

January 22, 2021

RE: Response to Request for Public Comments

To Whom It May Concern:

We are writing in response to the Federal Aviation Administration's ("FAA") request for public comments on the SpaceX Starship/Super Heavy Project at the Boca Chica Launch Site in Cameron County, Texas, and "potential alternatives and impacts ... affecting the quality of the human environment." Reference is also made to that letter to the FAA, dated July 3, 2020, and signed by multiple interested parties – including NextDecade Corporation ("NextDecade") – concerning the SpaceX Boca Chica Launch Site.

We understand that the FAA is undertaking the License Review Process and the Environmental Review Process to assess a range of issues and concerns related to public safety, national security, foreign policy, insurance requirements, and potential environmental impacts.

Additionally, we understand that FAA is utilizing a "Programmatic" Environmental Assessment ("EA") given that the proposed Starship/Super Heavy launch operations from the SpaceX Boca Chica Launch Site will be conducted on a recurring basis and that each launch operation is likely to result in substantially similar impacts. According to guidance issued by the Council on Environmental Quality ("CEQ"), the Programmatic EA "must [therefore] provide sufficient detail to foster informed decision-making that reflects broad environmental consequences from a wide-ranging federal program."¹

In light of SpaceX testing and other activities at the Boca Chica Launch Site, which are already causing near-daily closures of area recreational facilities and roadways (including, for example, every day this week)² and appear to be expanding significantly, we appreciate FAA's consideration of the below which pertain to the safe and secure construction and operation of NextDecade's fully permitted Rio Grande LNG facility to be constructed in the nearby Port of Brownsville, as well as to the sustainment of the human environment and indigenous flora and fauna for those who live, work, and recreate in Cameron County, Texas.³

It is important that SpaceX be required to provide regular and reliable information regarding its planned operations at the Boca Chica Launch Site. This will ensure the safe and efficient construction and operations of critical infrastructure in the region, including Rio Grande LNG. As it relates to the FAA's scoping of issues for analysis in the draft EA, we suggest that particular focus be placed on: (1) frequency and scope of launch operations and consistency with maximum number of launches assessed in the FAA's June 2014 final EIS; (2) Emergency response and planning; (3) offshore area clearing and facility closures; and (4) storage and handling of propellant fuel.

NextDecade's Rio Grande LNG project was the subject of an extensive, multi-year, multi-agency review pursuant to the National Environmental Policy Act of 1969 ("NEPA"). The entirety of the Rio Grande LNG NEPA review, which was managed by the Federal Energy Regulatory Commission ("FERC"), was

¹ https://www.energy.gov/sites/prod/files/2016/05/f31/effective_use_of_programmatic_nepa_reviews_18dec2014.pdf

² <https://www.cameroncounty.us/spacex/>

³ https://www.faa.gov/about/office_org/headquarters_offices/ast/environmental/nepa_docs/review/launch/spacex_texas_launch_site_environmental_impact_statement/
https://www.faa.gov/about/office_org/headquarters_offices/ast/environmental/nepa_docs/review/launch/spacex_texas_launch_site_environmental_impact_statement/media/Final_BO_FA_A_SpaceX_sm.pdf



conducted after the SpaceX environmental impact statement (“EIS”) had been completed and made public. Indeed, the plans and conclusions of multiple federal agencies and community stakeholders as they relate to the safe coexistence of SpaceX with Rio Grande LNG were formulated in reliance on FAA’s statements regarding the “maximum 12 annual launch operations ... including launches of the Falcon 9, a maximum of two Falcon Heavy launches, and/or associated mission rehearsals and static fire engine testing, through the year 2025.”⁴

For example, as set out in the Rio Grande LNG final EIS,⁵ the construction schedule for Rio Grande LNG contemplates carefully integrated and phased interruptions based specifically on information provided by SpaceX to the FAA pertaining to the 2016-2025 period. FERC has approved our project siting, construction and operations, based on these representations by FAA and SpaceX. It is our expectation that any alterations to the SpaceX launch program will result in no greater impacts to Rio Grande LNG or the community than contemplated in the SpaceX EIS.

There is little doubt that the U.S. Space Program – and the agencies and companies that support it – contribute significantly to enhancing our national security, not to mention national pride and patriotism, and we appreciate the FAA’s characterization of its own goals as they relate to commercial space transportation: “encourage, facilitate, and promote.” However, to permit boundless extension of the radius of impact of SpaceX’s experimental activities in South Texas without sufficient consideration of the substantial potential impacts on international commerce and community safety and vitality would be inconsistent with the authority delegated to FAA under the Commercial Space Launch Act of 1984, as amended and codified.

For the past several years, the FAA has collaborated with federal agencies to ensure SpaceX may safely coexist with other industries and communities, and we are confident the FAA will uphold its standard of constructive stakeholder engagement in response to this latest Starship/Super Heavy proposal.

Respectfully submitted,

A handwritten signature in blue ink, appearing to read 'Ivan Van der Walt', written over a light blue horizontal line.

Ivan Van der Walt
Senior Vice President

⁴ https://www.faa.gov/about/office_org/headquarters_offices/ast/environmental/nepa_docs/review/launch/spacex_texas_launch_site_environmental_impact_statement/
⁵ https://www.ferc.gov/sites/default/files/2020-05/FEIS-volume-1_0.pdf



Background

NextDecade is a liquefied natural gas (“LNG”) development company focused on LNG export projects. NextDecade is developing the largest LNG export solution linking Permian Basin and Eagle Ford Shale natural gas to the global LNG market. NextDecade’s marquee project, Rio Grande LNG, is to be constructed on a 984-acre site on the north embankment of the Brownsville Ship Channel. NextDecade’s common stock is listed on the Nasdaq Stock Market under the symbol “NEXT.” NextDecade is headquartered in Houston, Texas.

NextDecade and its stakeholders – including but not limited to global LNG customers, U.S. gas producers, midstream companies, vendors, contractors, shareholders, and employees – have an interest in the outcome of the FAA’s proceedings in this matter.

Rio Grande LNG comprises the largest privately funded infrastructure project in the State of Texas. The project will be constructed pursuant to a lump-sum turnkey engineering, procurement, and construction contract executed with Bechtel Oil, Gas, and Chemicals in May 2019. Bechtel is the world’s leading LNG EPC contractor, having constructed more than 30 percent of the liquefaction capacity in the world, including seven liquefaction trains to-date on the U.S. Gulf Coast.

Rio Grande LNG is expected to contribute more than \$35 billion to U.S. GDP during the construction phase, and more than \$550 million per year during operations. At full scale, the facility will be capable of producing 27 million metric tonnes of LNG per year for export to markets around the world. Rio Grande LNG will create thousands of direct and indirect jobs during construction and ongoing operations, driving increased revenues to local businesses in Cameron County and throughout the Rio Grande Valley. In addition to maximizing local hiring, NextDecade has committed to enhancing youth education, utilizing local training facilities, promoting safe work environments, and supporting improvements to the Brownsville Ship Channel.

FERC NEPA Review

LNG facilities in the United States are subject to extensive federal and state regulatory standards. To satisfy NEPA requirements, FERC evaluated the potential environmental impacts of Rio Grande LNG in an environmental impact statement (“EIS”) issued in April 2019. In addition to the FAA, several other agencies cooperated with FERC in the preparation of the EIS: U.S. Army Corps of Engineers, U.S. Coast Guard, Pipeline and Hazardous Materials Safety Administration, U.S. Environmental Protection Agency, U.S. Fish and Wildlife Service, National Park Service, National Oceanic Atmospheric Administration (National Marine Fisheries Service), and U.S. Department of Energy.

Cooperating agencies – including the FAA – have jurisdiction by law or special expertise with respect to resources potentially affected and thus participated in the NEPA analysis of Rio Grande LNG. As part of the NEPA analysis, the FAA assisted FERC in “evaluating impacts on and from the SpaceX rocket launch facility in Cameron County ... Specific recommends [were] included [in the final EIS] to address potential impacts from rocket launch failures on [Rio Grande LNG].”

In March 2017, and as requested by FERC, NextDecade filed a third-party analysis of “potential future space launch missions at the SpaceX ... launch site.” This analysis was completed by ACTA, Inc., a recognized subject matter expert in the evaluation of a range of safety hazards and risks from launch vehicle debris, blasts, and toxic gases, for the FAA, U.S. Department of Defense, the National



Aeronautics and Space Administration (“NASA”), and a variety of international companies and agencies. The ACTA analysis considered a full range of launch vehicles that met the threshold criteria for realness and relevance at the time and concluded that the risk (including likelihood and consequence) of a potential launch failure leading to an impact to the Rio Grande LNG facility boundary or the Brownsville Ship Channel was insignificant.

Additionally, a Letter of Recommendation issued in December 2017 by the U.S. Coast Guard featured consideration of SpaceX-related safety and security matters through consultation with “a variety of stakeholders including representatives from the Brownsville Navigation District, Port Isabel – San Benito Navigation District, local facility security, the Brazos Santiago Pilots Association, and Signet Maritime.”

At the conclusion of the extensive NEPA review, FERC issued an order granting authorization under Section 3 of the Natural Gas Act to site, construct, and operate the Rio Grande LNG facility.

Frequency and Scope of Launch Operations and Planned Interruptions

The FAA completed a final EIS pertaining to the SpaceX Boca Chica Launch Site in June 2014. The EIS covers a 10-year period from 2016 to 2025 and “assesses a maximum of 12 annual launch operations during this time period, which would include orbital and suborbital launches.” The FAA notes that SpaceX had not, at the time, “identified proposed operations beyond this time ... As necessary, for any activity that is outside the scope of [the] EIS and falls under the FAA’s purview, a new or supplemental NEPA analysis would be conducted.”

As noted above, the entirety of FERC’s NEPA review of NextDecade’s Rio Grande LNG project was conducted in the years following the completion of the SpaceX EIS. The plans and conclusions of multiple federal agencies and community stakeholders as they relate to the safe coexistence of SpaceX with other interests were formulated, relying on FAA’s statements regarding the “maximum 12 annual launch operations ... including launches of the Falcon 9, a maximum of two Falcon Heavy launches, and/or associated mission rehearsals and static fire engine testing, through the year 2025.”⁶

Additional interruptions due to unplanned experimental events may cause our EPC contractor, operations staff, and other personnel to take shelter with an unknown frequency, resulting in substantial impact to cost and schedule, as well as potential interference with vessel operations. We request the FAA consider the potential consequential effect to other industries should SpaceX be permitted to meaningfully exceed previously disclosed maximums.

Other Considerations

It is important that SpaceX be required to provide regular and reliable information regarding its planned operations at the Boca Chica Launch Site. This will ensure the safe and efficient construction and operations of critical infrastructure in the region, including our Rio Grande LNG facility.

Emergency Response and Planning

In accordance with various federal standards and to ensure the safety and security of our personnel, NextDecade has established an Emergency Response Plan (“ERP”) which accounts for all anticipated

⁶ https://www.faa.gov/about/office_org/headquarters_offices/ast/environmental/nepa_docs/review/launch/spacex_texas_launch_site_environmental_impact_statement/



events, including those resulting from planned rocket launch and recovery efforts. As a good corporate citizen, SpaceX must include industrial interests within impact zones in emergency response planning. Reliable communications will help to minimize disruption to industrial and marine activities in the region and mitigate potential impact to the liability of the federal government due to indemnification by the federal government for losses above \$3.1 billion.⁷ FAA should note that NextDecade's Health, Safety, Security, and Environment ("HSSE") team is keen to engage with SpaceX counterparts to promote the health and safety of the human environment and sustainment of indigenous flora and fauna.

Offshore Area Clearing and Facility Closures

On the day of a launch, Boca Chica Beach and portions of State Highway 4 are closed to the public. While closures are only on to the south of the Brownsville Ship Channel and do not impact the Channel itself, such closures have become near-daily (including, for example, every day this week) and have indeed disrupted access to recreational facilities frequented by those who live, work, and recreate in Cameron County. As part of a coastal management plan, SpaceX was to develop a plan for clearing offshore areas to ensure public health and safety. Clearing activities include boat patrol and helicopter sweeps conducted by the U.S. Coast Guard. Increased scope and frequency of SpaceX's disruptive activities may also have implications for the extent and duration of offshore area clearing.

Storage and Handling of Propellant Fuel

Energy infrastructure projects in South Texas have been subjected to appropriate regulatory scrutiny to ensure compliance and consistency with standards maintained by the Pipeline and Hazardous Materials Safety Administration and the National Fire Protection Association ("NFPA"), among others. While it is standard practice that facilities that store and utilize flammable liquids be required to model vapor cloud dispersion and design for blast overpressure, it is unclear to what extent NFPA reviews have been required of the SpaceX facility. It is also unclear what Process Safety Management guidelines have been incorporated in the design of the storage facility to accommodate requisite fuel quantities and conditions. Given the potential for now even larger quantities of fuel to be stored at the Boca Chica Launch Site, further modeling, review, and approval protocols must be applied to ensure the health and safety of the local community.

⁷ https://www.ferc.gov/sites/default/files/2020-05/FEIS-volume-I_0.pdf