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To: William S. Schoonover Associate Administrator Hazardous Materials Safety Pipeline and Hazardous Materials Safety Administration (PHMSA) <u>http://www.regulations.gov</u>

Re: Docket No. PHMSA-2018-0025 (HM-264), NPRM Hazardous Materials: Liquefied Natural Gas by Rail

Dear Administrator Schoonover,

Suwannee Riverkeeper for WWALS Watershed Coalition asks PHMSA not to follow the bad precedent of PHMSA Special Permit DOT-SP 20534, that authorized Energy Transport Solutions, LLC (ETS) to transport Liquefied Natural Gas (LNG) in DOT-113C120 tank cars between Wyalusing, PA and Gibbstown, NJ, with no intermediate stops. Instead, we ask PHMSA to reject the subject NPRM, HM-264, Docket No. PHMSA-2018-0025, by taking an Alternative 1: No Action.

We submit the following reasons for rejection of this proposed rule:

- 1. Low crash rates is not a sufficient reason to risk leaks or explosions that could require evacuation for a mile around and possibly set fires, nor the risk of odorless, colorless, evaporated LNG asphyxiating rail workers or still cold LNG causing freezing, burning, or explosions.
- 2. The National Transportation Safety Board (NTSB) in a comment submitted to PHMSA December 5, 2019, says the evidence does not support PHMSA's assumption of minimal volume and frequency of LNG by rail. PHMSA fails to address trains of many LNG rail cars. Such a block or unit train could result in a catastrophic failure much more severe than a single LNG rail car, possibly including a Boiling Liquid Expanding Vapor Explosion (BLEVE). NTSB points out that even if volume and frequency were minimal and only single LNG rail cars were used, even at the start, operational controls for safety of workers, the public, and the environment would be required that are not in the PHMSA rulemaking.
- 3. Few, if any, cities, counties, or states along rail lines that would carry LNG have risk management plans that deal with LNG leaks, wrecks, or explosions. The comment letter of December 20, 2019, filed by the Fire Chief of Zion, Illinois, points out many risks, including one that few local fire departments have contemplated, much less planned for: "the LNG will seek low lying areas outside of its container including but not limited to terrain and potentially basements where ignition sources (i.e. gas furnaces, gas water heaters, fireplaces) are found. This contributes greatly to the risk of a gas release becoming a gas fire."
- 4. Safety studies are lacking. For example, the Federal Railway Agency (FRA) is currently testing DOT-113 tanker cars for survivability. Those test results will not be available before the end of the comment period on PHMSA-2018-0025 (HM-264). The National Association of State Fire Marshals (NASFM) in a comment in this docket on December 17, 2019, wrote, "Our opposition is predicated on the lack of evidence and research that allowing such an action as

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proposed in the docket is safe either for America's first responders or the public."

5. Many rail lines that would carry LNG approved by this proposed rule run through densely populated areas, by schools, hospitals, and homes. See for example "FECR Movement of LNG ISO Containers by Rail, Quantitative Risk Analysis (QRA) Considering LNG Position in Train and Train Speed," Exponent Project No. 1308194.001, prepared for Florida East Coast Railway, LLC, December 8, 2016, which details routes up and down Florida's densely populated East coast, from the Hialeah LNG facility next to Miami Airport to Jacksonville, with Port Everglades in between. All such areas would be put to unnecessary risk by this LNG rail rule. For much more detail on LNG by rail in Florida, especially about exclusion zones, Potentially Affected Populations, and Potentially Sensitive Establishments, see the December 17, 2019, comment by Alliance for Sale Trains, Inc. The FECR QRA does examine some risks such as BLEVE that are lacking from the current rulemaking, yet the FECR QRA was inadequate for example in using inappropriate comparisons with propane. The FECR QRA is also for sturdier ISO tank containers. Thus the current rulemaking is even more inadequate.



- 6. PHMSA claims LNG by rail has no environmental impact. In addition to the environmental effects of the risks of the previous numbered items in this letter, more distribution of LNG means more fracking, with its severe and widespread health, environmental, social, and economic costs.
- 7. The real reason for PHMSA contemplating this rule is to promote fracking, which is no reason to risk public health and safety and the environment. The Pennsylvania Independent Oil and Gas Association (PIOGA) spells this out in a comment letter of January 10, 2020, "As the tremendous success in accessing Marcellus and Utica shale reserves has dramatically increased supply, PIOGA has broadened its emphasis to seeking expanded markets and additional uses for natural gas and related products. This has led to an expanded focus to more fully include pipeline operators and end-uses such as power generation and transportation (vehicles, locomotives and boats) as well as industrial and manufacturing consumers of

methane, ethane and related commodity products. PIOGA appreciates the extension of time and welcomes the opportunity to comment on the above-referenced rulemaking proposing changes to regulations affecting the bulk transport by rail of liquefied natural gas (LNG). PIOGA supports this rulemaking and the proposed changes as they will increase access to end use markets...."

- The current temporary popularity of LNG is no reason to continue promoting it. Fracking companies are already running out of credit, and the overseas market, for which much LNG is intended, has lower prices than its proponents expected.
- 9. A major reason for lower overseas LNG prices is the same as why LNG will fail in the near future in the United States: solar and wind power are being deployed exponentially. Even with the current glut of pipelines, LNG by truck, and LNG by rail, it is impossible for natural gas to grow exponentially because of the massive investments required in drilling, piping, liquefying, etc. Meanwhile, solar and wind power prices continue to fall through sheer economies of scale, pushing deployments up ever-faster.
- 10. The solution to risks of leaks, wrecks, and explosions of LNG truck tankers is not to add another source of risk in LNG rail cars, no matter what design.
- 11. We were told by pipeline companies that pipelines were needed or methane would be transported by truck. Now PHMSA tells us LNG by rail is less risky than trucks. Yet LNG is trucked down highways all the time. PIOGA in its January 10, 2020, comment spells out the industry attitude (emphasis theirs): "Allowing LNG shipments by rail in DOT approved tank cars will provide energy producers with increased flexibility by allowing them to select the transportation method that is the most economic and desirable based on the pertinent circumstances while maintaining rail public health and safety protections, and providing increased health and safety protections compared to truck shipments." This proposed PHMSA rule would simply add yet another way for transport of hazardous methane, in the especially hazardous form of LNG, and the health and safety protections claimed by PIOGA are absent from the proposed rule. If PHMSA's assumption of low initial volume and frequency of LNG by rail were true, LNG by rail would do little to lessen LNG by truck. If those assumptions are not true, LNG by rail is too risky.
- 12. As the additional comment by Delaware River Network of January 13, 2020, points out, there is no evidence in the rulemaking documents of PHMSA consulting with the other agencies involved in permitting natural gas or LNG, namely the Federal Energy Regulatory Commission (FERC), the U.S. Department of Energy Office of Fossil Energy (FE), and the Coast Guard, as well as the U. S. Department of Defense and U. S. Department of Homeland Security. LNG regulation is already dangerously fragmented among those agencies. Exacerbating this regulatory gap. the Federal Energy Regulatory Commission has disclaimed jurisdiction over inland LNG export facilities without a formal Rulemaking to delegate the Commission's jurisdictional authority under the Natural Gas Act to other federal or state agencies. In Jacksonville, Florida, alone, Eagle Maxville LNG was permitted by FE, Eagle LNG by FERC, and JAX LNG by neither, with nothing but a letter from the Coast Guard to show. Now PHMSA proposes to further enable shuffling LNG by rail from and among these questionably permitted LNG liquefaction facilities, in addition to the truck and rail LNG transport already in use. This rule would

compound the existing LNG risks to public health and safety and to the environment.

- 13. VENTING BOIL OFF GAS: If the train (or truck) is at a standstill for a long enough time, this vaporisation makes the pressure in the tank increase up to a pressure of 16 bar where a relief valve opens and gas is ventilated into the atmosphere to decrease the pressure in the tank. This released gas is called boil-off. Methane is a greenhouse gas (GHG), many times worse than carbon dioxide. Hence, venting natural gas into the atmosphere has a severe effect on global warming. Losing fuel also means losing money. See "How to Handle Boil-off Gases from LNG Trucks," Master thesis project, LIU-IEI-TEK-A--15/02235—SE, by Linda Gunnarsson and Erik Helander, 2015-06-04. https://www.diva-portal.org/smash/get/diva2:844798/FULLTEXT02.pdf
- 14. As Physicians for Social Responsibility point out in their January 13, 2020, comment letter, "Another potential source of an LNG-by-rail disaster must be taken into account: the possibility of a terrorist attack. The urban routing of LNG unit trains would make them highly vulnerable to attack by terrorists. The predictability and visibility of commercial rail traffic would make targeting easy; the passage of LNG trains through urban settings would make attacks potentially devastating. Human lives would be at risk, as would critical infrastructure and, potentially, other adjacent strategic targets." Solar panels have no such risks; even if targeted, they do not explode.
- 15. The most recent Intergovernmental Panel on Climate Change (IPCC) Report estimates that we need up to 50% reduction in greenhouse gas emissions by 2030 to limit atmospheric heating. Promoting LNG by rail works in the opposite direction, and should not be approved.
- 16. Methane is a far worse greenhouse gas than carbon dioxide: 86 times more efficient than CO2 at trapping heat over a 20-year period and 34 times more efficient over a 100-year period. Methane leaks at wells, from pipes, from liquefaction plants, from LNG truck or rail tankers if they crash, and from power plants. "Natural" gas is not a bridge fuel: it is a straight road to the drastic environmental results of global heating described by IPCC.
- 17. With Australia burning and U.S. average temperatures higher almost every year, we cannot afford more fracking, and we do not need LNG by rail driving it.

For all these reasons, I urge PHMSA to reject this LNG by rail rule.

Thank you for your consideration.

For the rivers and the aquifer,

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Attachment: "FECR Movement of LNG ISO Containers by Rail, Quantitative Risk Analysis (QRA) Considering LNG Position in Train and Train Speed," Exponent Project No. 1308194.001, prepared for Florida East Coast Railway, LLC, December 8, 2016.