

Memorandum of Understanding

This Memorandum of Understanding (MOU) is entered into as of the 23rd day of April, 2026 by and between the California Air Resources Board (CARB) and BNSF Railway Company (BNSF) (referred to collectively herein as the "Parties").

Recitals

BNSF proposes the Barstow International Gateway ("BIG") project in the City of Barstow ("City") and in the unincorporated County of San Bernardino, California, which consists of a railyard with an intermodal facility and "block swap" yard, along with a transload warehouse center.

In its Draft Environmental Impact Report (DEIR) for the BIG project, BNSF committed, among other things, to Tier 4 locomotives, zero-emission rail-mounted gantry cranes, Tier 4 hybrid rubber-tired gantry cranes, and zero-emission forklifts and hostlers.

In the February 23, 2026, Memorandum of Understanding between BNSF and Mojave Desert Air Quality Management District (District MOU) regarding BIG, BNSF committed, among other things, to: "Accumulate 50 locomotive-years of experience testing 5 [Tier 4 hybrid line-haul] locomotives across the BNSF network (5 locomotives * 10 years = 50 locomotive-years, or other combinations with more locomotives and fewer years), with three units deployed systemwide and two units operating between the Ports and the BIG IMF [Intermodal Facility]." See attached District MOU.

CARB is California's clean air agency and is committed to ensuring a clean and healthy environment for all California residents by attaining and maintaining health-based air quality standards.

CARB and BNSF have a history of partnering on voluntary emissions reductions, as evidenced by participation in the 1998 Locomotive NO_x Fleet Average Emissions Agreement in the South Coast Air Basin (98 MOU) and the 2005 Statewide Railyard Agreement (05 MOU). Under the 98 MOU, BNSF agreed to operate locomotive fleets that "on average" meet a Tier 2 NO_x emission standard through 2030. In the 05 MOU, BNSF agreed to additional measures meant to address particulate emissions in railyards. Together, these MOUs represent a successful partnership to voluntarily address locomotive emissions in California.

BIG is a rail facility specifically identified by the California State Transportation Agency in the most recent State Rail Plan as a critical investment for the state's freight network.

Senate Bill (SB) 149 establishes an Infrastructure Streamlining Program, which authorizes the Governor to certify transportation-related infrastructure projects that meet specified requirements for judicial streamlining under CEQA.

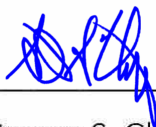
Terms

1. BNSF and CARB reiterate and incorporate the commitments of the District MOU into the terms of this MOU.
2. In addition, BNSF and CARB commit that in conjunction with the Governor's certification described above, they will continue to engage with each other in good faith to explore the extent to which additional technologies to reduce criteria pollutants and greenhouse gas emissions could be similarly tested to determine their feasibility for implementation in BNSF's operations; such technologies could include:
 - Zero emission and hybrid (partial zero emission) locomotives
 - Zero emission and Tier 4 hybrid cargo handling equipment (e.g., cranes and battery-electric yard trucks)
 - Biofuel (biodiesel and renewable diesel) blends
 - Operational enhancements (e.g., mode shift to rail and idling reduction.)
3. The evaluation process and criteria to deploy new technologies at scale will undergo a comprehensive mutually agreed testing protocol to evaluate solutions across a variety of facets, including:
 - Safety
 - Technology viability
 - Operational integration
 - Fleet applicability
 - Regulatory approval
 - Economic viability
4. In addition, the Parties will work together to identify grant opportunities to further implementation of the technologies tested in the District MOU or as contemplated above to the extent such technologies are determined to be otherwise feasible.
5. BNSF and CARB agree to engage with US EPA on future locomotive policies, leveraging the technology explorations in this MOU, that may become feasible to implement.

6. Nothing in this MOU delegates any rights, responsibilities, or authorities provided by law to any Party. Nothing in this MOU delegates or otherwise prevents, compromises, or precludes each Party from exercising all rights, responsibilities, or authorities provided by law.
7. Nothing in this MOU creates any rights, remedies, or causes of action in any person or entity not party to this MOU.
8. This MOU is effective upon completion of the signatures of the Parties and Governor's certification. The MOU is effective for a period of 10 years. The MOU may be terminated or extended upon mutual agreement by the parties. If any provision of this MOU is found not to be in effect, each provision is severable.

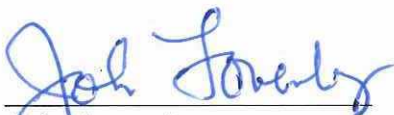
In witness thereof, this MOU has been executed by the Parties.

California Air Resources Board



Steven S. Cliff, Ph.D.
Executive Officer

BNSF Railway Company



John Lovenburg
Vice President - Environment & Sustainability

District MOU

(Attached)

MEMORANDUM OF UNDERSTANDING

This Memorandum of Understanding (“**MOU**”) is entered into as of the 23rd day of February, 2026 (“**Effective Date**”) by and between the Mojave Desert Air Quality Management District (“**MDAQMD**”) and BNSF Railway Company (“**BNSF**”) (MDAQMD and BNSF are sometimes collectively referred to herein as the “**Parties**”). The Parties acknowledge and agree that This MOU does not supersede or void the existing Superseding Cooperative Agreement between BNSF and MDAQMD dated as of December 19, 2025

RECITALS

- a. BNSF proposes the Barstow International Gateway (“**BIG**”) in the City of Barstow (“**City**”) and in the unincorporated County of San Bernardino, California. The BIG project consists of a rail yard with an intermodal facility and “block swap” yard, and a transload warehouse center. BNSF intends to seek all applicable governmental approvals necessary to implement construction and operation of BIG, including review under, and compliance with, the California Environmental Quality Act (“**CEQA**”). The City serves as the lead agency for BIG under CEQA.
- b. In January 2025, the California State Transportation Agency’s (“**CalSTA**”) adopted an updated Climate Action Plan for Transportation Infrastructure (“**CAPTI**”) 2024 State Rail Plan, which specifically identified BIG as advancing the CAPTI’s critical goal of building toward an integrated, statewide rail and transit network.
- c. On July 3, 2025, BNSF submitted a Preliminary Application to the Governor’s Office of Land Use and Innovation (“**LCI**”) for certification of BIG as a transportation-related infrastructure project under Senate Bill (SB) 149, Public Resources Code (“**PRC**”) Section 21189.81(g)(1), and intends to submit a final Application to LCI in the short-term.
- d. On November 10, 2025, The City of Barstow (“**City**”) published the City of Barstow General Plan and Barstow International Gateway Project Draft Environmental Impact Report (“**DEIR**”), State Clearinghouse No. 2024020501.
- e. As shown in the Preliminary Application, BIG advances (or does not impede) all of the goals set forth in Section 21189.81(g)(1), which goals are set forth in CalSTA’s State Rail Plan.
- f. As shown in the DEIR, BIG also meets CAPTI’s goal of moving towards the development of zero-emission freight transportation system. At the Project footprint, BIG would use zero-emission rail-mounted gantry (“**RMG**”) cranes, hybrid rubber-tired gantry (“**RTG**”) cranes, as well as zero-emissions forklifts and hostlers. Containers would be transported between the rail yard and transload warehouse center using zero-emissions hostlers, rather than heavy-duty trucks, via an onsite/private closed loop roadway to minimize local roadway traffic. BIG also includes electric plug-in for Transportation Refrigeration Units (TRUs).
- g. Additional zero-emission facets to the project were evaluated and determined not to be feasible within a reasonable period of time due to the infeasibility of the technology and lack of availability of sufficient power at the site. BNSF will commit to evaluation of technological, operational and economic feasibility of additional zero-emission technologies that might have potential for implementation at BIG at 5-year intervals until 2048. With regard to the latter, BIG is allotted “power budget” of 66 megawatts (MW) peak energy demand for the facility by

Southern California Edison (“SCE”), which has been allocated to support the current proposed electrical demand for the site. Based on expected power demand from widespan electric cranes, battery-electric hostlers, battery-electric forklifts, charging for employee electric vehicles, and lighting, heating, air conditioning, and other typical electrical demands, BIG has already maximized the allocated power budget. Additional zero-emission applications to the project were evaluated and determined not to be feasible within a project horizon due to the infeasibility of the technology and lack of availability of sufficient power at the site. Specifically, SCE has indicated that BIG would be required to add new transmission-level service to supply additional power to the site. This process would take several years for design, permitting approval, and construction by SCE. As such, this delay would fall well outside a feasible window for the successful project implementation. Because BIG would operate 24 hours per day, BIG must consider only power from the grid as the power budget and would supplement this power with energy from solar during daytime.

- h. BNSF will incorporate by reference the terms of this MOU into the Development Agreement between BNSF and the City in conjunction with the approval of the Specific Plan for BIG outlined in the DEIR so that City may directly enforce BNSF’s commitments in this MOU along with MDAQMD.

TERMS

As part of its Final Application under SB 149, BNSF commits that, in the event the Governor certifies BIG as a transportation-related infrastructure project under SB 149 and the BIG facility secures permits and is built, BNSF will further the development of zero-emission freight rail through the following actions:

A. Demonstration of Zero-Emissions Technology

Hybrid technologies lower greenhouse gas (GHG) and criteria pollutant emissions by reducing engine operation on internal combustion vehicles. These technologies get battery power from regenerative braking and do not require external charging infrastructure. Diesel-electric battery hybrid line haul locomotives consume less fuel and produce less emissions than traditional locomotives in mainline operations and have the potential to operate for short periods of time in zero-emissions mode in and near a yard or terminal. Within ninety (90) days of all federal, state and local approvals for construction of BIG have been obtained and no longer subject to legal challenge or appeal, BNSF will enter negotiations to procure and test at least five (5) hybrid Tier 4 line-haul locomotives across BNSF’s system in a variety of operating conditions described below (see: Evaluation Process and Criteria), including dedicating at least two (2) of those locomotives to operations between the Ports and the Intermodal Facility at BIG. It is BNSF’s understanding that locomotives can be built and delivered 18 months to 2 years after an order is placed. Assuming acceptable commercial terms can be reached by BNSF and the hybrid locomotive manufacturer, below is the anticipated timeline for locomotive deployment:

- (1) Year 1: BIG approvals finalized
- (2) Years 2-3: Procurement and manufacturing of Tier 4 hybrid line haul locomotives
- (3) Years 4-13: Accumulate 50 locomotive-years of experience testing 5 locomotives across the BNSF network (5 locomotives * 10 years = 50 locomotive-years), with three units deployed systemwide and two units operating between the Ports and the BIG IMF.
- (4) Year 14+: Assuming, no pausing or stoppage of the demonstration, advance efforts indicated in the “Success Criteria” section below

Factors governing acceptable commercial terms include: (i) the price is commensurate with the technology

and emission benefit the supplier believes the equipment could achieve, (ii) the supplier bears a commercially reasonable portion of research and development cost, (iii) BNSF is protected from liabilities associated with a catastrophic failure of the system, and (iv) the supplier's delivery time is commensurate with the anticipated timeline.

B. Evaluation of Battery-Electric Switcher Feasibility

BNSF is a partner in the Alameda Beltline Railway ("ABL") to compete for the San Pedro Ports rail operating contracts. ABL has submitted a bid for the INVEST CLEAN grant to the South Coast Air Quality Management District ("SCAQMD") to test battery-electric locomotive switchers at the Ports of Los Angeles and Long Beach. If ABL is awarded the operating contracts, BNSF will take an active advisory role in the testing and evaluation of battery-electric switcher technology at the Ports of LA and Long Beach. Evaluation Criteria relevant to battery-electric locomotive switchers (and other new locomotive technology) is outlined below (see: Evaluation Process and Criteria). Whether or not the ABL is awarded the Port switching business, BNSF will continue its advanced energy innovation efforts to explore the feasibility of emissions-reduction technologies through market research, supplier outreach, energy modeling, and exploration of grants that are intended to fully support new technology demonstrations.

C. Evaluation Process and Criteria

To deploy new locomotive technology at scale, railroads undergo a comprehensive testing protocol to evaluate the solutions across a variety of facets, including:

1. Safety

Safety is the highest priority at BNSF Railway. Any technology must be proven safe for normal operations (including charging in the case of battery-electric technology), maintenance and inspection, public interaction, cross-industry utilization (through the interoperable process of "interchange"), accident recovery, and more.

2. Technology Viability

Any new technology must be proven capable of performing a standard locomotive duty cycle across all portions of our network. This includes elements such as power output, tractive effort, in-train dynamics, cross platform communications, longevity testing, timely repair and maintenance to support asset availability and reliability requirements. The ability of new technology to "complete the mission" is critical for adoption.

3. Operational Integration

Locomotives are a vital link in an operational chain that also includes personnel, railcars, track, terminals and customer facilities, and freight. Regular locomotive operations include on-track movement, intra-facility shuttling, fueling (charging in the case of battery-electric equipment), daily inspections, periodic maintenance, across thousands of miles of varying infrastructure and terrain, pulling tens of thousands of tons of freight in extremely diverse geographies, spanning significant altitude and grade changes, in a variety of weather conditions. In order to contemplate large purchases of new locomotives, test units must be evaluated for their operational impact (positive or negative) in each of these varying conditions. Because locomotives often operate for 50 years or more, railroads typically pursue 50 locomotive years (e.g. 5 locomotives for 10 years = 50 locomotive-years) of testing to understand the cumulative effect of strenuous operations day-in and day-out for years, if not decades.

4. Fleet applicability

As stated above, locomotives are extremely long-lived assets. With one of the youngest line-haul fleets in North America, BNSF prioritizes solutions that can be applied to our existing fleet of locomotives. Purchasing

all-new locomotives is not only economically impractical; it is also environmentally inconsistent with BNSF's sustainability efforts. The embedded carbon associated with the steel production needed to support manufacturing thousands of locomotives is significant. Therefore, it is important to identify solutions that can be implemented on our existing locomotive fleet.

5. Regulatory Approval

The U.S. freight rail safety is regulated by the Federal Railroad Administration (FRA). Canadian rail is regulated by Transport Canada (TC). Both FRA and TC have indicated that any new alternative-fueled technology must be evaluated and approved before mainline operations can begin. The FRA is focused on the safety of the equipment itself as well as the interaction with other rail equipment, other transportation modes, and the general public. As such, any testing is likely to be scrutinized by the FRA and subject to a lengthy review process. Due to the interoperable nature of North American railways in which locomotives and railcars seamlessly transition from one railroad to another, new technologies need to be understood by industry regulators and consortiums to establish policies and best practices for key elements of their operation such as those listed above (Operational Integration) across all six Class I railroads and large Class 2 and 3 "shortline" railroads.

6. Economic Viability

The long-term economic justification for new technology must be accurately assessed and understood. This includes the upfront purchase price of any new equipment as well as the ongoing costs to operate, maintain, overhaul, fuel/charge, and otherwise service the locomotive. Beyond the railroad's economic analysis, the manufacturers of new technology and the associated supply chain participants must also evaluate the feasibility of deploying new technology. Lastly, railroads must consider the highly-competitive landscape that exists among railroads, and more significantly, between rail and trucking. Small shifts in premiums can have adverse effects on rail by driving volume to trucks, increasing congestion and emissions across major freight corridors and in cities and towns across the country. And because locomotives have such long operating lives, the economic analysis must take into account a large variety of factors with a significant degree of uncertainty surrounding the future state of our transportation, technology, political, regulatory, and economic systems before making long-term investments. A significant lever that can be used to usher in technology investment is the offering of grant subsidies such as SCAQMD's INVEST CLEAN program, which provided 100% funding for battery-electric locomotives, chargers, and associated electrical infrastructure. BNSF recommends programs with significant grant contribution be explored for the demonstration and thorough evaluation of hybrid linehaul locomotive technology as well.

D. Success Criteria

At the end of each year of testing, and six (6) months after completion of the demonstration project, BNSF will submit a report to the MDAQMD, CARB and SCAQMD that describes performance against the evaluation criteria listed above. All testing will be performed in good faith to determine the viability of the technology. This may yield a result that finds the technology is successful and appropriate for continued escalation or not viable for rail operations. If at any point during testing BNSF concludes that the technology is either (i) unsafe to continue operating in BNSF's normal operations, or (ii) causes more than sporadic delays to BNSF's ability to timely meet its common carrier and other obligations to its customers is endemic to the technology, BNSF will suspend the demonstration and advise MDAQMD and CARB. In such event, BNSF will work in good faith with the supplier to identify whether the equipment can be modified in a commercially reasonable manner that would address either the safety or service issues causing the suspension. BNSF will notify MDAQMD and CARB of the outcome of such efforts. However, if BNSF finds the testing of hybrid technology sufficiently satisfies each of the evaluation criteria outlined above, BNSF will partner with the MDAQMD on seeking grants to replace the dedicated Tier 4 fleet operating between the Ports and BIG IMF with Tier 4 hybrids at a rate of up to 5 locomotives per year (separate and distinct from BNSF's commitment


in Section A above regarding testing of the five (5) hybrid Tier 4 line-haul locomotives for feasibility.

E. Letter of Concurrence

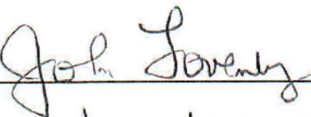
In exchange for BNSF's commitments in this Agreement, MDAQMD agrees to provide a letter of concurrence for BIG that BNSF can provide to the public agencies considering the governmental approvals necessary to implement the BIG Project, included but not limited to certifications related to SB 149. The Parties acknowledge and agree that nothing in this Agreement commits or binds MDAQMD to approve any entitlements, permits, plans or grants without going through the MDAQMD public processes.

IN WITNESS WHEREOF, the Parties have executed this MOU as of the Effective Date.

MOJAVE DESERT AIR QUALITY MANAGEMENT
DISTRICT

By: 
Name: BRAD POIRIEZ
Title: EXECUTIVE DIRECTOR / APCO

BNSF RAILWAY COMPANY

By: 
Name: JOHN LOVENBURG
Title: VP, Environment & Sustainability