CHENIERE

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January 20, 2026

Michael Desselle,
Chairman, North American Energy Standards Board (NAESB)
1415 Louisiana, Suite 3460, Houston, Texas 77002

RE: Cheniere Energy Inc.'s comments on implementation of the National Petroleum Council's (NPC) recommendation

Dear Michael,

Thank you for your letter dated December 12, 2025, soliciting Cheniere Energy Inc.'s (Cheniere) input on the NPC's *Charting the Course – Reducing GHG Emissions from the U.S. Natural Gas Supply Chain Study* ("Study") recommendation to develop differentiated gas standards for incorporation into gas contracts.

As you are aware, Cheniere was deeply involved in the development of the NPC report, with our CEO, Jack Fusco, serving on the Study's Steering Committee, and with me serving as the Chair of the Lifecycle Analysis Task Group, and as a member of the Coordinating Subcommittee responsible for drafting the report. As previously voted at the NPC, we endorse the recommendation in the Study. The question you raise in your letter is whether NAESB should develop the standards for differentiated gas. We offer the following thoughts for your consideration.

The first concept of responsible or differentiated gas was designed by my colleagues and I at Southwestern Energy, culminating in the first public transaction in 2018 with New Jersey Natural Resources.[1] While there has been a nascent differentiated gas market in the United States, demand for such products has often lagged. The lag is primarily due to a lack of standardization to support comparison, lack of additionality (or beyond business as usual) in the differentiated gas product, third-party verification practices that may not meet the rigor of global standards, and existing standards that do not warrant measurements of methane emissions which have been found to be uncertain and quite often underestimated. In addition, the complexities of the U.S. natural gas grid have limited the ability to trace the gas pathways from producer to the end user, including liquefaction terminals, and these complexities have not been adequately accounted for in differentiated gas claims.

All this leads to the question is what exactly is "different" between the "differentiated" or "responsibly sourced" gas versus the natural gas commodity bought and sold daily in the United States? And what are the key principles to develop the associated differentiated gas standards?

In 2021 and 2024, Cheniere published peer-reviewed papers in the American Chemistry Society (ACS) journal in which we demonstrated how reasonable gas pathing and supplier-specific greenhouse gas

[1] Independent Energy Standards Corporation (IES). (2018). IES Makes History in Oil & Gas Industry and Establishes First-Ever "Responsibly Sourced Gas" Transaction. IES. globenewswire.com/news-release/2018/09/06/1566697/0/en/IES-Makes-History-in-Oil-Gas-Industry-and-Establishes-Market-for-Differentiated-Gas-by-Completing-First-TrustWell-Responsible-Gas-Transaction.html

(GHG) intensities can be estimated, consistent with principles commonly employed in assessing environmental attributes.[2] That is, rather than relying on physical tracking of molecules, these approaches relied upon the aggregation of permissibly disclosed contractual and transaction details, Cheniere and fellow co-authors concluded *"[s]upply chain-specific LCAs and the integration of emission measurements in LCAs are critical to accurately characterize the differences in GHG emissions from natural gas and LNG supply chains."*

Further, our research concluded that *"registries that record the environmental attributes of natural gas have been recently established to foster the sale of differentiated gas: either the gas molecules (i.e., on a bundled basis) or their (lower) methane intensity attributes (i.e., selling the attributes unbundled from the gas itself). Although such registries have, to date, concentrated on the emissions profile of production operations, they are flexible by design and can accommodate specific pathways across the supply chain as considered in this analysis. However, given the nascency of these gas registries, additional research linking the framework and algorithm for natural gas LCAs presented here into these ledger technologies is recommended to enable monitoring and verification to support regulatory reporting, differentiation, and commoditization of natural gas across the supply chain."*

Essentially, to develop differentiated gas standards, we consider the following key components:

- **Credible measurement, reporting and verification (MRV) standards**: MRV standards should define the boundary (production-only versus entire supply chain), scope (methane-only versus all greenhouse gases), spatial boundary (U.S., regional or global), and related parameters. Currently, most standards focus on methane emissions.
  The Oil and Gas Methane Partnership (OGMP) 2.0 is the only global-level measurement and reporting (M&R) methane framework endorsed by more than 150 companies worldwide for use across the supply chain. Verification of measurement is a relatively new consideration, and the Center for Energy and Environmental Systems Analysis (CEESA) at the University of Texas at Austin has proposed a verification protocol that is undergoing public review for use as part of compliance with the EU methane rule.[3] In addition to OGMP 2.0 and CEESA, other voluntary standards commonly used in the U.S. include MiQ, Equitable Origin, and EarnDLT, though as noted above these voluntary standards have not translated to material interest from gas buyers as percentage of volumes of natural gas marketed or consumed.
- **Credible registries** that are interoperable and maintain the provenance of the claimed attribute throughout the chain of custody. Several technology firms have introduced registries though as noted above there is limited use of these registries as most transactions are done on bespoke basis.
- **Transparency and trust** in the performance and use of differentiated gas certificates. For a proper functioning differentiated gas markets, there should be transparency in relation to differentiated gas attributes that have been third-party certified and meeting a specific standard,

[2] Roman-White et al. (2021). LNG Supply Chains: A Supplier-Specific Life-Cycle Assessment for Improved Emission Accounting. *ACS Sustainable Chemistry & Engineering, 9*(32), 10857-10867. https://doi.org/10.1021/acssuschemeng.1c03307 and Roman-White et al. (2024). Gas Pathing: Improved Greenhouse Gas Emission Estimates of Liquefied Natural Gas Exports through Enhanced Supply Chain Resolution. *ACS Sustainable Chemistry & Engineering. 12*(46). 16956-16966. https://doi.org/10.1021/acssuschemeng.4c07162

[3] European Union Methane Regulation: Verification & Reporting Protocol — CEESA

transparency on pricing to enable efficient markets, and ensure the attributes are not double counted or used in the market.

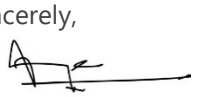
- **Regulatory drivers** may result in development of robust differentiated gas markets. Cheniere has actively followed and engaged on the EU Methane Rule (EUMR) for several years, including by providing pragmatic implementation solutions under Chapter 5, Articles 27-29, related to LNG imports. Under the EUMR, the compliance obligation lies with the importer of gas or LNG into the EU, and not with the producer or exporter. The European Commission has recognized the complexities of implementing the EUMR as adopted, and on December 15, 2025, the EU energy ministers supported a pragmatic implementation approach proposed by the Commission on December 10, 2025. This approach employs "certificates" that document the MRV attributes of the gas production. The Commission and the network of competent authorities in the Member States are currently developing associated clarification and compliance solutions. Once further clarity is provided regarding implementation of the rule by the Commission and/or competent authorities, we believe there will be the need to define the MRV and registry standards.

Since technical MRV standards require deep technical expertise and are already being developed by academia, OGMP 2.0, and others, we do not see a role for NAESB in developing the MRV standards themselves. However, a potential role for NAESB could be as a central clearinghouse or registry to track MRV certificates as they are generated and retired—whether transactions are bundled with or unbundled from the underlying commodity (natural gas or LNG).

It is expected that the early stages of differentiated gas markets will include multiple registries. The lack of interoperability among registries represents a significant limitation to the certified gas marketplace, whether voluntary or for use under EU or other regulatory regimes. An overview of certified gas registries was included as a topic paper in the NPC Study,[4] and in this paper, the authors recommended development of a "centralized certified natural gas framework" that could provide a baseline GHG emissions standard against which certified natural gas registries could benchmark certifications. In addition, such a registry could support price discovery and provide a safeguard against double counting of MRV certificates, while allowing multiple registries to co-exist. The standards and framework for such a central registry could be designed by NAESB in consultation with market participants, regulators, and technology providers. A NAESB-led central registry for MRV data related to certified gas could initially be limited to methane emissions, aligned with the OGMP 2.0 M&R framework, and the CEESA verification protocol.

We hope you find these comments useful, and if you have any further questions, please do not hesitate to reach out to me at 713-375-5424.

Sincerely,



Fiji George
Sr. Director, Climate & Sustainability

[4] Saacks et al. (2024). Topic Paper #6: Overview of Certified Natural Gas Registries. National Petroleum Council, Charting the Course – Reducing GHG Emissions from the U.S. Natural Gas Supply Chain. chartingthecourse.npc.org/files/GHG_Topic_Paper_6.pdf