

Comments on Proposed Gateway Pacific Terminal/Custer Spur EIS Scoping

Brian Grunkemeyer
16527 NE 46th St.
Redmond, WA 98052
December 23, 2012

I oppose any coal export terminals on the West coast for a multitude of reasons, but primarily because we must curb our contributions to catastrophic climate change. Climate change will be this century's biggest challenge, one in which our policymakers globally & federally have not made significant progress on. This terminal and other similar proposals would only exacerbate the problem.

In developing the environmental impact statement, a few things must be within scope. While it may be premature to say we should never export coal to China, a full accounting of the relevant social costs must be included before we sign up for some meager benefits with unknown potentially high costs down the road. These costs include an environmental triple whammy of damage, costs to mitigate reduced water in the US, as well as measurable direct economic costs to the communities in which the coal trains would travel through.

I believe the thousands of people who turned out across Washington State to testify against the coal export terminal clearly demonstrates the public believes we have legal standing to make these requirements in the EIS. The will of our sovereign people is clear – a broad EIS that mitigates or prevents the damage to our communities is required.

Why Oppose Coal Trains vs. All Train Traffic?

Some portion of the arguments presented opposing a coal export terminal could in theory apply to any commodity. The intent is not to oppose using rail to haul freight or people – it is vastly more energy efficient than using roads. All trains will increase diesel PM air pollution, and all trains will block railroad crossings. However, the trains hauling coal are unlike those hauling other commodities or people. The distinguishing factors for coal are the number of train trips and the coal dust deposited on the tracks.

The volume of coal exported requires a large number of trains, and our rail network is already approaching a point where congestion increases exponentially with new traffic. The rail industry employs unit trains with 100 – 120 cars, so these trains are not just more frequent, but also longer.

As for coal dust, there are impacts to the communities along the rail lines from breathing airborne coal dust. Coal dust may be so fine that human lungs can't expel it, leading to long term health damage. But

coal dust also affects the rails themselves. The rail industry recognizes that coal dust buildup along tracks allows water to pool, which degrades tracks and can lead to derailments. Unlike hauling grain or apples, coal is unique in its toxicity to people living near the tracks as well as the tracks themselves.

One obvious mitigation for coal dust would be to require placing metal caps on top of each rail car. Private industry is also working on spraying some paint-like compound on coal to mitigate coal dust. Both of these measures have not yet been shown to be cost effective yet, and the EPA is still evaluating the effectiveness of the spray. The EIS should include by reference some determination of which mitigations are appropriate and a rough estimate of the cost per ton of coal.

Environmental Triple Whammy

For Washington State, we get an environmental triple whammy from this coal port. First, we get additional train traffic (causing air pollution, coal dust impact and congestion). Second, we will see marine impacts from coal spills at the terminal and additional ship traffic through Puget Sound. Third, some portion of the air pollution from burning the coal will come back to impact us, in addition to the global CO2 increases.

Specifically, the EIS must assess what impact increased coal burning in China will have on the United States. Dr. Kimberly Prather¹, the Distinguished Chair in Atmospheric Chemistry at Scripps Institution of Oceanography, has research indicating that air pollution from China is blowing to the West Coast of the United States and is raising the temperature and reducing the amount of rainfall in California². A high-level summary has been reported by CBS News³. Staff developing the EIS should contact her after reading her research.

The EIS should detail how much additional water and climate change impact will be experienced in the US from exporting each ton of coal to China. Costs to mitigate water shortfalls in the West are quite high. One proposal from the US Bureau of Reclamation was to pump Missouri River water from Kansas to Denver, uphill for 500 miles⁴. By providing more water to Denver from the east side of the Rockies, the hope is that Denver could reduce its water needs from the mountains that form the Colorado River, to provide more water for agriculture and cities along the entire Colorado River basin (including California's Imperial Valley and Las Vegas). The costs were \$8.6B up front then \$1B annually. While a bit extreme, the fact that the US Bureau of Reclamation was seriously considering it illustrates the scale of our water crisis in the West. The scope of a water project like this is truly national – the redirected water would benefit 5 states and possibly harm barge traffic & agriculture in another 6 states. In the absence of a reasonable global framework for modeling impact from additional air pollution on the other side of the world, increasing the risk of the need to build these projects is not something we

¹ <http://sio.ucsd.edu/Profile/kprather>

² <http://atofms.ucsd.edu/content/calwater-2011>

³ http://www.cbsnews.com/8301-18563_162-57341838/pollution-from-china-alters-weather-in-u-s-west/

⁴ <http://www.kansascity.com/2012/12/13/3964235/pump-water-from-leavenworth-to.html>

should take on lightly. We run the risk of making a small amount of money from jobs and royalties on coal mining, but paying tens of billions to mitigate the damage we've already caused, and possibly more.

The water crisis is just one specific instance of the social cost of carbon. The social cost of emitting one ton of greenhouse gasses is not well known, but we know that it is quite high. Any calculation of the financial damage from emitting one ton of CO₂ (including from burning that coal in China) should include some acknowledgement of these costs. The EPA has provided a Technical Support Document on the Social Cost of Carbon for Regulatory Impact Analysis, showing a carbon cost of up to \$137/ton over time⁵. Other analyses show carbon costs in the range of \$500 - \$900/ton⁶. The EIS must include this social cost of carbon and show how the project's planners are going to mitigate this worldwide impact, such as planting trees or by eliminating more coal power plants in the US to counteract the damage they will be inflicting on the world.

Direct Economic Costs

The Mayor of Seattle has cited studies showing that the additional traffic may increase railroad gate closures in downtown Seattle by up to 3 hours a day. The rail lines in question run right by the Port of Seattle and our 2 (perhaps soon 3) stadiums. The Port of Seattle already has serious freight mobility issues due to their lack of on-dock rail, requiring drayage trucks to haul freight between the Port and two nearby railyards. Significantly increased rail traffic in this corridor will only harm the Port of Seattle's ability to move goods, as well as complicate citizens' access to and from our sports stadiums. Lower port volume and stadium ticket revenue are clear economic costs that this proposal will create in Seattle. The Port of Seattle and our sports teams should be asked to quantify the impact on their revenue.

If the congestion from the rail traffic is found to be detrimental, then the cost of building overpasses or underpasses should be included in the EIS. Notably, some way should be found so that the railroad or coal terminal operator bears these costs, not the communities that happen to host railways.

Strategic Impacts

The likely consumers of this coal are China, with India being a distant second. Does it make sense to dig up coal in the US to fuel the economy of our competitor? China has already turned northern Australia into a resource colony. The United States needs to strategically evaluate whether such a decision is in our national economic & military interests. The correct level of engagement among our federal leaders has not seemed to occur.

⁵ US EPA Technical Support Document: Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 12866 <http://www.epa.gov/oms/climate/regulations/scc-tsd.pdf>

⁶ Climate Risks and Carbon Prices: Revising the Social Cost of Carbon, Stockholm Environment Institute <http://dx.doi.org/10.5018/economics-ejournal.ja.2012-10>

China can fuel their economy with a mix of energy efficiency, conservation, and their already substantial worldwide lead in solar panel manufacturing (an industry that the US is currently losing to China due to poor environmental regulations & government subsidies in China). We do not need to sell them coal.

Alternatives to the Proposal

The EIS should look at alternatives to the coal export terminal. I suggest we leave the coal in the ground, and we export our energy efficiency know-how to China. Instead of opening new mines to export essentially toxic dirt, the US should export programmable thermostats from US companies like Honeywell, the techniques to make buildings more efficient from companies like McKinstry, and hybrid locomotives from GE. At the same time, we should export policy know-how and regulations targeting increased energy efficiency & renewable electricity from the Northwest Power & Conservation Council and the Bonneville Power Administration. I'd suggest we export wind turbines and solar panels to China, but the US is in the process of ceding these industries to China due to our lack of a national industrial policy to further develop the replacements to our energy industry. But exporting equipment, retrofits & regulations would be more valuable for the US in terms of money, and make the right long term changes needed to improve the sustainability of the world's energy consumption.