Draft SP 20534
UPDATED Draft Environmental Assessment
July 8, 2019

1 Introduction

Methane refrigerated liquid commonly known as liquefied natural gas (LNG) is currently transported via truck and in United Nations (UN) approved International Organization for Standardization ("ISO") portable tanks by rail under a Federal Rail Administration (FRA) approval in accordance with the Hazardous Material Regulations (HMR; 49 C.F.R. Parts 171-180). Energy Transport Solutions LLC (hereinafter referred to as "ETS" or "Applicant") submitted a special permit application to the Pipeline and Hazardous Materials Safety Administration (PHMSA) for the transportation of LNG in DOT-113C120W rail tank cars. This draft Environmental Assessment (EA) was prepared in accordance with the National Environmental Policy Act of 1969 (NEPA), the President's Council on Economic Quality (CEQ) regulations implementing NEPA, and U.S Department of Transportation (DOT) policy. This draft EA analyzes the potential environmental impacts that could result from PHMSA's issuance of the proposed special permit application. 49 CFR § 107.105(d) requires that PHMSA only grant special permits when the decision "achieves a level of safety at least equal to that required by regulation, or if a required safety level does not exist, is consistent with the public interest."

2 Background and Statement of Purpose and Need

ETS has applied for a special permit asking PHMSA to approve ETS's use of DOT-113C120W tank cars as an appropriate package for the transportation of Methane, refrigerated liquid (LNG) by rail tank car. ETS is a logistics company that provides transportation services to move LNG domestically and internationally. ETS intends to use the special permit to facilitate shipments to customers who are principally exporters of LNG to foreign markets. In most cases, ETS would expect that the ultimate end-users of this LNG will be foreign generators of power for residential, commercial and industrial purposes. Nevertheless, it is possible that there will be some domestic end-users of the LNG—most likely industrial users who would buy LNG from ETS's customers for direct use.

If the proposed special permit were issued to efficiently transport natural gas outside of a pipeline, the natural gas must first be liquefied, reducing its volume at ambient pressures by a ratio of more than 600 to 1 to maximize efficiency in transportation. In the liquefaction process, water and carbon dioxide, along with most hydrocarbons other than methane, are removed. The product is then cooled to -162 °C (-260 °F) where methane, the predominant component of natural gas, transitions from a vapor to a liquid state. LNG is colorless and odorless and will vaporize (i.e., return to a gaseous state) if released to the atmosphere. As described in more detail below, LNG