towards addressing the problem, or continue us on the path towards global catastrophe.

1-The FERC Responsibility

As the DEIS itself states¹, in evaluating this proposal, FERC has defined roles and responsibilities:

“In addition to complying with NEPA, our purposes for preparing this EIS include (1-6):

- identify and assess potential impacts on the human environment that would result from the implementation of the proposed action;
 - identify and assess reasonable alternatives to the proposed action that would avoid or minimize adverse impacts on the human environment;
 - identify and recommend specific mitigation measures to minimize environmental impacts;
- and
- facilitate public involvement in identifying significant environmental impacts on specific resources.”

In confining its assessment to the impact of the project on Southern Oregon, the DEIS fails to satisfy its charge of assessing “potential impacts on the human environment” since the human environment is larger than just the region; it is at least national, if not global.

Furthermore, the DEIS assures the reader (p. 1-7) that: “the Commission [FERC] would balance public benefits against potential adverse consequences,” and “the Commission would approve the proposal unless it finds the proposed facilities would not be consistent with the public interest.” It is difficult to imagine how promoting climate catastrophe could be consistent with the public interest. Again, the public interest is not defined in a regional context but would have to be considered in at least a national, if not a global, context.

Later in the document, DEIS defines cumulative effects in relation to the Council of Environmental Quality definition as: “... the impact on the environment resulting from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions, regardless of which agency or person undertakes such other actions” (p. 4 -783). While this definition clearly implies that the DEIS should address the impact on the environment of this and other actions regardless of the origin of those actions, the DEIS also carefully and arbitrarily defines as outside the scope of this EIS (p. ES -3): “the public benefit or need to export LNG, unconventional natural gas production (“fracking”), induced production of natural gas, “life-cycle” cumulative environmental impacts associated with the LNG export process, and downstream greenhouse gas emissions resulting from the combustion of exported natural gas.”

In identifying how broadly the environmental impact assessment should be undertaken, the DEIS identifies the geographic range which is considered in relation to an array of issues covered by the analysis (Table 4.14-1, p. 4- 786). Although greenhouse gas emissions are considered in the DEIS, this table does not identify the geographic range within which said assessment of cumulative effects will be undertaken. However, in the discussion of Climate Change and Greenhouse gas Emissions (p. 4 - 804), the DEIS acknowledges the findings of the U.S. Global Change Research Program 2017-2018 reports². In so doing, the DEIS acknowledges the following statements from those reports:

“The Fourth Assessment Report states that climate change has resulted in a wide range of impacts across every region of the country....” and “The U.S. and the world are warming; global sea level is rising and acidifying; and certain weather events are becoming more frequent and more severe. These changes are driven by accumulation of GHG in the atmosphere through combustion of fossil fuels (coal, petroleum, and natural gas), combined with agriculture, clearing of forests, and other natural sources. These impacts have accelerated throughout the end [of the] 20th and into the 21st century (USGCRP 2018).”

The DEIS then illogically and arbitrarily absolutely rejects the U.S. Global Change Research Program analysis by stating: “Climate change is a global phenomenon; however, for this analysis, we will focus on the existing and potential cumulative climate change impacts in the Project area.” This indefensible and arbitrary decision is totally inconsistent with the responsibility that FERC identifies for itself in compiling this DEIS. The paradox is that it is impossible to assess regional impacts without assessing the impact on the atmospheric greenhouse gas concentration and thus on global warming and climate change. Of course, if FERC refuses to assess the cumulative impacts of the project on a scale that is meaningful to that impact (i.e. global), it will not identify any problem. Approval of the project becomes pre-ordained and trivial.

The best the DEIS seems able to offer in relation to greenhouse gas emissions and climate change impacts, is that the authors find no method of assessing the impact and close their assessment of this

issue by stating pathetically and helplessly: "...we are unable to determine the significance of the Project's contribution to climate change." However, as reported below (4.ii), an estimate of the global impact of the project reveals that between some 100 and 200 projects such as Jordan Cove would be sufficient to exhaust the available greenhouse gas emissions budget for the entire planet if we are to have any chance at preserving life as we know it.

As indicated above, FERC acknowledges that developing the DEIS involved complying with NEPA requirements. This is underlined with the following statement: "This draft EIS was prepared in accordance with the requirements of the National Environmental Policy Act of 1969" (p. ES - 1). Basically, NEPA requires: "...the federal government to use all practicable means to create and maintain conditions under which man and nature can exist in productive harmony⁴".

The array of responsibilities assigned to FERC in terms of evaluating the environmental impact of the project proposal should be enough to guarantee a reasoned and rational assessment. Regrettably, as delineated below, FERC fails to fulfill its own accepted responsibilities.

2 -The Urgency of Climate Action

It was encouraging to read the FERC DEIS acknowledge (p. 4-805) the conclusion of the National Climate Assessment Report² that:

"The U.S. and the world are warming; global sea level is rising and acidifying; and certain weather events are becoming more frequent and more severe. These changes are driven by accumulation of GHG in the atmosphere through combustion of fossil fuels (coal, petroleum, and natural gas), combined with agriculture, clearing of forests, and other natural sources. These impacts have accelerated throughout the end of the 20th and into the 21st century"

What was missing, however, was a similar acknowledgement of the conclusions of the 2018 Intergovernmental Panel on Climate Change (IPCC) assessment of the global warming goal we need to accept, and the steps we need to take to achieve it³. According to the IPCC we must limit the global rise to only 1.5°C above the pre-industrial level as a maximum. That IPCC report also underlined that for a 50% chance of limiting warming to 1.5°C by 2050, we have a budget of 580 Gigatons of CO₂ emissions. Furthermore, the IPCC report underlines that to avoid temperature overshoot, we must reduce GHG emissions 45% below the 2010 level by 2035 and achieve net zero GHG emissions by around 2050. The conclusion from the National Climate Assessment and the IPCC warning is clear: we face a crisis of immense proportions. If we wish to have any hope of preserving a planet that supports life as we know it, we cannot afford to promote projects that lead us in the opposite direction. The staff and Commissioners of FERC are in a somewhat unique position in this arena. Your authority provides you an opportunity to assess the dimensions and urgency of the problem and respond accordingly to proposals that add to the problem rather than contribute to the solution. Our children and grandchildren urge upon FERC that you assume the responsibility of doing the right thing to defend our planet against the ravages of global warming.

In its promotion of the Jordan Cove project, Pembina's Jordan Cove LNG campaign proclaims in a carefully worded statement: "Natural gas is the cleanest burning fossil fuel..."⁵. While it is true that, as a result of the combustion of natural gas for generating of electricity, fossil gas is cleaner than coal and oil in terms of the carbon dioxide emissions per unit of energy generated⁶, Pembina's subtle and duplicitous misrepresentation of the problem fails to tell the whole story. Natural gas is, on average, somewhere between 87% and 94% methane⁷. Like all fuel sources, fossil gas has a full life cycle that involves extraction, processing, transmission, and final combustion. To be meaningful, emissions during all these steps must be included in the accounting of total emissions from the use of the resource. It is hardly surprising that Pembina totally fails to acknowledge the rest of the life cycle and focuses only on the consequences of burning the fossil fuel. This is because the remainder of the life cycle involves leakage of the greenhouse gas methane which has a remarkably high Global Warming Potential (GWP) compared to carbon dioxide. Indeed, methane has a GWP 86 times that of carbon dioxide on a 20-year basis and 34 times greater on a 100-year basis⁸.

With fossil gas emitting only about 50% of the carbon dioxide as coal per unit of energy generated, natural gas may seem a preferable energy source⁶. But it's not! The problem become evident only when we correctly assess the full life cycle emissions of methane since the fugitive emissions occurring throughout the cycle negate the small combustion benefit.

3 -Fugitive Emissions

Studies on the fugitive emissions of methane from fossil gas fracking have been conducted for many years. These studies either apply a top-down technology involving aircraft or satellite estimates of atmospheric methane concentrations over time, or bottom-up estimates derived from studies of fracking activities at the well, and the leakage occurring from these sites. As long ago as 2014, Robert Howarth and his team at Cornell University⁹ determined, using the 20-year warming value for methane, that the methane emissions necessary to negate the combustion benefits of fossil gas range from 2.4% - 3.2%, with a mean of 2.8%. They further assessed the actual fugitive emissions from conventional fossil gas extraction as between 1.7% and 6.0% (mean 3.8%), while emissions from shale-fracked fossil gas range between 3.6 and 7.9%, (mean of 5.8%). These data indicate that fossil gas is never better than coal; it is profoundly not "the clean fossil fuel." Furthermore, the assertion by FERC that the 100-year Global Warming Potential should be used in assessing the global warming impact of methane is purely arbitrary and based on no evidentiary argument. Indeed, given that the 2018 IPCC Report³ identifies the need for substantial emissions reductions within ten years, the 20-year basis is more justifiable.

Meanwhile, Schneissing¹⁰ reported 9.1% as the value for fugitive emissions and Howarth¹¹ in a 2015 literature review, indicated the value was probably closer to 12%. Many subsequent studies have endorsed these findings. The concern was echoed by Powell¹² in 2019. The notion that fossil (natural) gas is 'the clean fossil fuel' has been completely debunked in the research literature yet, displaying a total absence of integrity, Pembina continues to imply this fraudulent claim. By carefully couching their promotions in the deceptive claim about combustion benefits ("Natural gas is the cleanest burning fossil fuel..."⁵), they completely ignore the fugitive emissions throughout the life cycle. In the 2019 DEIS, FERC has made exactly the same error. It is unconscionable that an effort to determine the potential effects

on the human environment and whether the project is consistent with the public interest should ignore the impact of full life cycle emissions resulting from the project. Confining the assessment of impact to Southern Oregon ignores the responsibility assigned to FERC, and renders the DEIS trivial, and the outcome inevitable.

4 -Jordan Cove Compromises Statewide Efforts

4-i. The Narrow FERC Assessment

The FERC DEIS takes an unreasonably narrow view of the climate implications of the project by assessing only the emissions that would result directly from the Jordan Cove facility and the Pacific Connector Pipeline (see below). Even with this narrow view, the conclusion is that the combined Jordan Cove facility (at 1,969,795 Short Tons of annual carbon dioxide equivalent emissions; p. 4-670) and the Pacific Connector Pipeline (at 393,720 Short Tons annual carbon dioxide equivalent emissions; p. 4-675) would be responsible for 2,363,515 Short Tons (2,144,166.63 Metric Tons) of annual carbon dioxide equivalent emissions.

The DEIS attempts to minimize the significance of this by comparing it to the 2007 Oregon Greenhouse Gas emissions reduction goals¹³. According to this bill Oregon imposed a target for emissions reductions of 10% of 1990 level by 2020, and 75% below the 1990 level by 2050. The 1990 emissions level is reported as 56 million metric tons (MMT)¹⁴. Although efforts are underway to impose a slightly more rigorous goal of 'at least 80% below the 1990 level by 2050¹⁵, I will focus on the 2007 voluntary goal. According to HB3543, the 2020 goal is 50.5 MMT annually while the 2050 emissions goal is 14 MMT annually. According to the narrow FERC DEIS assessment, the project would thus annually emit over 4% of Oregon's total emissions, and by 2050, this would be over 15%.

Clearly, even using the FERC DEIS basis, by 2050, this project will be responsible for a substantial proportion of statewide emissions, compromising the ability of the state to reach its goals, and placing a greater burden on other sectors to reduce their emissions sufficiently to compensate for the added emissions originating from this project.

4.ii. A Fair and Complete Assessment

In its assessment of the global warming impact of greenhouse gas emissions from the Jordan Cove and Pacific Connector projects, the DEIS employs standard Carbon dioxide equivalent comparisons among gases. However, the DEIS identified the carbon dioxide equivalent of methane as 25 (p. 4 - 666). This value is obsolete and incorrect, seemingly based on the outdated 2007 IPCC report¹⁶. Even the EPA identifies Global Warming Potential of methane as 28 - 36 times that of carbon dioxide on a 100-year basis and 84 - 87 times on a 20-year basis¹⁷. The DEIS should rely on current values for the Global Warming Potential of methane: 34 times on a 100-year basis or 86 times on a 20-year basis reported by the IPCC⁵. Given the urgency for action identified by the IPCC³, there is no justification for using the 100-year equivalent. Urgency demands that the 20-year Global Warming Potential of 86 times carbon dioxide is appropriate.

The basic message is that under no circumstances can fossil gas from fracked shale be considered an improvement over coal as an energy source. Its extraction, export and combustion pose huge global problems.

While much attention has focused on emissions from the liquefaction facility proposed for Jordan Cove, such a focus misses the main problem. In offering this assessment, I do not ignore the greenhouse gas emissions that would result from the Jordan Cove plant, but stress that the real problem is the full life cycle emissions (including those sources and the annualized emissions from construction) resulting from the extraction, processing, transmission, and final combustion of this gas. The only aspects from this array that the DEIS addresses are the transmission emissions from the compressor station in Klamath Falls and those from the Liquefaction facility in Coos Bay. This is completely inadequate!

Several years ago, I undertook an assessment of the Global Warming Potential or carbon dioxide equivalent emissions resulting from the project. These calculations are based on the conservative fugitive emissions estimates presented by Howarth and colleagues discussed above⁹. I have updated these calculations to reflect the current proposal for 1.2 Bcf/d. These calculations produce an annual carbon dioxide equivalent emissions assessment of over 62 million metric tons (MMT) of greenhouse gases using the methane 20-year GWP value and over 39 million metric tons using the 100-year GWP value. A parallel assessment undertaken by Oil Change International¹⁸ in 2017 calculated the full life cycle emissions resulting from this project at between 36.8 and 52.0 MMT.

These values are critical because Oregon's In-Boundary total greenhouse gas emissions were approximately 65 MMT¹⁹ for 2017 (the most recent year for which data are available). Thus, if this project is completed, its overall global warming contribution would be equivalent currently to as much as 61% or 96% of Oregon's annual emissions depending on the GWP basis employed (100-year or 20-year respectively). Given the 2050 Oregon annual emissions target of 14 MMT, the emissions from the overall project would be between more than twice and more than 4 times those anticipated from Oregon. The implication is clear: if Jordan Cove is permitted, any effort Oregon undertakes to reduce its greenhouse gas emissions will be compromised by the full life cycle emissions resulting from this one single project. The public interest of Oregonians, Americans, and residents of the planet is not best served by a project that, by 2050, would be emitting many times the greenhouse gases that the state itself emits.

In terms of assessing the impact of the project for global Greenhouse Gas emissions and global warming, the DEIS simply gives up (p. 4 - 806/807) on the grounds that this is too difficult. The Precautionary Principle²⁰ is worth introducing at this juncture. In summary, the Precautionary Principle argues: "When human activities may lead to morally unacceptable harm that is scientifically plausible but uncertain, actions shall be taken to avoid or diminish that harm." Harm refers to harm to humans or the environment that threatens human life or health, that is serious and effectively irreversible, that has impacts that are inequitable for present or future generations, and that is imposed without adequate consideration for the human rights if those affected. If ever there were an issue demanding application of the Precautionary Principle, surely preserving the livability of the planet would qualify. In this vein, it may, indeed, be difficult to assess the potential impact of the full life-cycle emissions of greenhouse

gases from the Jordan Cove project, but we can generate a broad (back-of-the-envelope) estimate of the impact.

Earth has warmed some 0.8°C since 1880 with two-thirds of the increase occurring since 1975 at a rate of 0.15 - 0.20°C per decade²¹. During the last four decades, the greenhouse gas concentration in the atmosphere has risen 114 parts per million²², a rate of 28.5 ppm per decade. From these data we can assess the warming rate as between 0.005°C and 0.007°C per ppm atmospheric carbon dioxide equivalent increase. Since we have about 0.5°C of increase left before we reach the IPCC suggested limit of 1.5°C above the pre-industrial temperature, we can estimate the number of ppm increase in carbon dioxide equivalent before we have exhausted our emissions budget. The value is between 70 and 100 ppm.

According to the Carbon Dioxide Information Analysis Center²³, 1 ppm of atmospheric Carbon dioxide is equivalent to 2.13 Gigatons. Employing the annual emissions from the Jordan Cove project of 36.8 to 52 Million Metric Tons (= 0.036 - 0.052 GT) reported by Oil Change International¹⁸, we can estimate the annual atmospheric carbon dioxide concentration impact of the Jordan Cove project as between 0.017 and 0.024 ppm. This equates to an annual contribution of between 0.00017 and 0.00034 of the total budget of greenhouse gas emissions we are globally allowed. Over a 30-year project life span, this means that Jordan Cove would be responsible for between 0.0051 and 0.0103 of that total budget allowance. While this may seem small, the message is that it will only require between 97 and 196 such projects for us to exhaust the global greenhouse gas emissions budget for keeping global warming below 1.5°C above the pre-industrial temperature. Employing the range that I calculated using the 20-year and 100-year GWP values for emissions (39 and 62 MMT), the range is between 80 and 182 such projects. The global impact of Jordan Cove is disastrous, especially when computed over an estimated life span of 30 years.

The Annual Greenhouse Gas Index²² assesses atmospheric greenhouse gas impacts on global warming in terms of the radiative forcing of the constituent gases, setting 1990 as the Index (i.e. 1). Based on the Global Warming Potential of the array of gases contributing to the problem, the AGGI has now reached 1.43²². Of this, 0.22 (about 15%) is due to atmospheric methane²². Indeed, since pre-industrial times, the atmospheric concentration of methane has risen from around 500 ppb²⁴ to the current level of 1866 ppb²⁵. After holding steady at around 1780 ppb for several years from the turn of this century, atmospheric methane concentration is now on the rise again²⁵. As the referenced graphs show, even though the carbon dioxide concentration itself is just over 400 part per million, the current total atmospheric concentration of greenhouse gases, in carbon dioxide equivalent terms, is close to 500 parts per million²². Gases besides carbon dioxide are responsible for some 20% of the total warming in our atmosphere representing about 40% of the AGGI Index of 1.43²².

It is worth stressing that methane's contribution to global warming is consequential. This means we cannot afford to ignore it. Any activity that results in substantial methane and other greenhouse gas emissions, such as the Jordan Cove project, should be viewed as a huge threat to the livability of our planet. Again, it is impossible to interpret this proposal as serving the public interest. Our children and grand-children will not think generously about us if we fail them by approving the Jordan Cove project.

5 - Social/Economic Costs

The social cost of the emissions of greenhouse gases has been assessed. Although the current administration denies the reality of global warming and its climate change consequences, and has determined unreasonably that the social cost of carbon dioxide equivalent emissions shall be designated as between \$1 and \$7 per ton of emissions²⁶, the EPA under President Obama calculated the 2020 cost of these emissions per metric ton as between \$42 and \$123 (in terms of 2007 dollars)²⁷. Given the rate of inflation²⁸, this translates to between \$51 and over \$150 per ton of emissions today. Calculating the social cost of the annual emissions of greenhouse gases from the Jordan Cove project, we find this cost falls between nearly \$6 billion and over \$9 billion dollars annually depending on whether the 100-year or 20-year basis for calculating the methane impact is employed.

According to project proponents, the economic benefit to Oregon derived from the project would comprise tax revenue of some \$100 million to state and local governments²⁹. Pembina claims the economic benefits from the project accrue to the state of Oregon and Coos County. It is worth noting that the employment opportunities afforded by the project, once the temporary construction process is completed, are minimal and will probably be acquired mostly by experienced workers migrating from elsewhere rather than local residents. But, even if these benefits indeed occur, they comprise a drop in the bucket compared to the costs. Is it really legitimate that such an unbalanced equation of local economic benefit at the expense of such a huge national and global cost should be endorsed? Based on the best estimates by Pembina for the annual benefit, and the most conservative estimate of the social cost of the greenhouse gas emissions, the cost / benefit ration for this project is an astonishing 50:1. It seems impossible to justify a project that promises an annual cost 50 times its annual economic benefit. Even on the basis of economics, this project clearly does not serve the public interest.

6 -An Alternative

There certainly exists an economic need for investment in rural and coastal Southern Oregon. However, this need does not have to be met by a project as regionally and globally destructive as the Jordan Cove LNG export facility. Instead, the region can be assisted through a focus on investment in clean renewable energy that would serve the region instead of serving a Canadian corporation and its shareholders. The Oregon Climate Action Program¹³ serves exactly such a role since it will provide economic support not only for renewable energy, but also for agricultural and forestry activities that sequester carbon. Rather than promoting a project that is globally a huge economic and environmental disaster, elected public officials and agency staff in the region should look to the Oregon Climate Action Program for relief from their economic woes.

7 -The Moral Imperative:

Many of us alive today, whether through religious conviction or some other belief system, think that our moral imperative is to leave a planet that is at least as rich as the one we found when we arrived. Projects such as Jordan Cove collide with such a belief system and demand that we reflect on where we stand on that critical issue.

It is difficult to imagine that anyone associated with the development or promotion of the Jordan Cove proposal has children or grandchildren or cares sufficiently about what life will be like on this planet if projects such as this are completed. While economic systems are assuredly amoral, humans making regulatory decisions should not be equally amoral. Those proposing projects that further their own personal economic status at the expense of all life on the planet should have sleepless nights until we all collectively reverse course. Those with the responsibility for assessing projects such as this, and deciding whether they should be permitted, have an equally profound responsibility to consider the total social and economic impact of such projects. By any social and global measure possible, the Jordan Cove project should not be permitted. Not only does this project fail to serve the public interest, it substantially undermines and compromises that public interest.

When addressing the existential threat that is the global warming crisis confronting us, at some point in our lives, each of us will be called upon to make difficult decisions and either go with the flow towards another mass extinction of life (that potentially includes *Homo sapiens*), or resist that flow and protect life. Southern Oregon Climate Action Now urges the Federal Regulatory Commission to join us in rejecting this one further step towards our collective planetary suicide.

A corporation committed to being a good neighbor to other residents of our planet would withdraw its application and 'keep it in the ground.' We know that we cannot afford this kind of fossil fuel extraction, processing, and combustion if we are to achieve the objective of the Paris Agreement to keep global temperature rise under 1.5°C above pre-industrial levels.

8 -Concluding Remarks:

According to the DEIS, (p. 1-16) "The analysis in this EIS addresses all relevant environmental topics raised during scoping." There is, however, no evidence of a discussion of the cumulative impact of the greenhouse gas emissions that would result from the complete project despite the fact that I raised this issue in the scoping comments submitted months ago. There is no analysis of the impact of the full life-cycle emissions of Greenhouse Gases from extraction through processing, transmission, transportation, to final combustion. Nor is there any explanation offered as to why such an analysis was not included except to claim it was beyond the scope of the analysis. On one hand, the DEIS defines its role and responsibility as including to: "identify and assess potential impacts on the human environment that would result from the implementation of the proposed action... (p. 1- 6)." Meanwhile, on the other hand, contrary to this statement of responsibility, the DEIS states (p. 4 - 805) "Climate change is a global phenomenon; however, for this analysis, we will focus on the existing and potential cumulative climate change impacts in the Project area." The exclusion of such an analysis is not only unconscionable, it also indicates an abject failure on the part of FERC to serve the self-proclaimed purposes of the DEIS.

Interestingly, a recently released analysis of our future argues that the current trajectory of greenhouse gas emissions will result in a massive breakdown in human civilization by 2050³⁰. The conclusion is based on the judgement that understatement of the problem runs through risk assessment, scientific assessment, and political assessment. Each of us, personally and professionally, must decide whether

we wish to make decisions that push humanity closer to the brink of that breakdown, or away from that brink.

Finally, I note, since the Jordan Cove project is based on the expectation by its proponents of increased natural gas extraction³¹, excluding the environmental impact of increased extraction of this fossil fuel from the assessment comprises dereliction of duty. Since the DEIS makes no mention of the overarching environmental problem of global warming promoted by the project, it seems unlikely that the Commissioners will consider this aspect when making their decision. This failure represents an appalling and disappointing abdication of responsibility and authority by FERC in the development of this DEIS.

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