

INVEST CLEAN

Climate Pollution Reduction Grant U.S. Environmental Protection Agency



Implementation Plan

Measure 4

Battery Electric Locomotive Program

1. Introduction

INVEST CLEAN, funded by the EPA CPRG grant, aims to overcome barriers to transitioning goods movement corridors to zero emission technologies in the two Metropolitan Statistical Areas (MSAs) in Southern California, i.e., Los Angeles-Long Beach-Anaheim and Riverside-San Bernardino-Ontario MSAs. The INVEST CLEAN initiative focuses on reducing emissions from the goods movement sector by implementing incentive measures and electrifying the Southern California goods movement corridor. The four measures provide incentives for the installation of electrical charging equipment to support heavy-duty battery electric (BE) vehicles, replacing high-polluting vehicles and equipment with BE Class 8 freight vehicles, last-mile delivery vehicles, cargo handling equipment (CHE), and switcher locomotives.

This Implementation Plan (Plan) addresses the procedures and methodologies to implement the “Battery-Electric Switcher Locomotive Program” (Program). This Program provides funding for the development and deployment of battery-electric switcher locomotives, as well as procurement and installation of supporting chargers and associated equipment to operate battery-electric locomotives. By providing financial incentives, the Program will encourage the production of battery-electric switcher locomotives in the U.S. and deploy them to help reduce emissions in the MSAs, which are the West Coast gateway to international commerce. The total funding incentive of the Program is \$190.8 million. This Plan describes the funding structure, timeline, application solicitation and distribution procedures, application evaluation process, and key program requirements, invoice processes, engagement with local communities, data reporting, and other strategies to ensure the successful execution of this Measure.

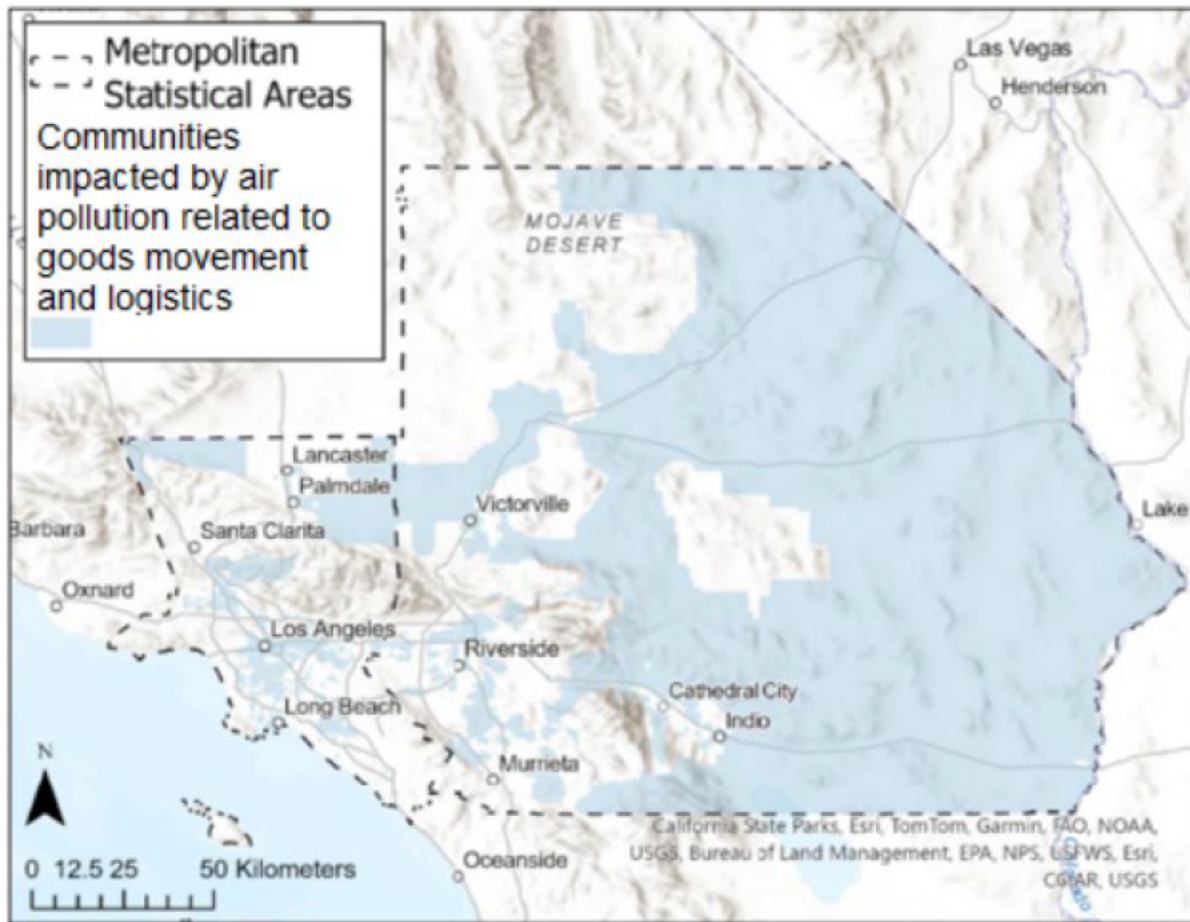
2. Definitions

Applicant: Entity that submits an application/proposal for the Program.

Goods Movement: As defined in Commercial Code Section 2105, goods are movable and the goods being moved must be part of a transaction that involves a contract for the sale of the goods.

Metropolitan Statistical Areas (MSAs): Statistical areas defined by the Office of Management and Budget which have an urban core population of at least 50,000. The INVEST CLEAN program specifically serves the Los Angeles-Long Beach-Anaheim and Riverside-San Bernardino-Ontario MSAs, which include the following four counties: Los Angeles, Orange, Riverside, and San Bernardino.

Figure 1 Area inside the dotted lines represents the two MSA qualified territories



Measure: One of the four battery electric technology categories under INVEST CLEAN grant. It covers the incentive program, data collection, workforce training, and community outreach. In this Plan, it refers to Battery Electric Locomotive.

Participant Support Costs: Direct cost contributions on behalf of award recipients who are participating in the INVEST CLEAN Program. These are specifically contributions for the battery electric locomotive purchase and infrastructure costs.

Program: The incentive portion of the Measure for Battery Electric Locomotive under the INVEST CLEAN grant.

Project: A switcher locomotive Project refers to one (1) locomotive with the supporting charger that has applied and/or received funding under the Program.

Program: The incentive portion of the Measure for Battery Electric Locomotive under the INVEST CLEAN grant.

Replacement: Replacement Projects require the decommissioning of an existing retiring/baseline locomotive and the commissioning of new battery electric locomotive. Conversion Projects opting to replace only the engine must scrap the baseline engine and install electric motor(s) in the baseline locomotive.

Subaward: Funds provided to an applicant or recipient for development and deployment of battery electric locomotives(s) under the Program based on eligibility and Program criteria.

Subaward Agreement: A written document that establishes the amount, eligibility criteria, responsibilities, and compliance requirements associated with the award, ensuring that funds are used for their intended purpose and that the subrecipient fulfills the program objectives before payment.

Subaward Recipient (or subrecipient): The selected entity that enters into a subaward agreement with South Coast AQMD. It will be required to fulfill all program requirements – such as purchasing eligible equipment, constructing or installing equipment, and providing required documentation- to receive reimbursement.

Switcher Locomotive: Under this Program, a switcher locomotive refers to a locomotive used for maneuvering railway vehicles over short distances. The maximum rated power limit of 2300 bhp for switcher locomotives in 40 CFR Part 1033 is not applicable to the Program.

University of California, Irvine (UCI): The designated third-party data collection and verification organization under INVEST CLEAN.

3. Structure

On a competitive basis, this Program provides funding for the deployment of battery electric switcher locomotives and associated infrastructure. Under this Program, a Project that replaces a diesel switcher locomotive or engine with battery electric technology and installs the supporting charging infrastructure is eligible for funding. The battery electric switchers must be deployed by 1/1/2028. Applicants will be required to provide an emission reduction plan. The request for proposal (RFP) in Attachment 1 illustrates the workflow from application to Project completion for applicants of this Program.

Applicant Eligibility

Eligible applicants can be

- Owners and/or operators of switcher locomotives within the two MSAs, who are directly responsible for the operation, maintenance, and procurement of such equipment; and/or,

- Locomotive manufacturers of switcher locomotives. Partnership with a rail operator to deploy and demonstrate the battery electric switcher locomotive(s) will be needed to be eligible.

Partnerships between manufacturers and operators are strongly encouraged to ensure both the technical feasibility and operational practicality of proposed solutions.

Equipment Eligibility

Baseline switcher locomotives:

- The baseline locomotive or engine that will be removed from operation must be diesel-fueled.

Replacement/Converted battery electric switcher locomotives funded by the program:

- Can be either a brand-new replacement locomotive or a conversion of the baseline locomotive to operate 100 percent on battery electric technology
- The battery electric switcher locomotive should be operated within the two MSAs.
- Unless otherwise approved by the South Coast AQMD staff, at a minimum, 425 MWh of electricity usage per year per unit will be required to ensure Program emission reduction goals are achieved

Supporting Charging Equipment:

- To effectively deploy the new BE switcher locomotive, applicants will need to provide documentation showing the design, construction, and installation plan for the charging infrastructure.
- Construction and installation of infrastructure will be required to adhere to Build America Buy America and other Federal requirements (See Attachment 1 Section 3.7)

4. Implementation Timeline

The timeline for the release of this Program is established in the RFP (see Attachment 1). Procurement timelines must align with EPA's Build America, Buy America provisions for charging infrastructure equipment, and performance tracking is required throughout the implementation of the locomotive replacement and infrastructure and utility coordination including contingency buffers due to supply chain delays.

5. Incentive Funding

A. Subaward amount

A total of \$190.8 million is available under the Program. Each battery-electric locomotive Project may receive an award of up to \$10.6 million, not to exceed the total eligible Project cost. One applicant can be awarded funding for multiple Projects.

B. Subaward distribution

Funds will be distributed on a reimbursement basis only upon the execution of an agreement, completion of approved milestones, verification that the new/replacement locomotive or

charging infrastructure meets program requirements and is placed into service, and submittal of required reports, invoices, and proof of payment.

South Coast may allow progress payments to ensure the Project is carried out in a timely manner given the financial scale of the Project(s). Two agreements may be executed for BE switcher Projects, one with the manufacturer and one with the operator. Partial payments may be made to the manufacturer as the locomotive build meets major milestones which may include chassis completion, manufacturing and installation of the powertrain including batteries, locomotive testing, and final delivery. Other payments may be made to the manufacturer after delivery for items like training and ongoing warranty support. For the agreement with the operator, it will secure their commitment to utilize the locomotive(s), ensure emission reductions, and provide charging infrastructure. Separate payments may be made upon the design, installation, and completion of the charging infrastructure, if awarded under the Program, to ensure the supporting infrastructure is ready by the time the battery electric locomotive is delivered.

6. Subaward Agreement

Subaward agreements will be executed between the South Coast AQMD and the rail operator and/or between the South Coast AQMD and the original equipment manufacturer (OEM). The agreement will outline the OEM and/or rail operator's responsibilities, milestones and deliverables.

The subaward agreement may include milestone-based payments. Equipment, parts, and labor costs must be substantiated and sufficient proof that the milestone has been met must be documented in the submitted invoice before milestone payments can be made.

If the infrastructure component is awarded under the Program, it will be included in the same subaward agreement with its own set of milestone dates. If the charging infrastructure is not funded through the INVEST CLEAN Program, recipients will be required to provide the status of the supporting charging infrastructure regularly to ensure timely and coordinated deployment.

7. EPA Terms and Conditions

All selected applicants under the Program will be considered as Subaward Recipients of the EPA CPRG grant. Subaward Recipients are subject to all applicable provisions outlined in 2 CFR, Part 200 and Part 1500, 40 CFR Chapter 1, Subchapter B, in addition to all relevant federal grant requirements, including EPA General Terms and Conditions, EPA Programmatic and Administrative Terms and Conditions, and the EPA Subaward Policy, to ensure the goals and objectives of the subaward are achieved. Instructions on how to demonstrate compliance are detailed in the RFP, Attachment 1 Section 3.7.

8. Outreach and Engagement Strategy

Based on input received from the public, South Coast AQMD will disseminate information and work with local and regional partners throughout the two MSAs to engage with industry, community, labor, and other stakeholders to promote the incentive program. Outreach and engagement will be conducted to ensure that original equipment manufacturers (OEMs), dealerships, and operators in the locomotive industry are aware of the program. Additionally, community outreach and engagement will be conducted to receive feedback on Project prioritization considerations and related issues.

- Maximize outreach to reach potential incentive program participants through various channels including, but not limited to, in-person meetings/workshops, participating in industry and community events, social media, INVEST CLEAN website, email blasts, partnerships with governmental agencies, chambers of commerce and trade associations, and other methods.
- Utilize subscription mailing lists by Standardized Industrial Classification to reach a broader pool of potential program applicants.
- Coordinate with Community Benefits Steering Committee to educate stakeholders on funding opportunity.
- Engage with targeted communities and stakeholders.

The INVEST CLEAN website will be periodically updated to provide Program Announcements, Request for Proposals, public workshops, meetings and events, workforce development opportunities, and other information.

9. Proposal and Evaluation Process

Proposals seeking Program funding must address the following requirements. Please see the RFP, Attachment 1, for more details.

- Proposal Section 1: Applicant and Project Participant Information
 - Provide a brief description of the firm and key members of the proposed teams and their roles and responsibilities
 - Clearly define who owns the old locomotive and who will own and operate the new BE switcher locomotives, and
 - Provide proof of ownership, and/or
 - Provide a letter of commitment from the operator, including a commitment to long term operation of the BE locomotive
 - Provide equipment data in the worksheet found at: INVEST CLEAN (<https://www.aqmd.gov/home/technology/implementation/invest-clean>)
- Proposal Section 2: Project Approach and Implementation
 - Provide a summary of the Project and how the Project will meet the Measure 4 requirements and objectives as indicated in Attachment 1 Section 2.3, Eligibility Requirements and Section 2.4 Workflow.
 - Describe the plan and operation for the deployment of a new BE switcher locomotive to operate a minimum of 425 MWh annually.

- Describe how the Project operation locations will be selected and if they will be adjacent to or near residential areas, schools, or public facilities
- Describe the Emission Reduction Plan for the destruction timeline of the Existing Equipment, including:
 - BE engine conversion, scrap or park the existing locomotive(s),
 - How real, measurable, and verifiable emission reductions can be achieved,
 - Method for monitoring and tracking of the old/parked locomotive(s) and their activities and emission reductions
- Describe the new BE locomotive charging infrastructure plan that includes the following:
 - Review and evaluation of charging infrastructure space and available grid power to support the charging of the BE locomotives. If more than one BE locomotive will be deployed, include an assessment of how they can be supported. If more than one charger is installed, include a description of the charger locations. If grid power needs supplementing, identify power solutions or other charging assistance that may need to be utilized, such as a microgrid.
 - Include the description of any renewable energy onsite to help power the locomotives and other power production or management technologies anticipated to be used.
- Describe who will own and operate (if different) the new BE locomotive and the supporting infrastructure.
 - If different, describe the financial responsibilities between the owner and the operator
 - Supporting infrastructure is subject to BABA requirements. Refer to Attachment 1 Section 3.7 for further details.
 - Construction and installation should be completed under a union labor agreement
- Proposal Section 3: Project Cost Breakdown
 - Provide pricing and cost information for the Project. Include:
 - Vendor quote for new BE switcher locomotive(s) or quote for engine conversion
 - The applicant should obtain the most recent and detailed quote for the Project, as the award will not be increased once the Project is awarded.
 - Total cost (including shipping/freight, taxes, and state fees)
 - Warranty information
 - Maintenance agreement
 - Infrastructure costs (if applicable)
 - Planning/Design, engineering, permitting, equipment, and installation
 - The locomotive manufacturer and its contact information
 - The infrastructure manufacturer and its contact information

- Provide a contingency plan to address the possibility of Project costs increasing due to inflation or any other unforeseen circumstances.
- Proposal Section 4: Project Implementation Schedule and Continuation Plan
 - Provide a description/timeline of your Project's readiness and implementation schedule
 - Describe the plan for the BE locomotive(s) and supporting infrastructure (if applicable) after closeout of the agreement.
- Proposal Section 5: Business Information Certifications, including:
 - Contact information of all participating parties/entities
 - Business Status Certification Form
 - W-9 IRS Form
 - 590 California Withholding Form
 - Certificate Regarding Debarment, Suspension, and Other Responsibility Matters
 - Campaign Contribution Disclosure Form

Proposal Evaluation

South Coast AQMD will evaluate proposals received. Proposals will be evaluated and ranked based on the proposal demonstrating an understanding of the RFP objectives, on the demonstrated capability of the applicant to accomplish the work, and on the geographic funding consideration.

South Coast AQMD places a high level of emphasis on deploying BE switcher locomotives that:

- Provide real, measurable, and verifiable emission reductions.
- Present a strong business case for the new BE switchers and supporting infrastructure service, including a continuation plan that thoroughly explains how the BE switcher locomotive will be operated regularly and continuously.
- Operate in areas adjacent to or near residential areas, schools, or public facilities or in high-density urban or suburban communities.

The South Coast AQMD will evaluate and rank the proposals based upon the following criteria:

1. **Project Cost-Effectiveness**
 Proposals will be evaluated for the annual emission reductions of oxides of nitrogen (NO_x), Particulate Matter 2.5 (PM_{2.5}), and Carbon Dioxide Equivalent (CO₂e). Projects with baseline locomotives with high annual fuel usage tend to provide higher emission reduction benefits. Cost-effectiveness will be computed as the ratio of the requested funding amounts to the estimated emission reductions over the Project life, using the methodology described in Attachment 1 Section 8 or using an alternative methodology deemed more appropriate by South Coast AQMD per Attachment 3. CO₂e reduction will be assigned with a higher weight than NO_x and PM_{2.5} reduction when calculating the overall Cost-Effectiveness.
2. **Project Approach and Implementation**
 Proposals will be evaluated on timeline and readiness with respect to how soon the BE locomotives can be deployed and operating. If the applicant is not a rail operator, commitment from at least one operator must be provided along with details of where the

locomotive will operate. Proposal should include all the requested information mentioned in Attachment 1 Section 5 Proposal Preparation & Submittal Instructions.

3. Supporting Infrastructure

To effectively implement the incentive funding and deploy the new locomotive, applicants are required to submit approaches to provide charging support for the new switcher locomotives. This plan will be evaluated with respect to how the BE locomotive will be charged and the readiness of the infrastructure that may be installed. Evaluation factors include, but are not limited to: the expected usage for the Project period, fleet commitment to utilizing the infrastructure, power availability and utility coordination, the percentage of renewable sources, equipment throughput relative to cost, Project implementation timeliness, and cost-share. If funds are requested under the locomotive RPFs for the charging infrastructure EPA requirements must be met, see Section 7.

4. Strategy to Achieve On-going Reductions

Applicants are required to discuss how the battery electric switcher locomotive Project will continue beyond the agreement term with options to extend the in-service date as needed to meet the usage requirements of the BE switcher locomotive. Projects with a defined plan for continuing the switcher locomotive deployment will be awarded a higher point allocation.

5. Operation Nearby Sensitive Receptors

Proposals will be evaluated regarding the location where the battery electric switcher locomotive operates. The Program funding will prioritize Projects that replace existing switcher locomotives in operation in areas adjacent to or near residential areas, schools, or public facilities in the two MSAs. Geographical distribution of funds will be considered when making awards.

6. Emission Reduction Plan

Applicants are required to submit a plan outlining how their Project would achieve emission reduction goals. The proposal will be evaluated based on the applicant's proposed plan to manage the existing locomotive, see section 12, and the viability of the emission reduction claims. Proposal to scrap the old locomotive(s) at the time of BE locomotive delivery will score higher.

7. Applicant Experience with Battery-electric Technologies

Applicant's knowledge and experience with battery-electric equipment and the ability to maintain and operate the equipment will be evaluated and scored.

8. Proposal Completion at Time of Submittal

Proposal's completeness, accuracy, and responsiveness to the RFP and all its requirements will be reviewed and scored.

10. Disposition and Scrappage Requirements

Disposition

Either the old locomotive's engine (only) or the entire old locomotive may be scrapped or displaced using the two options listed below. The applicant must choose an option at the time of RFP submission. Each option has its implications for Project scoring and reporting requirements.

- A. Convert old locomotive's engine or scrap the old/baseline Locomotive at the time of BE switcher locomotive delivery (preferred):
 - i. Proposals that include this approach could score higher, as it ensures emission reductions and eliminates the need to track the old locomotive. The operator may scrap only the locomotive engine(s), but the chassis should only be converted to BE.
 - ii. See Scrapping section below for scrapping requirements
- B. Delayed Scrapping and Parking the Old/Baseline Locomotive. The applicant may request that the replaced locomotive be parked at the time of delivery and scrapped after a successful preliminary deployment period ends (see next section, below). Allowing the parking or suspending operation of their old locomotives provides rail operators with assurance of uninterrupted operation in case the BE locomotive becomes temporarily inoperable. This redundancy will help relieve anxieties in incorporating and utilizing BE technology for their critical operations. The South Coast AQMD will monitor the BE switcher locomotive deployments closely and communicate with the OEMs and operators to ensure both OEMs and operators are doing their best to address and resolve any issues quickly.
 - i. Preliminary deployment period:
 - 1. During the preliminary deployment period, the operational metrics for the BE electric switcher locomotives will be reviewed to ensure that the rail operator is able to accomplish their day-to-day operations using BE electric switcher locomotives as they would with diesel switcher locomotives.
 - 2. An operation plan must be submitted, which should include a comprehensive description of the current (old) locomotive's daily operations, such as typical routes, service hours, duty cycles, fuel usage, and maintenance schedules. The plan must also outline the proposed operating strategy for the new BE locomotive including a detailed maintenance and repair timeline that identifies service intervals, responsible personnel or contractors, and anticipated downtime for charging and repairs. Written approval from South Coast AQMD for the operation plan is required prior to initiating Project implementation or reimbursement activities.
 - 3. Tracking and documenting new BE switcher locomotive operation and any parked locomotive operating periods will be required. Documentation must be provided to the South Coast AQMD semi-annually.
 - 4. If there are issues with the new BE switcher that result in downtime, the baseline locomotive may be brought back with limited operation upon immediate notification to South Coast AQMD. Subaward recipient must provide verification that the parked locomotive will only be returned to service when the BE switcher locomotive is non-operational and undergoing repair that exceeds 15 business days.
 - 5. The duration of the preliminary deployment period will be set to 5 years and may be subject to change upon the evaluation of the proposal. At the end of

the 5 years preliminary deployment period, an evaluation of the Project's progress and accomplishments will be conducted to determine the success of the deployments, or if the preliminary deployment period needs to be extended.

- a. The success of preliminary deployment period includes:
 - i. The BE unit's ability to provide rail operators with day-to-day operational needs of the replaced equipment, with supporting infrastructure sufficient to charge the equipment.
 - ii. The service or maintenance of the BE equipment can be scheduled without extended periods of downtime and operators are fully trained to operate and charge the BE equipment safely.
- b. If South Coast AQMD staff verify that the preliminary deployment was unsuccessful, the OEM and operator must attempt to correct the issues and prepare the BE switcher locomotive for an extended preliminary deployment period. A report detailing the deficiencies, communication with the OEMs, and efforts to correct the issues must be provided.
 - i. If the operators decide not to continue operating the equipment during the 5 years Project life or before September 2029, the South Coast AQMD will seek EPA's approval and work with the existing locomotive owner to identify the new operator and transfer the sub-award agreement to the new operator.
 - ii. If no operator can be identified, the South Coast AQMD will notify OEMs and rail operators within the 2 MSAs of the availability of the locomotive and solicit an operator.
 1. Prospective applicants must respond to the Measure's Request for Proposal. Responses will be evaluated, scored and ranked by South Coast AQMD staff as proposals are received. Further details about submission requirements are provided in Section 9.
 2. Upon delivery of the BE switcher locomotive, the subaward recipient operator must proceed with a displacement option of choice as indicated in the approved proposal: (1) scrap old locomotive or engine only at the time of BE switcher delivery, or (2) delay scrapping and park the old locomotive switcher during the preliminary deployment period.
- c. After the preliminary deployment period has been deemed successful, the subaward recipient must scrap an existing diesel locomotive engine(s) according to the Scrappage section below.

Scrappage

The following are the requirements when scrapping the old switcher locomotive for locomotive replacement projects or the old switcher locomotive's engine for conversion projects:

- A. Destruction of the locomotive engine(s) may be completed by the applicant or by a verified dismantler.
- B. The destruction method of the locomotive engine(s) will vary depending on the structure of the engine:
 - a. A hole in the engine block and destroyed in such a manner to eliminate the possibility of future operation or
 - b. Other equivalent methods of destruction are acceptable if approved by South Coast AQMD and EPA.
- C. Photo or recorded video documentation of the destruction must be provided to South Coast AQMD.
- D. The cost of salvaging the existing equipment will not be reimbursed.
- E. Only the locomotive engines need to be scrapped.

11. Inspection

All BE electric locomotive Projects must permit South Coast AQMD to conduct an on-site or remote inspection of the Project, including the engine, vehicle, or equipment, and associated records, during the contract term. Per 2 CFR 200.337, EPA and its authorized representative shall have access to the funded Projects. South Coast AQMD may choose to inspect the baseline unit (Pre-Inspection), the new unit (Post-Inspection), and the scrapped unit (Destruction-Inspection). More details are provided for these inspections below:

Pre-Inspection

Pre-inspection must verify the operational condition of the existing equipment and verify, at a minimum, the following:

- a. Existing locomotives or other diesel-powered equipment can start up and are functional
- b. Locomotive or other equipment make, model, and serial number
- c. Engine serial number and family number
- d. Locomotive fuel type
- e. Clear photographs or a recorded video of the existing locomotive

If the locomotive is parked, telematics are required for the parked locomotive for tracking purposes. Logs on the baseline locomotive usage, along with justification of the usage and downtime/repair records of the new locomotive, must be maintained. In addition, inspections will be performed by South Coast AQMD staff or a South Coast AQMD subcontractor to verify compliance with the parked locomotive protocol.

Post-Inspection

Post-inspection of the replacement locomotive must be completed before final disbursement of funds. The post-inspection must include clear photographs or a recorded video of the following views:

- f. Full views of the new or converted locomotive

- g. Propulsion information
- h. Functional infrastructure
- i. Locomotive in operation

Destruction Inspection

Provide clear photos or recorded video of the following:

- a. Full view of the old locomotive
- b. Destroyed engine block
- c. Engine serial number either stamped on the block or the tag
- d. Other views dependent on the method of equipment destruction

12. Monitoring and Compliance

Monitoring

Subaward recipients shall provide South Coast AQMD periodic updates throughout the project to ensure the battery electric locomotives development and deployment are on time, charging infrastructure is in place in a timely manner, and the operation of the battery electric switcher is within expectations.

Documentation will need to be provided to demonstrate that the work performed is in compliance with EPA regulatory requirements in Attachment 1 Section 3.7.

Throughout both the preliminary deployment period and project term, subaward recipients will be required to report operation data metrics, which may include, but not be limited to, locomotive availability (percent of time the BE switcher locomotive is ready and available for use), duty cycle coverage (percent of typical diesel switcher tasks completed within one full battery cycle), hours operated, maintenance and operating costs, operational fit, interoperability and operator feedback, miles traveled, energy used, charging frequency, charging rate, charger uptime downtimes and other challenges encountered during the reporting period.

Where feasible, subaward recipients should allow remote access to UCI for the purposes of data collection. Details on the data to be collected, data collection methodology, data collection frequency, and other reporting requirements will be specified in the UCI implementation plan for data collection.

UCI will analyze operational data to verify Program performance, emission reductions, and associated job creation. Subaward recipients may request to withhold business-sensitive data, provided this does not compromise the data collection objectives. Note that such requests will not abrogate or modify the provisions of Government Code Section 7920 et seq. (Public Records Act).

Compliance

When a subaward recipient is unable to meet the program requirements (e.g., documentation, operation, utilization, emission benefits, etc.) or terms specified in the Agreement, South Coast AQMD may consider the options to remedy the violation before seeking enforcement action. In addition, when a subaward recipient cannot meet the average usage requirements or terms specified in the Agreement, South Coast AQMD may seek remediation.

Options to mitigate non-performance include, but are not limited to, the following:

- Extending the project Agreement to allow for the makeup of the usage requirement shortfall.
- The owner will make its best effort to repair the equipment and assist with identifying a new operator.
 - South Coast AQMD will review and approve the justification for the deployment failure before any ownership transfer can be authorized.
- South Coast AQMD may withhold project funds until compliance is met. Additionally, South Coast AQMD may require return of project funds.

13. Workforce Training

OEMs or certified training institutions (such as those affiliated with the International Brotherhood of Electrical Workers (IBEW)) must provide necessary training upon completion of both the BE switcher locomotive and the supporting charging infrastructure. To ensure a smooth operational transition, applicants are encouraged to obtain training in best operating practices and safety from the manufacturer before accepting delivery of the BE switcher locomotives. Applicants are encouraged to secure at least one dedicated expert approved by the OEM to provide ground support to ensure safe and efficient operation of the BE locomotives, charging, service, and routine maintenance.

South Coast AQMD will work with the Los Angeles County Electrical Educational and Training Trust Fund (LA ETI) of the National Electrical Contractors Association (NECA) of greater Los Angeles and the International Brotherhood of Electrical Workers (IBEW) and partners to support pre-apprenticeship and apprenticeship programs which allow students in higher education to participate in the Workforce Development Program. The approach is centered around NECA-IBEW's joint labor-management apprenticeship program, which utilizes apprentices in charging infrastructure projects. Also, students will be offered on-the-job training to inspire them to become electricians. The Workforce Development Program will support professional certifications and promote overall job growth in this industry, in alignment with industry standards, worker's rights, and Construction Labor Standards. Additionally, if needed, fleet new to technology can receive training on charging equipment operation, equipment maintenance, and equipment repair, just to name a few. Costs may include labor, travel, demonstration units, materials, facility fees, etc. Details will be provided in the Workforce Development Program Implementation Plan developed by NECA-IBEW.

14. Program Performance Evaluation and Reporting

SCAQMD will evaluate and closely monitor the program's progress to identify the need for improvements and adjust accordingly, including modifying and reissuing the solicitation. South Coast AQMD will evaluate the program's performance based on the following:

- Project implementation progress
- Measures participation
- Agreement execution
- Data and report submission to UCI
- UCI analysis of the data collected from the charger deployments, utilization, and reported malfunctions and challenges.

If the program performance did not meet the expectations, contingency measures include, but are not limited to, the following:

- Reopen the solicitations
- Find OEMs and contractors that meet EPA regulatory requirements, terms, and conditions (See Attachment 1 Section 3.7: i.e. BABA, Davis Bacon & Related Acts (DBRA), etc.) and work with subaward recipients to facilitate their compliance
- Obtain EPA's approval and reallocate funds to other measures and consider the cost-effectiveness
- Conduct additional outreach
- Enforce agreements and impose penalties
- Increase monitoring and project tracking
- Meet with subaward recipients to discuss plans to mitigate emission reduction shortfall

Attachment 1
Request For Proposal



South Coast
Air Quality
Management District

INVEST CLEAN

Climate Pollution Reduction Grant U.S. Environmental Protection Agency



Request for Proposals #2025-15

Battery Electric Locomotives

Open: June 6, 2025

Submission Deadline: September 30, 2025, at 12 PM PST

Section 1 – Introduction

The Inflation Reduction Act (Public Law 117-169) created the U.S. EPA Climate Pollution Reduction Grant (CPRG) program which provides \$4.6 billion in grants. Note, the availability of CPRG Funding is contingent upon the timely receipt of funds from the U.S. EPA.

In July 2024, U.S. EPA awarded CPRG funds to the South Coast Air Quality Management District (South Coast AQMD) to implement the Infrastructure, Vehicles, and Equipment Strategy for Climate, Equity, Air Quality, and National Competitiveness (INVEST CLEAN) in Los Angeles-Long Beach-Anaheim and Riverside-San Bernardino-Ontario Metropolitan Statistical Areas (MSAs). The two MSAs include the following four counties: Los Angeles, Orange, Riverside, and San Bernardino. INVEST CLEAN targets the limiting factors and challenges to the electrification transformation of the Southern California goods movement corridor.

Under this Request for Proposals (RFP), the South Coast AQMD is soliciting proposals for **Measure 4** of the INVEST CLEAN initiative, the Battery Electric (BE) Locomotive Program. This measure focuses on deploying battery electric switcher locomotives to modernize freight rail operations in the two MSAs mentioned above, which serve as the West Coast gateway to international commerce. Measure 4 provides funding for the development and operation of battery electric switcher locomotives, as well as the installation of chargers and supporting infrastructure as needed to operate battery electric locomotives.

South Coast AQMD places a high level of emphasis on deploying BE switcher locomotives that:

- Provide real, measurable, and verifiable emission reductions.
- Present a business case for the new BE switchers with a supporting infrastructure plan, including a continuation plan that thoroughly explains how the BE switcher locomotive will continue to operate.
- Operate in areas adjacent to or near residential areas, schools, public facilities, high-density urban or suburban communities.

The following sections describe the eligibility requirements to participate in the INVEST CLEAN program and guidelines for proposal preparation under this RFP.

Section 2 – RFP Overview & Eligibility Requirements

Measure 4 of the INVEST CLEAN program provides funding for the deployment of BE switcher locomotives and the supporting infrastructure in the two MSA geographic areas. This measure encourages the domestic production of locomotives and charging infrastructure.

2.1 Available Funding

The total incentive amount of CPRG Funding allocated for Measure 4 is \$190.8 million. Should South Coast AQMD receive proposals with total requests less than the amount allocated, or if proposals are deemed non-meritorious, South Coast AQMD reserves the right to reduce the total funding available

and reallocate funds to other INVEST CLEAN Measures and/or reopen another BE switcher locomotive solicitation. South Coast AQMD also reserves the right not to fund any of the proposals received, irrespective of the merits of the proposals submitted.

2.2 Geographical Funding Minimum

South Coast AQMD has not established a Geographical Funding Minimum for each county within the two MSAs, but the funding intent is to allocate projects throughout the two MSAs, if feasible, following the completion of proposal evaluation, scoring, and ranking.

2.3 Eligibility Requirements

For this RFP, the following eligibility requirements apply:

- Eligible Applicant:
 - Locomotive manufacturers who are partnering with a rail operator to develop and deploy switcher locomotives, and/or
 - Owners and/or operators of switcher locomotives who are directly responsible for the operation, maintenance, or procurement of such equipmentPartnerships between locomotive manufacturers and operators are required to ensure both technical feasibility and operational practicality of proposed projects.
- Location:
 - The project must be domiciled within the two MSA regions shown in the dotted areas on the map on the following page in Figure 1, which include the following four counties: Los Angeles, Orange, Riverside, and San Bernardino.

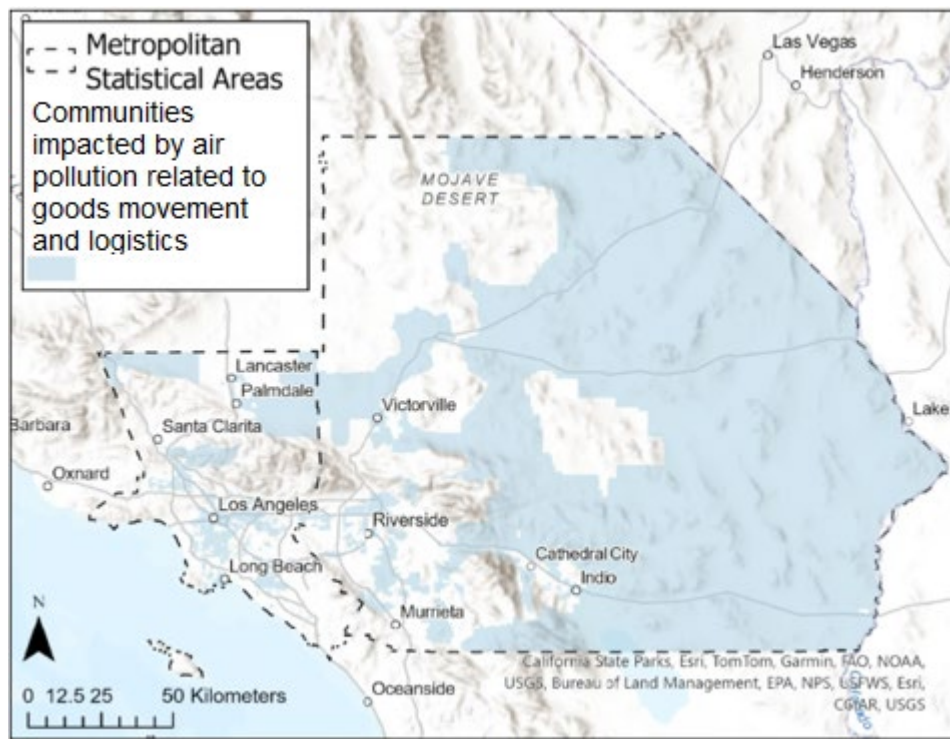


Figure 1: Area inside dotted line represents the two MSA qualified territories.

- Deployment of New BE switcher locomotives:
 - The new equipment should be operated within the two MSAs. At a minimum, 425 MWh per year of usage for each BE locomotive will be required to ensure emission reduction benefits are achieved, but if unforeseen circumstances prevent the operators from meeting this requirement, documentation must be provided.
 - To ensure a smooth operational transition, applicants should obtain training in best operating practices and safety from the manufacturer before accepting the delivery of the BE switcher locomotives.
 - Applicants are encouraged to secure at least one dedicated expert approved by the OEM to provide ground support to ensure safe and efficient operation of the BE locomotives, charging, service, and routine maintenance.
- Displacement Options of Old Locomotive:

The old locomotive may be scrapped or displaced using the following two options. The applicant must choose an option at the time of RFP submission. Each option has its implications for project scoring and reporting requirements.

 - Scrap the Old/Baseline Locomotive at the Time of BE Switcher Locomotive Delivery (Preferred):
 - Proposals that propose this approach could score higher, as it ensures emission reductions (ER) and eliminates the need to track the old locomotive.

The operator may scrap only the locomotive engine(s), but the chassis should only be repowered to Tier 4 or cleaner.

- Delayed Scrapping and Parking the Old/Baseline Locomotive:
The applicant may request that the replaced locomotive be parked at the time of delivery and scrapped after a successful preliminary deployment period ends (see definition below). Applicants who choose this option must:
 - Provide verification that the old locomotive will only be returned to service when the BE switcher locomotive is non-operational and undergoing repair that exceeds 15 business days.
 - Track parked old/baseline locomotives and monitor their usage.
 - Provide tracking data to the South Coast AQMD semi-annually.
 - Agree with the project period extension if the preliminary deployment period needs to be extended.
 - Destruction of old locomotives must meet the requirements listed in Section 2.3 under Emission Reductions.
- Preliminary Deployment Period and Determination of a Successful Preliminary Deployment Period:
 - The Preliminary Deployment Period is when the old/baseline locomotive is parked while the new BE switcher locomotive is operated within the two MSAs. The rail operator will scrap the parked locomotive at the end of a successful preliminary deployment period. At a minimum, 425 MWh per year of average usage over the 5-year period for each BE locomotive will be required to ensure emission reduction benefits are achieved. If unforeseen circumstances prevent the operators from meeting this requirement, documentation must be provided.
 - At the end of the preliminary deployment period, the operator will continue operating the BE switcher locomotives if successful until the end of their useful life. The successful preliminary deployment includes the BE unit's ability to provide rail operators with the day-to-day operational needs of the replaced equipment, with supporting infrastructure sufficient to charge the equipment. The service or maintenance of the BE equipment can be scheduled without extended periods of downtime, and operators are fully trained to operate and charge the BE equipment safely. However, if the applicant and the OEMs determine that the preliminary deployment period is unsuccessful, a report detailing the deficiencies, communication with the OEMs, and efforts to correct the issues must be provided. EPA and South Coast AQMD will determine the actions to take.
- Emission Reductions:
 - Emission reductions should be local, real, measurable, and verifiable.
 - The baseline locomotive that will be removed from operation must be diesel-fueled. Locomotives with high annual fuel usage provide the most carbon emission

reduction benefits for INVEST CLEAN, and they will be scored higher in the cost-effectiveness category compared to units with lower fuel usage.

- The applicant must complete the equipment form located at [INVEST CLEAN](https://www.aqmd.gov/home/technology/implementation/invest-clean) (<https://www.aqmd.gov/home/technology/implementation/invest-clean>) to provide information for the baseline locomotive for emission reduction verifications.
- As mentioned above, not operating the old/baseline locomotive in lieu of scrapping during a five-year preliminary period is allowable and outlined in the section describing Figure 2 Project Flowchart. If there are issues with the new BE switcher that result in downtime, the baseline locomotive may be brought back with limited operation and immediate notification to South Coast AQMD. A plan must be submitted, including a detailed description of the old locomotive's daily usage and the BE locomotive's repair plan. Upon notification, the sub-awardee must obtain South Coast AQMD and EPA's approval. In addition, tracking and documenting new BE switcher locomotive downtime and old locomotive operating periods will be required.
 - If South Coast AQMD staff verify that the preliminary deployment was unsuccessful, the OEM and operator must attempt to correct the issues and prepare the BE switcher locomotive for a new preliminary deployment period.
 - Destruction of all locomotives (chassis and engines) or locomotive engines shall be conducted, and the documentation should be submitted as described below:
 - A hole in the engine block and destroyed in such a manner to eliminate the possibility of future operation of the engine, or
 - Other equivalent methods of destruction are acceptable if approved by the South Coast AQMD and the EPA.
 - Photo or recorded video documentation of the destruction must be provided to South Coast AQMD
 - Please note that the solicitation accounts for the accumulated emission reductions instead of annual emission reductions.
- Charging Equipment and Supporting Infrastructure:
 - To effectively deploy the new BE switcher locomotive, potential awardees will need to provide documentation showing the design, construction, and installation plan of the charging infrastructure.
 - Construction and installation of infrastructure will be required to adhere to Build America Buy America and other Federal requirements, a non-exhaustive list of which is provided below in Section 3.7.

2.4 Project Workflow:

The flowchart in Figure 2 depicts the workflow of the project after the subaward is granted. The table provides a detailed explanation of the steps. Projects will start with the execution of the agreements between the South Coast AQMD and the sub-awardee(s) for the final deployment of the BE locomotive, the commissioning of the supporting charging infrastructure, and the required reporting:

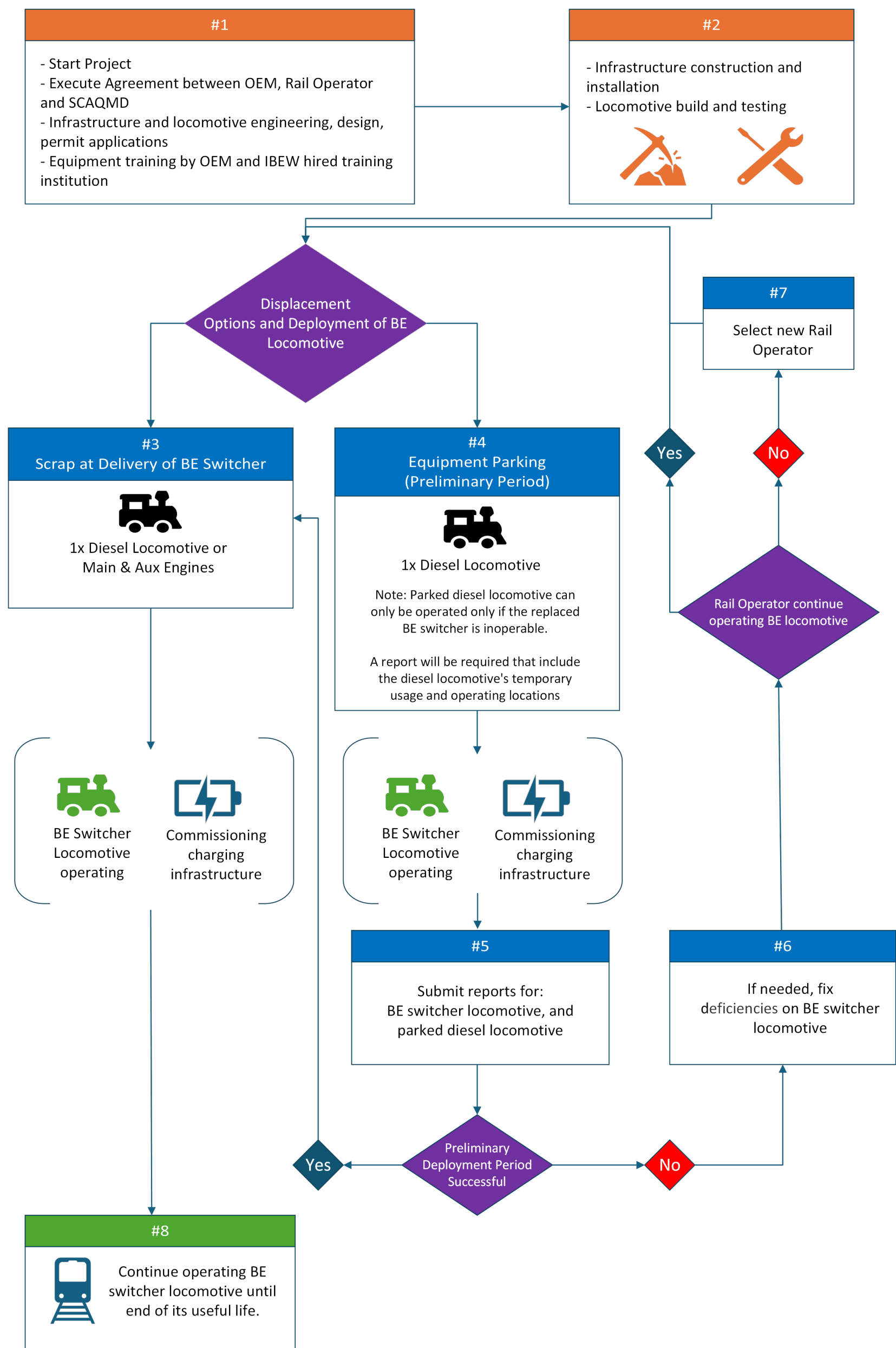






Figure 2: Project flowchart to deploy BE switcher locomotive(s)

The Table below offers a step-by-step explanation of the flow chart. Please refer to the flow chart's box number and the corresponding process description:

Chart Process #	Description of Process
1	Process begins with executing agreement(s) between the locomotive manufacturer (OEM), rail operator, and South Coast AQMD. Agreements clarify roles and milestones on locomotive manufacturing and charging infrastructure development and installation. Rail operator and OEM begin with the order of the switchers and charging infrastructure development in tandem to ensure the chargers can be commissioned when the new locomotive is delivered. Milestones for both the locomotive and charging infrastructure design, engineering, build, and testing are established to ensure project progress and payments can be made as milestones are achieved. Workforce training by the locomotive OEM and/or IBEW-contracted training institutions are initiated. If the charger is funded by INVEST CLEAN, the installation must be performed by IBEW/NECA workforce.
2	The charging infrastructure project must proceed in parallel with the locomotive build. Progress reports will be provided to South Coast AQMD and tested against milestones in the agreement. Progress payments can be made as indicated in the agreement with an invoice submittal that includes the deliverables for that payment.
	<p>BE switcher locomotive is ready for delivery, operator proceeds with the displacement option of choice as indicated in the approved proposal, which is to either scrap the locomotive engines at the time of delivery of BE switcher locomotive or delay scrapping and parking the old/baseline switcher during a preliminary deployment period.</p> <p>The Preliminary deployment period must be five years and is intended to ensure the BE locomotive meets operational needs.</p>
Scrap at Time of Delivery	
3	If the operator chose the " Scrap at Time of Delivery " option, the locomotive or locomotive engine must be scrapped at this step. The instruction for the scrapping is in Section 2.3 - Eligibility Requirements – Emission Reductions . When the operator takes delivery of the BE locomotive, construction and commissioning of the charging infrastructure must be completed. Projects with scrap at time of delivery may receive funding priority.
8	Operator that scraps the old locomotive at the time of delivery will operate the BE locomotive to meet the minimum 425 MWh per year, which will be stated in the agreement and subject to change; and operator will, to the best of their abilities, continue operation until the end of the locomotive's useful life.
Preliminary Deployment Period – Delayed Scrapping	
4	If the operator chooses the "Locomotive Parking" option, a diesel locomotive operating in the two MSAs will be parked during the preliminary deployment period. Operation of the parked locomotive (referred to as the baseline locomotive) is prohibited unless the BE locomotive is non-operational, undergoing repairs or other situations approved by the South Coast AQMD or

	EPA. Telematics are required for the parked locomotive for tracking purposes. Logs on the baseline locomotive usage, along with justification of the usage and downtime/repair records of the new locomotive, must be maintained. In addition, inspections as described in the inspection section may be performed by South Coast AQMD staff or South Coast AQMD subcontractor to verify compliance with the parked locomotive protocol. When the operator takes delivery of the BE locomotive, old locomotive parking requirements must be met; additionally, construction and commissioning of the charging infrastructure must be completed.
5	The tracking data report mentioned in Process #4 must be maintained on site and should be provided to the South Coast AQMD semi-annually.
	After the preliminary deployment period of five years is complete, the operator will notify South Coast AQMD to declare whether the preliminary deployment was successful. If it was deemed unsuccessful, a detailed report describing equipment deficiencies, communications with OEMs, services, repairs, maintenance and other efforts made to resolve the issues should be included. If it was deemed successful, the operator follows the scrapping procedure of Process #3 then completes the project with Process #8 .
6	If the preliminary deployment was not successful, the OEM will be tasked to repair or update the locomotive to address the issues.
	After the OEM repairs the locomotive, the original operator will be given the option to continue operating the repaired unit. If the original operator continues, the preliminary deployment period repeats and the baseline locomotive will be scrapped after the preliminary deployment is deemed successful.
7	If the original operator no longer wishes to continue with the repaired locomotive, a new rail operator will be selected to operate the locomotive. An agreement with the new operator will be executed.
	The new operator repeats the cycle and may choose to scrap a diesel locomotive at time of delivery or delay scrapping and parking the old/baseline locomotive . If the latter is chosen, the old locomotive will be scrapped after a successful five-year preliminary deployment.

Section 3 – Funding & Conditions

3.1 Total Maximum Project Funding

Up to \$10.6 million may be awarded for the cost of one new BE switcher locomotive, including the required maintenance, services such as batteries, and supporting charging infrastructure site engineering and installation.

No additional funding will be available if project costs exceed the subgrantee's grant amount.

3.2 Payment

Selected Measure 4 projects will be paid either on a reimbursement basis or through progress payments set on milestones. If the awardee opts for reimbursement, the payment will be made after

the BE locomotive is delivered. If the progress payment is proposed, a payment schedule with applicable deliverables will be specified, and invoice payments will need to be accompanied by supporting documents, including but not limited to proof of payments and documentation showing the milestone was met. Progress payments may be made as the BE locomotive is being manufactured and the infrastructure installation occurs. The final invoice under this RFP will need to be submitted with supporting documents by March 30, 2029. The term of the Subaward agreements under this RFP will end at least five years from the last payment date to ensure emission reductions occur for at least 425 MWh per year of average usage over a 5-year period or until the useful life of the locomotive is achieved, whichever comes first.

The sub-awardee will be encouraged to obtain the most recent price estimate and place the purchase order as soon as the contract is executed to secure the equipment pricing.

Applicants should be aware that funding awarded through this grant may only be used to implement measures set forth in the EPA approved workplan for this CPRG implementation grant and all costs charged to the award to support these activities must meet the requirements for allowability under 2 CFR Part 200, Subpart E as well as applicable provisions of 2 CFR 1500.

3.3 Inspections

The old locomotives may be inspected before, after, or during destruction. The inspections of the BE switcher locomotives will be conducted during the preliminary deployment period. Each grantee funded under each measure is subject to inspection based on South Coast AQMD and EPA's discretion.

3.4 Reporting

Selected awardees will be required to submit semi-annual reports. Awardees will be provided with data collection requirements to ensure the South Coast AQMD has the necessary environmental information and other data to evaluate project performance. The data will be collected in real-time or through telematic equipment, which may include, but will not be limited to, locomotive availability (percent of time the BE switcher locomotive is ready and available for use), duty cycle coverage (percent of typical diesel switcher tasks completed within one full battery cycle), hours operated, maintenance and operating costs, operational fit, interoperability and operator feedback, miles traveled, energy used, charging frequency, charging rate, charger uptime downtimes and other challenges encountered during the reporting period. Selected applicants must ensure performance data is properly provided and equates to the usage requirements in the agreement. South Coast AQMD reserves the right to verify the information provided.

The National Renewable Energy Laboratory (NREL), the designated third-party data verification organization under INVEST CLEAN, will collect and analyze vehicle data to verify the Measure's performance and emission reductions. Once NREL develops specific data collection and reporting procedures, they will be provided.

Additional reporting will be required if the baseline locomotive is not scrapped at the time of the new locomotive delivery.

3.5 Access to Records and Retention

Materials, reports, photos, and other documentation submitted pursuant to the project may be released in part or in whole pursuant to either the Freedom of Information Act or the California Public Records Act. The EPA or SCAQMD may make publicly available on their website copies or portions of project information.

EPA and SCAQMD also reserve the right to access records of the subgrantee pertinent to this award, to perform audits, execute site visits, or for any other official use. This right of access also includes timely and reasonable access to the subgrantee's personnel for the purpose of interviewing and discussion related to such documents or the Federal award in general. This right of access shall continue as long as the records are retained.

In accordance with 2 CFR 200.334, the recipient must retain all Federal award records, including but not limited to, financial records, supporting documents, and statistical records for at least three years from the date of submission of the final financial report. The records must be retained until all litigation, claims, or audit findings have been resolved and final action has been taken if any litigation, claim, or audit is started before the expiration of the three-year period. Examples of the required records include: (1) time and attendance records and supporting documentation; and (2) documentation of compliance with statutes and regulations that apply to the project.

In accordance with 2 CFR 200.337, the EPA, the Inspector General, the Comptroller General, and the pass-through entity, or any of their authorized representatives, have the right of access to any documents, papers or records of the recipient which are pertinent to the grant award. The rights of access are not limited to the required retention period, but last as long as the records are retained.

3.6 Use of Logos

Use of the EPA's logo, along with logos of other participating entities, on outreach materials, websites, or reports, must adhere to the requirements of both the General Terms and Conditions, Paragraph Q, and California Health and Safety Code Section 40730.

3.7 EPA Terms and Conditions

All selected applicants will be considered subgrantees of the EPA CPRG grant. Subgrantees will be required to comply with all applicable provisions outlined in 2 CFR, Part 200, and Part 1500, 40 CFR Chapter 1, Subchapter B, and all applicable terms and conditions set forth in the EPA General Terms and Conditions, which is located at https://www.epa.gov/system/files/documents/2024-10/fy_2025_epa_general_terms_and_conditions_effective_october_1_2024_or_later.pdf, the EPA Subaward Policy, which is located at Grants Policy Issuance (GPI) 16-01: EPA Subaward Policy for EPA Assistance Agreement Recipients | US EPA, the INVEST CLEAN Grant Agreement (Grant No. 97T15501) and any amendments made thereto, which includes both the Programmatic and Administrative Terms and

Conditions, which are included as Appendix A, as well as , as well as any other applicable federal requirements. Subgrantees are subject to all federal grant requirements, including subaward reporting requirements on the overall performance to ensure the goals and objectives of the subaward are achieved. Examples of items that must be reported include but are not limited to:

- Summaries of results of reviews of financial and programmatic reports;
- Environmental results the subrecipient achieved;
- Summaries of audit findings and related pass-through entity management decisions; and
- Full documentation and proof of the project spending of the CPRG funding. Please refer to the EPA websites for the General Terms and Conditions
[EPA General Terms and Conditions effective October 1, 2024 or later](#)
- EPA Subaward Policy
<https://www.epa.gov/grants/grants-policy-issuance-gpi-16-01-epa-subaward-policy-epa-assistance-agreement-recipients>
- Air Quality Resilience
To the extent practicable, the recipient agrees to incorporate current and future change risk in planning, siting, design, and operation of the project. Approaches for incorporating air quality change risk may make use of air quality change data and information (e.g., projections and emission scenarios) that are reflective of the project's anticipated lifespan. This includes consideration of the air quality change risks posed to the individuals, communities, local governments, organizations, or other entities served by the project over its anticipated lifespan.
- Cybersecurity
 - a. The recipient agrees that when collecting and managing environmental data under this assistance agreement, it will protect the data by following all applicable State or Tribal law cybersecurity requirements.
 - b. Any connection between the recipient's network or information system and EPA networks to transfer data under this agreement must be secured. For purposes of this Section, a connection is defined as a dedicated persistent interface between an Agency IT system and an external IT system for the purpose of transferring information. Transitory, user-controlled connections such as website browsing are excluded from this definition. If the recipient's connections as defined above do not go through the Environmental Information Exchange Network or the EPA's Central Data Exchange, the recipient agrees to contact the EPA PO no later than 90 days after the date of this award and work with the designated Regional/Headquarters Information Security Officer to ensure that the connections meet EPA security requirements, including entering into Interconnection Service Agreements as appropriate. This condition does not apply to manual entry of data by the recipient into systems operated and used by the EPA's regulatory programs for the submission of reporting and/or compliance data.

- Subawards for For-Profit Entities

For-profit subrecipients must comply with Subparts A through F of the Uniform Grant Guidance (2 CFR Part 200) and the Federal cost principles applicable to for-profit entities located at 48 CFR Part 31, with the exception of the method of payment to for-profit subrecipients must be “reimbursement” rather than “advance”. For-profit subrecipients must provide documentation for incurred eligible and allowable costs prior to receiving EPA funds.

- Procurement of Systems, Equipment and Devices

- a. When purchasing replacement systems, equipment and/or devices, the replacement systems, equipment or device:

- i. will continue to perform a similar function and operation as the system, equipment or device that is being permanently rendered inoperable;
- ii. will achieve the estimated emission reductions included in the subaward agreement; and
- iii. is consistent in its intended use, operation and location as described in the subaward agreement.

The procurement of systems, equipment or devices should follow the EPA's Best Practice Guide for Procuring Services, Supplies, and Equipment Under EPA Assistance Agreements (<https://www.epa.gov/grants/best-practice-guide-procuring-services-supplies-and-equipment-under-epa-assistance>).

- Signage Requirements

- a. Investing in America Emblem: The recipient will ensure that a sign is placed at construction sites supported in whole or in part by this award displaying the official Investing in America emblem and must identify the project as a “project funded by United States President’s Inflation Reduction Act” as applicable. The sign must be placed at construction sites in an easily visible location that can be directly linked to the work taking place and must be maintained in good condition throughout the construction period. The recipient will ensure compliance with the guidelines and design specifications provided by the EPA for using the official Investing in America emblem.
- b. Consistent with section 6002 of RCRA, 42 U.S.C. 6962, and 2 CFR 200.323, recipients are encouraged to use recycled or recovered materials when procuring signs. Signage costs are considered an allowable cost under this assistance agreement provided that the costs associated with signage are reasonable.

- Public or Media Events

- a. The EPA encourages the recipient to notify the EPA Project Officer listed in this award document of public or media events publicizing the accomplishment of significant events related to construction projects as a result of this agreement and provide the opportunity for attendance and participation by federal representatives with at least ten (10) working days' notice.

Also, as noted above, the subgrantees will be subject to all applicable Federal requirements. Please refer to the attachments and links listed above for a more detailed overview of these applicable requirements. The following list highlights only a portion of those requirements but is not an exhaustive list.

- Build America Buy America (BABA)

Projects with supporting infrastructure funded under this program are subject to domestic content sourcing requirements under the Build American Buy America (BABA) provisions of the Infrastructure Investment and Jobs Act (IIJA) (P.L. 117-58, §§70911-70917). Please note that none of the funds provided under the Grant award may be used for an infrastructure project unless:

1. All iron and steel used in the project are produced in the United States – this means all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States;
2. All manufactured products used in the project are produced in the United States – this means the manufactured product was manufactured in the United States; and the cost of the components of the manufactured product that are mined, produced, or manufactured in the United States is greater than 55% of the total cost of all components of the manufactured product, unless another standard that meets or exceeds this standard has been established under applicable law or regulation for determining the minimum amount of domestic content of the manufactured product; and,
3. All construction materials are manufactured in the United States – this means that all manufacturing processes for the construction material occurred in the United States,

For further information regarding BABA requirements including but not limited to, information regarding construction material standards and applicability of waivers, please refer to Paragraph 49 of the EPA General Terms and Conditions, which can be found at [*EPA General Terms and Conditions effective October 1, 2024 or later](#).

Please note that the manufacturer of the manufactured products and materials must provide a certification letter of BABA compliance in company letterhead. A template of the letter can be found here: [Certification Letter Template for Manufactured Products Covered Under the Build America, Buy America Act](#). Applicants must implement these requirements in their procurements, and these requirements must flow down to all contracts at any tier. For legal definitions and sourcing requirements refer to EPA's Build America, Buy America website.

Applicants selected for funding under the INVEST CLEAN Battery Locomotives Program must work with South Coast AQMD to provide documentation demonstrating equipment and materials sourced adhere to the BABA requirements.

- For more information on BABA, please visit:
 - <https://www.epa.gov/baba>.
 - [*EPA General Terms and Conditions effective October 1, 2024 or later](#)
 - [eCFR :: 2 CFR Part 184 -- Buy America Preferences for Infrastructure Projects](#)
- For more information on the Infrastructure Investment and Jobs Act (IIJA) visit: <https://www.congress.gov/bill/117th-congress/house-bill/3684/text>
- Davis-Bacon and Related Acts (DBRA) is a collection of labor standards provisions administered by the Department of Labor that are applicable to grants involving construction. Under DBRA, all contractors and subcontractors performing construction must be paid no less than the locally prevailing wage and fringe benefits for corresponding work on similar projects in the area. Weekly certified payrolls must be submitted to South Coast AQMD and maintained for no less than three years after work completion. By accepting a contract under INVEST CLEAN, the selected applicant acknowledges and agrees to the terms provided in the DBRA Requirements for Contractors and Subcontractors Under EPA Grants: https://www.epa.gov/system/files/documents/2023-10/dbra_requirements_for_contractors_and_subcontractors_under_epa_grants.pdf
- Endangered Species Act (16 U.S.C. §1531 et seq.): The Endangered Species Act requires a biological assessment to determine if any endangered or threatened species, or their critical habitat, could be adversely affected by the proposed construction activities. The assessment must be completed within 180 days after the date it was initiated and must be completed prior to any contract for construction and before any construction has begun. The assessment process is outlined as follows:
 - A desktop review to identify species and habitats in the vicinity of the construction site using the U.S. Fish and Wildlife Service's (USFWS) IPaC tool: <https://ipac.ecosphere.fws.gov/>
 - If species or habitats are potentially impacted, a consultation with the USFWS may be required
 - Avoidance and Mitigation measures such as protective buffers, erosion control, and other Best Management Practices (BMP) may be proposed.
 - The USFWS must agree with the assessment and resolution before the project can commence.
 - Information on the Endangered Species Act: <https://www.epa.gov/laws-regulations/summary-endangered-species-act>
 - Procedures explained in 50 CFR Part 402: [50 CFR Part 402-- Interagency Cooperation—Endangered Species Act of 1973, as Amended](#)
- National Historic Preservation Act (16 U.S.C. §470 et seq.): This Act requires a review of potential adverse effects of federally funded activities on historic properties listed or eligible for listing on the National Register. This review should be completed prior to applying for permits.

- For more details see: <https://www.nps.gov/subjects/archeology/national-historic-preservation-act.htm>
 - Selected applicants under this RFP are to provide South Coast AQMD with documentation demonstrating compliance with the National Historic Preservation Act (16 U.S.C. §470 et seq.) A mapping tool such as the link below from the U.S. Department of the Interior can be utilized to determine whether the construction site impacts a registered national historical property: https://www.nps.gov/orgs/1094/nrhp_spatialdata.htm
 - The applicant must work with the EPA on any required consultation process with the State or Tribal Historic Preservation Office prior to commencing the project to ensure compliance with section 106 of the NHPA.
- Archeological and Historic Preservation Act (54 U.S.C. §§ 312501-312508): Similar to the National Historic Preservation Act, this Act applies to federally funded activities. It requires historic and archeological objects and materials to be saved that would otherwise be destroyed as a result of the activity.
 - For more details see: <https://uscode.house.gov/view.xhtml?req=granuleid%3AUSC-prelim-title54-chapter3125&edition=prelim>
 - Selected applicants under this RFP are to report to South Coast AQMD and the EPA any historical or archeological objects and materials found in the process of construction.
- Farmland Protection Policy Act (7 U.S.C. §4201 et. seq.): The purpose of this Act is to minimize or prevent the irreversible conversion of farmland to nonagricultural uses. This act would require identification of the effects federally funded activities may have on farmlands and to consider alternative options.
 - For more details see: <https://www.nrcs.usda.gov/conservation-basics/natural-resource-concerns/land/cropland/farmland-protection-policy-act>
 - Applicants selected under this RFP must demonstrate adherence to the Farmland Preservation Policy Act (7 U.S.C. §4201 et. Seq.)
 - <https://www.nrcs.usda.gov/conservation-basics/natural-resource-concerns/land/evaluation-and-assessment>
- Coastal Zone Management Act (16 U.S.C. § 1451 et. seq.): This act requires the review of federally funded activities to determine if the goal of the Act is being met: “preserve, protect, develop and where possible, to restore or enhance the resources of the nation’s coastal zone.”
 - For more details see: <https://coast.noaa.gov/czm/act/>
 - Applicants selected under this RFP are to consult with the California Coastal Commission to ensure that the applicant’s project will be consistent with the state’s coastal zone management plan.

- Map of California Coastal Zone: <https://www.coastal.ca.gov/maps/>
- Information about obtaining a permit:
https://www.coastal.ca.gov/enforcement/cdp_pamphlet.pdf
- Reporting Waste, Fraud and Abuse (2 CFR 200.113): Consistent with Federal requirements, subgrantees must promptly report in writing whenever there is credible evidence of the commission of a violation of federal criminal law involving fraud, conflict of interest, bribery, or gratuity violations per the requirements outlined in EPA's General Terms and Conditions, Paragraph 51, which can be found at: https://www.epa.gov/system/files/documents/2024-10/fy_2025_epa_general_terms_and_conditions_effective_october_1_2024_or_later.pdf

3.8 Agreement Structure

A formal agreement will be executed with the South Coast AQMD, the rail operator, and/or the original equipment manufacturer (OEM) for the construction and deployment of the BE switcher locomotives and the supporting infrastructures. This agreement will outline the OEM and rail operator's responsibilities, milestones and deliverables.

In cases where the OEM is also the applicant, the agreement may include milestone-based payments. However, parts and labor costs must be substantiated and submitted in advance of any milestone payment disbursements.

Concurrently, the rail operator will design and construct the required charging infrastructure for the BE switcher locomotives while they are being built. If the infrastructure component is awarded under the INVEST CLEAN program, it will be included under the same contractual agreement. If not funded through the INVEST CLEAN Program, required reporting will still be required to ensure timely and coordinated deployment.

OEMs or certified training institutions (such as those affiliated with the International Brotherhood of Electrical Workers (IBEW)) will provide necessary training with completion of both the BE switcher locomotive and the supporting charging infrastructure.

3.9 Performance

When a selected applicant is unable to meet the program requirements (e.g., annual reporting, operation, emission benefits, etc.) or terms specified in the contract, South Coast AQMD may consider the options to remedy the violation before seeking enforcement action. In addition, when a grantee cannot meet the average usage requirements or terms specified in the contract, South Coast AQMD may consider that the average usage for a contracted BE switcher locomotive(s) is less than the activity required in the contract.

Options for non-performance include, but are not limited to, the following:

- Extending the project agreement to allow for the makeup of the usage requirement shortfall
- Transfer ownership of the BE switcher locomotive to another entity committed to complying with the agreement and operating the BE switcher locomotives
 - The OEM will make its best effort to repair the locomotive and assist with identifying a new rail operator.
 - SCAQMD and EPA will review and approve the justification for the deployment failure before any operator transfer can be authorized.
 - The new operator will be allowed time to secure alternate funding for the necessary charging infrastructure.

3.10 Closeout

If selected for funding, Closeout of the agreement can occur once all required documentation has been received, and the recipient has fulfilled all obligations. In addition, the selected applicant agrees to use the BE switcher locomotive(s) purchased under the INVEST CLEAN program for which it was acquired, and for the duration of its useful life whether the project continues to be supported by the award. After the end of the grant period, the BE switcher locomotive(s) may be retained, sold, or otherwise disposed of with no further obligation to the EPA or South Coast AQMD.

Section 4 – RFP Timeline (These dates are subject to change)

Battery Electric Switcher Locomotive Workshop*	February 19, 2025
Release Solicitation	June 6, 2025
RFP Workshop and Community Information Meeting	TBD (will be posted on the INVEST CLEAN website: https://www.aqmd.gov/home/technology/implementation/invest-clean)
Deadline for Submit Proposal	September 30, 2025, at 12:00 PM PT
Proposal Evaluation	October 2025 through December 2025
Subaward Agreement Execution	October 2025 through August 2027
Procurement and Deployment	January 2026 through September 2028
Invoice Review and Payment	June 2026 through March 2029
Performance and usage tracking	Starting after Locomotive Deployment

* Note: Copy of Workshop presentation slides can be found here:

https://www.aqmd.gov/docs/default-source/invest-clean/investclean_locomotive_workshop_2-19-2025.pdf?sfvrsn=12

Section 5 – Proposal Preparation & Submittal Instructions

A proposal must be prepared and submitted in response to this RFP. Only a proposal following this RFP's instructions will be reviewed and evaluated. The following instructions are intended to assist the Applicant in preparing a proposal for consideration.

5.1 Proposal Preparation:

The following Sections must be included in the proposal seeking Measure 4 funding under INVEST CLEAN.

- Proposal Section 1: Applicant and Project Participant Information
 - Provide a brief description of the firm and key members of the proposed teams and their roles and responsibilities
 - Clearly define who owns the old locomotive and who will own and operate the new BE switcher locomotives, and
 - Provide proof of ownership, and/or
 - Provide a letter of commitment from the operator, including a commitment to long term operation of the BE locomotive
 - Provide equipment data in the worksheet found at: [INVEST CLEAN](https://www.aqmd.gov/home/technology/implementation/invest-clean) (<https://www.aqmd.gov/home/technology/implementation/invest-clean>)
- Proposal Section 2: Project Approach and Implementation
 - Provide a summary of the project and how the project will meet the Measure 4 requirements and objectives as indicated in Section 2.3, Eligibility Requirements and Section 2. Workflow.
 - Describe the plan and operation for the deployment of a new BE switcher locomotive to operate a minimum of 425 MWh annually.
 - Describe how the project operation locations will be selected and if they will be adjacent to or near residential areas, schools, or public facilities
 - Describe the Emission Reduction Plan for the destruction timeline of the Existing Equipment, including:
 - Scrap or park the existing locomotive(s),
 - How real, measurable, and verifiable emission reductions can be achieved,
 - Method for monitoring and tracking of the old/parked locomotive(s) and their activities and emission reductions
 - Describe the new BE locomotive charging infrastructure plan that includes the following:
 - Review and evaluation of charging infrastructure space and available grid power to support the charging of the BE locomotives. If more than one BE locomotive will be deployed, include an assessment of how they can be supported. If more than one charger will be installed, include a description of the charger locations. If grid power needs supplementing, identify power

solutions or other charging assistance that may need to be utilized, such as a microgrid.

- Include the description of any renewable energy onsite to help power the locomotives and other power production or management technologies anticipated to be used.
- Describe who will own and operate (if different) the new BE locomotive and the supporting infrastructure.
 - If different, describe the financial responsibilities between the owner and the operator
 - Supporting infrastructure is potentially subject to BABA requirements, as Section 2.4 of this RFP indicates.
 - Construction and installation should be completed under a union labor agreement
- Proposal Section 3: Project Cost Breakdown
 - Provide pricing and cost information for the project. Include:
 - Vendor quote for new BE switcher locomotive(s)
 - The proposer should obtain the most recent and detailed quote for the project, as the award will not be increased once the project is awarded.
 - Total cost (including shipping/freight, taxes, and state fees)
 - Warranty information
 - Maintenance agreement and
 - Infrastructure costs (if applicable)
 - Planning/Design, engineering, permitting, equipment, and installation
 - The locomotive manufacturer and its contact information
 - The infrastructure manufacturer and its contact information
 - Provide a contingency plan to address the possibility of project costs increasing due to inflation or any other unforeseen circumstances.
- Proposal Section 4: Project Implementation Schedule and Continuation Plan
 - Provide a description/timeline of your project's readiness and implementation schedule
 - Describe the plan for the BE locomotive(s) and supporting infrastructure (if applicable) after closeout of the agreement.
- Proposal Section 5: Business Information Certifications, including:
 - Contact information of all participating parties/entities
 - Business Status Certification Form
 - W-9 IRS Form
 - 590 California Withholding Form

- Certificate Regarding Debarment, Suspension, and Other Responsibility Matters
- Campaign Contribution Disclosure Form

5.2 Proposal Submission Requirements:

All proposals must be submitted according to specifications set forth in the section above and in this section. Failure to adhere to these specifications may result in the proposal's rejection. Submit three (3) complete copies of the proposal in a sealed envelope, plainly marked in the upper left-hand corner with the name and address of the Applicant and the words "Request for Proposals #2025-15." Additionally, please provide an electronic copy of the proposal.

Due Date – All proposals are due or postmarked no later than 12:00 PM PST, Tuesday, September 30, 2025, and must be submitted to:

Procurement Unit
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765-4178
Phone: (909) 396-3520

Modification or Withdrawal – Once submitted, proposals cannot be altered without the prior written consent of South Coast AQMD. All proposals shall constitute firm offers and may not be withdrawn for a period of ninety (90) days after September 30, 2025.

5.3 RFP Amendments

South Coast AQMD Review Committee may modify the RFP and/or issue supplementary information or guidelines relating to the RFP during the Proposal preparation and acceptance period from June 6, 2025, at 12:00 PM PST to September 30, 2025, at 12:00 PM PST. Amendments will be posted on the INVEST CLEAN website at <https://www.aqmd.gov/home/technology/implementation/invest-clean>.

5.4 Confidentiality

Please ensure that any trade secret, confidential or proprietary information being provided is marked accordingly. Please see the following website for more details:
<https://www.aqmd.gov/docs/default-source/default-document-library/Guidelines/praguidelines.pdf>

Section 6 – INVEST CLEAN Contact Information

This RFP can be obtained by accessing the INVEST CLEAN website at <https://www.aqmd.gov/home/technology/implementation/invest-clean>. South Coast AQMD staff members are available to answer questions during the proposal acceptance period. To expedite assistance, please direct your inquiries to investclean-locomotive@aqmd.gov.

Section 7 – Proposal Evaluation & Scoring

Proposals will be evaluated by the South Coast AQMD, and all eligible projects will be competitively ranked. Proposals will be evaluated based on the proposal demonstrating an understanding of the RFP objectives, on the demonstrated capability of the applicant to accomplish the work, and on the Geographic Funding consideration discussed in Section 2.2. The following evaluation criteria form the basis upon which proposal scoring and selection will be conducted. The maximum score available is 100 points. The highest ranked proposals will be considered for INVEST CLEAN funding.

The South Coast AQMD reserves the right not to make any awards.

Criteria #	Criteria	Percentage
1	Overall Project Cost-Effectiveness [Proposal Section 3]	25
2	Project Approach and Implementation [Proposal Section 2]	20
3	Supporting Infrastructure ¹ (Existing or New) [Proposal Section 2]	15
4	Strategy to Achieve On-going Reductions [Proposal Section 4]	10
5	Operation Nearby Sensitive Receptors [Proposal Section 1]	10
6	Emission Reduction Plan [Proposal Section 2]	10
7	Applicant Experience with Battery-electric Technologies [Proposal Section 1]	5
8	Proposal Completeness at Time of Submittal [All Proposal Sections]	5
	Total	100

¹Infrastructure installations are subject to Davis-Bacon and Related Acts and other Federal Regulations see Section 3.7 above.

1. Overall Project Cost-Effectiveness (25 points maximum)

Proposals will be evaluated for the accumulated yearly tailpipe emission reductions of GHGs, oxides of nitrogen (NOx), and Particulate Matter 2.5 (PM2.5). Cost-effectiveness will be computed as the ratio of the INVEST CLEAN funding request amounts to the estimated emission reductions over the agreement term, using the methodology described in Section 8 of this RFP or using an alternative methodology deemed more appropriate by South Coast AQMD. GHG reduction will be assigned a higher weight than NOx and PM2.5 reduction when calculating the overall Cost-Effectiveness.

The maximum score of 25 points will be assigned to the project deemed most cost-effective, with points assigned to all other proposals received on a prorated basis.

2. Project Approach and Implementation (20 points maximum)

Proposals will be evaluated on timeline and readiness with respect to how soon the BE locomotives can be deployed and operating. If the applicant is not a rail operator, commitment from at least one operator must be provided along with details of where the locomotive will

operate. Proposal should address all requested information mentioned above in Proposal Section 2: Project Approach and Implementation.

3. Supporting Infrastructure (15 points maximum)

To effectively implement the incentive funding and deploy the new locomotive, applicants are required to submit approaches to provide charging support for the new switcher locomotives. This plan will be evaluated with respect to how the BE locomotive will be charged and the readiness of the infrastructure that maybe installed. Evaluation factors include but are not limited to: the expected usage for the project period, fleet commitment to utilizing the infrastructure, power availability and utility coordination, the percentage of renewable sources, equipment throughput relative to cost, project implementation timeliness, and cost-share.

4. Strategy to Achieve On-going Reductions (10 points maximum)

Applicants are required to discuss how the battery electric switcher locomotive project will continue beyond the agreement term with options to extend the in-service date as needed to meet the usage requirements of the BE switcher locomotive. Projects with a defined plan for continuing the switcher locomotive deployment will be awarded a higher point allocation.

5. Operation Nearby Sensitive Receptors (10 points maximum)

Proposals will be evaluated on the location where the battery electric switcher locomotive operates. INVEST CLEAN funding will prioritize projects that replace existing switcher locomotives in operation in areas adjacent to or near residential areas, schools, or public facilities in the two MSAs. Geographical distribution of funds will be considered when making awards.

6. Emission Reduction Plan (10 points maximum)

Applicants are required to submit a plan outlining how their project would achieve emission reductions. The proposal will be evaluated based on the applicant's proposed plan to manage the existing locomotive, such as through destruction, and the viability of the emission reduction claims. Proposal to scrap the old locomotive(s) at the time of BE locomotive delivery will score higher.

7. Applicant Experience with Battery-electric Technologies (5 points maximum)

Proposals will be evaluated based on the applicant's knowledge and experience with battery-electric equipment and the ability to maintain and operate the equipment.

8. Proposal Completion at Time of Submittal (5 points maximum)

Proposals will be evaluated on their completeness, accuracy, and responsiveness to the RFP and all its requirements.

SECTION 8 - Simple Methodology for Quantifying Emissions Reduction Using EPA Methods and Emission Factors

This methodology provides an optional approach to quantify emission reductions resulting from the adoption of BE switcher locomotive technologies. It is based on U.S. Environmental Protection Agency (EPA) standards and emission factors. Applicants may propose their method of calculating emission reductions but it will be subject to South Coast AQMD and/or EPA approval. The EPA Diesel Emissions Quantifier (DEQ) may also be used to help calculate emissions reductions for the project.

Baseline Locomotive (Old or Existing) Emissions Calculation Baseline emissions represent the amount of pollutants that would have been emitted by the locomotive fleet or other baseline diesel locomotive (old or existing) without the replacement with the BE switcher locomotives. The following steps outline the baseline calculation:

- **Identify Locomotives:** Determine the number, type, and duty cycle of switcher locomotives that will be selected for non-operational use or destroyed in the existing fleet.
- **Determine Baseline Emission Factors:** Use EPA's published emission factors (g/bhp-hr) for the specific locomotive engine model year and tier standard. Emission Factors are provided in the Emission Factor tables in the following pages.
- **Fuel Consumption or Hourly Usage:** Calculate the proposed equivalent average fuel consumption or hourly usage based.
- **Calculate Baseline Emissions:**
 - NO_x and PM_{2.5} Emission Reductions from Diesel Switcher Locomotives by pollutant (tons/year)

$$E = \frac{(FC \times FConv \times EF)}{453.6 \frac{g}{lb}} \times 2000 \frac{tons}{lb}$$

Equation Variable	Description	Unit
FC	Fuel Consumption per Locomotive	gallons/year
EF	Emission Factor for Baseline Locomotive engine (NO _x , PM _{2.5})	g/hp-hr
FConv	Fuel conversion	hp-hr/gallon
E	Emissions (NO _x , PM _{2.5})	tons

FConv is estimated to be 15.2 hp-hr/gallon

- CO₂ Emission Reductions from Diesel Switcher Locomotives by pollutant (tons/year)

$$E = 10.21 \frac{Kg \cdot CO_2}{gal} \times \frac{FC}{1000}$$

Equation Variable	Description	Unit
FC	Fuel Consumption per Locomotive	gallons/year
FConv	Fuel conversion	hp-hr/gallon
E	Emissions (CO ₂)	tons

BASELINE EMISSION FACTORS

Table 1: Locomotive Emission Factors (EF) (g/bhp-hr) Based on 1998 Federal Standards for Switcher Locomotives

Engine Type	NOx	PM2.5
Uncontrolled	17.40	0.405
Tier 0	12.6	0.405
Tier 1	9.90	0.396
Tier 2	7.30	0.175

Note: These factors are to be used for the project baseline emissions if the baseline locomotive is certified or required to be certified to the 1998 federal locomotive remanufacture standards, and for the reduced emission locomotive if the project locomotive is remanufactured to these 1998 standards. Factors are based upon Regulatory Impact Analysis: Final United States Environmental Protection Agency (U.S. EPA) Locomotive Regulation (2008).

PM2.5 estimated at 92% of PM10(DPM)

Table 2: Locomotive Emission Factors (EF) (g/bhp-hr) Based on the 2008 Federal Standards

Engine Type	NOx	PM2.5
Tier 0	10.6	0.212
Tier 1	9.90	0.212
Tier 2	7.30	0.248
Tier 3	4.50	0.074
Tier 4	1.00	0.014

Note: These factors are to be used for the project baseline emissions if the baseline locomotive is certified or required to be certified to the new (2008) federal locomotive remanufacture standards, and for the reduced emission locomotive if the project locomotive is remanufactured to the new standards or meets Tier 3 standards. Factors are based upon Regulatory Impact Analysis: Final U.S. EPA Locomotive Regulation (2008).

PM2.5 estimated at 92% of PM10(DPM)

APPENDIX A

EPA Grant Award Attachments and Relevant Modifications

Attachment 1 - Project Description

The purpose of this award is to provide funding under the Inflation Reduction Act (IRA) to the South Coast Air Quality Management District. The recipient will implement greenhouse gas (GHG) reduction programs, policies, projects, and measures identified in three Priority Climate Action Plans (PCAPs) developed under three different Climate Pollution Reduction Grant (CPRG) planning grants. Activities conducted through this grant will benefit all residents and visitors to the South Coast Air Quality Management District in California, through four main objectives: implementation of ambitious measures that will achieve significant cumulative GHG reductions by 2030 and beyond; pursuit of measures that will achieve substantial community benefits, particularly in low-income and disadvantaged communities; complementing other funding sources to maximize these GHG reductions and community benefits; and, pursuit of innovative policies and programs that are replicable and can be “scaled up” across multiple jurisdictions.

This agreement provides full federal funding in the amount of \$499,997,415. Preaward costs are approved back to 10/1/2024. Refer to Terms and Conditions. The South Coast Air Quality Management District (South Coast AQMD) is leading Infrastructure, Vehicles, and Equipment Strategy for Climate, Equity, Air Quality, and National Competitiveness (INVEST CLEAN) to implement zero-emission (ZE) transportation measures related to goods movement from the Priority Climate Action Plans (PCAPs) for the Los Angeles – Long Beach – Anaheim and Riverside – San Bernardino – Ontario Metropolitan Statistical Areas (MSA), and the state of California.

This grant will support the development and training of a workforce needed to implement, maintain, and sustain the zero emission transformation of the Southern California Goods Movement Corridor. It will support outreach and engagement opportunities for disadvantaged communities and ensure durability and permanence of the achieved emission reductions via internal combustion engine scrappage and new zero emission technology deployment.

The anticipated deliverables and outcomes include the following:

- Measure 1, Charging Infrastructure Deployment Incentive Program has estimated emission reductions of 3,427,178 (MT COe) by 2030 and 11,153,463 (MT COe) by 2050

- Measure 2, Battery Electric Freight Vehicle Deployment Incentive Program has estimated emission reductions of 67,391 (MT COe) by 2030 and 172,369 (MT COe) by 2050

- Measure 3, Battery Electric Cargo Handling Equipment Deployment Incentive Program has estimated emission reductions of 61,230 (MT COe) by 2030 and 143,567 (MT COe) by 2050

- Measure 4, Battery Electric Locomotive Program has estimated emission reductions of 42,476 (MT COe) by 2030 and 300,146 (MT COe) by 2050

Not only will these 4 Measures reduce greenhouse gas (GHG) emissions significantly, there are also significant co-benefits. Co-benefits include: reduced criteria and hazardous air pollutant impacts on low-income disadvantaged communities (LIDAC) and the opportunity to drive economic growth including job creation throughout the South Coast Air Quality Management District and beyond.

SCAQMD will provide a subaward to IBEW and/or identify other workforce training providers to support apprenticeship, and higher education, utilization of apprenticeships, support for certifications and other

services, and benchmarks for diversity and inclusion. The approach will integrate community college and universities with programs related to zero emission technologies to meet programmatic educational goals of workforce training organization and academic institutions.

SCAQMD will provide a subaward to Alliance for Sustainable Energy, which is a nonprofit that oversees all of the national labs, including NREL. The subaward will improve the national labs' data tools and enhance their research work, which are integral to their mission of solving the nation's energy challenges. The subawardee will develop locomotive operation reporting requirements, host the data, analyze charging data, verify emission reductions, prepare a scaling plan for ZE equipment deployment and infrastructure installation, and prepare data reports.

SCAQMD will provide subaward(s) to incentivize the purchase or lease of electric locomotives by railroad operators for a minimal of 5 years. The selection of rail operators receiving the incentives will be based on, but not limited to the following: quantity of electric switchers purchased or leased, number of years committed to operate the switchers, emission reduction, and number of operation hours.

Administrative Conditions

General Terms and Conditions

The recipient agrees to comply with the current Environmental Protection Agency (EPA) general terms and conditions available at: <https://www.epa.gov/grants/epa-general-terms-and-conditions-effective-october-1-2024-or-later>

These terms and conditions are in addition to the assurances and certifications made as a part of the award and the terms, conditions, or restrictions cited throughout the award.

The EPA repository for the general terms and conditions by year can be found at: <https://www.epa.gov/grants/grant-terms-and-conditions#general>.

A. Federal Financial Reporting (FFR)

For awards with cumulative project and budget periods greater than 12 months, the recipient will submit an annual FFR (SF 425) covering the period from "project/budget period start date" to **September 30** of each calendar year to the EPA Finance Center in Research Triangle Park, NC. The annual FFR will be submitted electronically to rtpfc-grants@epa.gov no later than **December 30** of the same calendar year.

Find additional information at <https://www.epa.gov/financial/grants>. (Per 2 CFR § 200.344(b), the grantee must submit the Final FFR to rtpfc-grants@epa.gov within 120 days.)

B. Procurement

The recipient will ensure all procurement transactions will be conducted in a manner providing full and open competition consistent with 2 CFR § 200.319. In accordance with 2 CFR § 200.324, the grantee and subgrantee(s) must perform a cost or price analysis in connection with applicable procurement actions, including contract modifications. *State and Tribal government entities must follow procurement standards as outlined in 2 CFR § 200.317.*

C. MBE/WBE Reporting, 40 CFR, Part 33, Subpart E (EPA Form 5700-52A)

The recipient agrees to submit a "MBE/WBE Utilization Under Federal Grants and Cooperative Agreements" report (EPA Form 5700-52A) annually for the duration of the project period. The current EPA Form 5700-52A with instructions is located at <https://www.epa.gov/grants/epa-grantee-forms>

This provision represents an approved exception from the MBE/WBE reporting requirements as described in 40 CFR Section 33.502.

Reporting is required for assistance agreements where funds are budgeted for procuring construction, equipment, services and supplies (including funds budgeted for direct procurement by the recipient or procurement under subawards or loans in the "Other" category) with a cumulative total that exceed the **Simplified Acquisition Threshold (SAT) currently set at \$250,000** (the dollar threshold will be automatically revised whenever the SAT is adjusted; See 2 CFR Section 200.1), including amendments and/or modifications. All procurement actions are reportable when reporting is required, not just the portion which exceeds the SAT.

Recipients with expended and/or budgeted funds for procurement are required to report annually whether the planned procurements take place during the reporting period or not. If no budgeted procurements take place during the reporting period, the recipient should check the box in section 4A when completing the form.

When completing the annual report, recipients are instructed to check the box titled "annual" in section 1B of the form. For the final report, recipients are instructed to check the box indicated for the "Final Report (project completed)" in section 1B of the form.

The annual reports are due by October 30th of each calendar year and the final report is due within 120 days after the end of the project period, whichever comes first. The recipient will submit the MBE/WBE report(s) and/or questions to GrantsRegion9@epa.gov and the EPA Grants Specialist identified on page 1 of the award document.

D. Subaward(s)

The recipient's approved budget includes subaward(s). As applicable, the recipient will comply with the General Term and Condition on reporting of first tier subawards to www.fsrs.gov per "Reporting Subawards and Executive Compensation" requirement.

Programmatic Conditions

A.] Deliverables

The first phase of the Climate Pollution Reduction Grants (CPRG) program provided funding for designing Priority Climate Action Plans (PCAPs) that incorporate a variety of measures (i.e., programs, policies, measures, and projects) that reduce greenhouse gas (GHG) emissions. The purpose of this CPRG Implementation assistance agreement is to implement proposed measures within a specified PCAP identified in the CPRG Implementation Grant General Competition application. All programs, policies, measures, and projects contained in the final, approved CPRG implementation assistance agreement workplan are required deliverables.

The recipient agrees to implement GHG reduction programs, policies, projects, and measures (collectively referred to as "GHG reduction measures," or "measures") identified in a PCAP developed under a CPRG planning grant and included in the CPRG implementation grant workplan. The recipient agrees to ensure that each is successfully implemented before the end of the grant project period. The recipient agrees to successful project implementation, which includes the process of putting a decision or plan into effect; executing the program, policies, projects and/or measures, not just planning or designing the programs, policies, projects and/or measures. The recipient agrees to adequately describe the actual environmental outputs and outcomes achieved, including actual GHG emissions reduced, not just the expected outputs and outcomes of the proposed measures. Clean Air Act (CAA) section 137 also requires that CPRG Implementation grant recipients address the degree to which a grant reduces GHG emissions in total and with respect to low-income and disadvantaged communities, where "greenhouse gas" refers to the air pollutants carbon dioxide (CO₂), hydrofluorocarbons (HFCs), methane (CH₄), nitrous oxide (N₂O), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆).

To the best of their ability, the recipient agrees to:

- implement GHG emission reduction programs, policies, measures, and projects that are expected to reduce GHG emissions (or enhance GHG removals) by the estimated cumulative total GHG emission reductions from the final approved workplan;
- only report emission reductions occurring as a result of CPRG funding; and
- only report emission reduction data in units of million metric tons of carbon dioxide equivalent (MMTCO₂e) where appropriate, calculated using the global warming potentials (GWP) in the International Panel on Climate Change's (IPCC) Fifth Assessment Report.

Refer to the Notice of Funding Opportunity, EPA-R-OAR-CPRGI-23-07 (https://www.epa.gov/system/files/documents/2023-09/CPRG_General_Competition_NOFO.pdf), Appendix B, Global Warming Potentials for GHGs, for details about how to apply GWP values for different gases.

For the measures included in the final, approved assistance agreement work plan, the recipient agrees to provide transparent GHG emission reduction estimates based on high-quality, thorough, reasonable, and comprehensive methodologies, assumptions, and calculations. Examples of tools that could be used to assist in these GHG quantifications can be found at: <https://www.epa.gov/inflation-reduction-act/climate-pollution-reduction-grants>.

B.] Final Approved Work Plan and Modifications

including the roles, responsibilities, and commitments that each partner will provide to ensure project success, the operating model for the coalition, and the resources that each partner will contribute to the project. As established in the CPRG coalition's MOA, the lead applicant is accountable to the EPA and accepts full responsibility for effectively carrying out the full scope of work and proper financial management of the grant. Coalition members who are grant subrecipients are accountable to the lead applicant for proposed use of EPA funding and successful project implementation. The recipient shall not make changes to the signed MOA without prior written approval from the EPA.

C.] Performance Reporting and Final Performance Report

1. Performance Reports - Content

The recipient agrees to inform the EPA as soon as it is aware of problems, delays, or adverse conditions that will materially impair the recipient's ability to meet the outputs/outcomes specified in the final, approved assistance agreement work plan. The recipient agrees to inform the EPA immediately rather than waiting until the next performance report is due.

The recipient agrees to adequately describe the actual environmental outputs and outcomes achieved, not just the expected outputs and outcomes of the proposed measures. The recipient agrees to report out on each performance measures that will be the mechanism to track, measure, and report progress toward achieving the expected outputs and outcomes for each GHG reduction measure. The recipient agrees to track and report separately on the work conducted and GHG emissions reductions for each measure (program, policy, measure, or project) specified in the final, approved assistance agreement work plan. Recipients also agree to track and report separately on the budgets for each measure.

In accordance with 2 CFR 200.329, the recipient agrees to submit semi-annual, one-year, and final performance progress reports that include brief information on each of the areas specified below. To ensure the EPA can effectively monitor progress towards the achievement of measures, the recipient also agrees to report progress for each measure identified in the final, approved assistance agreement work plan as soon as work is completed and information is available.

a. Semi-Annual Report: The recipient agrees to submit semi-annual performance reports that include brief information on each of the following areas:

- (1) a comparison of actual technical progress and milestones achieved during the reporting period to the outputs/outcomes and performance measures established in the final, approved assistance agreement work plan, which may include technical changes made to the project, public events conducted, websites published, release of public-facing documents or tools, or other reportable activities described in the work plan;
- (2) a consolidated budget update with separate tracking for each measure (that is, how much was spent on equipment, supplies, contractors, subgrants, etc., during the reporting period and cumulatively) and, when appropriate, additional pertinent information such as analysis and explanation of cost overruns, high-unit costs, cost-share expenditures, program income, infrastructure costs subject to Buy America, Build America (BABA) compliance, or requested budget modifications (for example, when the recipient is requesting to move funding from one budget category to another);
- (3) if necessary, a description of the reasons why any implementation timeline milestones or outputs/outcomes were missed for each measure established in the final, approved assistance

agreement work plan, including the recipient's strategy to address challenges faced and/or the recipient's approach to ensure that the approved outputs/outcomes for each measure will be achieved within the period of performance;

(4) documentation of community engagement activities conducted in low-income and disadvantaged communities for each measure, which describes how the activities were publicized, categorizes respondents/attendees (e.g., the number of people from Tribal governments, federal government, state government, local government, nonprofits, for profits, universities, and the public), explains how input from participants was considered in decisions for implementing the measure, and details how meaningful engagement with low-income and disadvantaged communities will be continuously included in the development and implementation of the measure;

(5) as applicable, strategies for mitigating environmental risks;

(6) a description of any climate resiliency planning, siting, design, and operation of the project.

(7) as applicable, updates to individuals, including those from coalition members, who serve as key contacts and/or any changes to the roles and responsibilities of key contacts involved in each measure and the reason(s) for the change(s);

(8) as applicable, updates regarding which organizations have the authority to implement each measure and the reason(s) for the change(s);

(9) as applicable, updates regarding changes to contracts, subgrants, and participant support costs;

(10) as applicable, progress on generating high-quality jobs with a diverse, highly skilled workforce and support of strong labor standards; and

(11) summary of anticipated activities for the next 6-month reporting period.

b. One-year report: As part of the second semi-annual progress report (*i.e.* the more detailed one-year report), the recipient agrees to report the additional data to the EPA using the reporting template from the EPA's Information Collection Request 2806.01, Office of Management and Budget (OMB) Control Number 2060-0763. The reporting template will be made available to grant recipients through an electronic data interface to be specified by EPA upon approval of the Information Collection Request. This includes co-pollutant emissions reductions of each pollutant impacted by each measure, the sector impacted, and the county in which the emissions change. In addition, the recipient agrees to report the Climate and Economic Justice Screening Tool (CEJST) Census tract IDs or the EPA's EJScreen Census block group IDs for areas affected by GHG reduction measures, consistent with the EPA's definition of low-income and disadvantaged communities for the CPRG program.

c. Final Report: The recipient also agrees to submit a detailed final report and to report certain data associated with the final report to the EPA using the reporting template from the EPA's Information Collection Request 2806.01, OMB Control Number 2060-0763.

d. Subaward Performance Reporting: Subawards establish a financial assistance relationship under which the subrecipient's employees and contractors implement programs and projects to accomplish the goals and objectives of the grant. Subrecipients (which includes Coalition members) are subject to the same federal requirements as the pass-through entity. (For more details, see General Terms and

Conditions 8. Establishing and Managing Subawards, applicable provisions of 2 CFR Part 200, the EPA's Subaward Policy). The recipient must report on its subaward monitoring activities under 2 CFR 200.332 (d). Examples of items that must be reported if the pass-through entity has the information available are:

- (1) Summaries of results of reviews of financial and programmatic reports.
- (2) Summaries of findings from site visits and/or desk reviews to ensure effective subrecipient performance.
- (3) Environmental results the subrecipient achieved.
- (4) Summaries of audit findings and related pass-through entity management decisions.
- (5) Actions the pass-through entity has taken to correct deficiencies such as those specified at 2 CFR 200.332(e), 2 CFR 200.208 and the 2 CFR Part 200.339 Remedies for Noncompliance.

As with any EPA grant with a grant recipient subawarding to subrecipients, the grant recipient is accountable to the EPA and accepts responsibility for carrying out the full scope of work and proper financial management of the grant. In the event that a subawardee withdraws, the grant recipient continues to be subject to the EPA's terms and conditions for the grant, the subaward policy, and EPA grants policy. In circumstances where the EPA deems that the withdrawal of a coalition member or subawardee fundamentally alters the project or jeopardizes the project's success, the EPA will consider appropriate remedies and reserves the right to terminate an awarded grant (see 2 CFR 200.339 through 343)

2. Performance Reports - Frequency

The recipient agrees to submit **semi-annual** performance reports electronically to the EPA Project Officer within 30 days after the six-month reporting period ends. Semi-annual reports are due according to the following schedule. If a due date falls on a weekend or holiday, the report will be due on the next business day. If a project start date falls within a defined reporting period, the recipient must report for that period by the given due date unless otherwise noted. This semi-annual reporting schedule shall be repeated for the duration of the award agreement.

October 1 – March 31 Reporting Period: report due April 30

April 1 – September 30 Reporting Period: report due October 30

As part of the second semi-annual performance report that is submitted one year after the grant award, the recipient agrees to submit the **one-year** performance report that includes the additional details specified above in section C.1.b.

The recipient must submit the final performance report no later than 120 calendar days after the end date of the period of performance.

D.] Allowable and Unallowable Activities

The recipient agrees to only use this CPRG Implementation grant award funding to implement measures in the EPA approved workplan for this CPRG Implementation grant and follow the grant Terms and

Conditions. All costs charged to the award to support these activities must meet the requirements for allowability under 2 CFR Part 200, Subpart E as well as applicable provisions of 2 CFR Part 1500. In addition, the recipient agrees to obtain prior approval from the EPA Award Official prior to the expenditure of the award for financial assistance as well as other activities that involve acquiring real property, including related equipment purchases, if not already in the EPA approved work plan.

The recipient agrees to not use the award for the following unallowable activities: (a) activities that are not in the EPA approved work plan; (b) activities that support measures, activities or projects outside the boundaries of the ten EPA regions. The recipient also agrees not to use this CPRG award to replace existing program federal funding, but the recipient may use CPRG funds to supplement or expand existing programs. The recipient also agrees not to use the award for activities associated with defending against, settling, or satisfying a claim by a private litigant, except when either (a) the claim stems from the recipient's compliance with the terms and conditions of the award agreement or (b) the recipient has obtained prior written approval from the EPA Project Officer.

The recipient agrees to not use the award to aid regulated entities to comply with EPA regulatory requirements.

E.] Davis-Bacon Related Act

1. Program Applicability

- a. Climate Pollution Reduction Implementation Grants.
- b. Section 314 of the Clean Air Act.
- c. Construction activities conducted under a Climate Pollution Reduction Implementation Grant.
- d. The recipient must work with the appropriate authorities to determine wage classifications for the specific project(s) or activities subject to Davis Bacon under this grant.

2. Davis-Bacon and Related Acts

Davis-Bacon and Related Acts (DBRA) (<https://www.dol.gov/agencies/whd/government-contracts/construction>) is a collection of labor standards provisions administered by the Department of Labor, that are applicable to grants involving construction. These labor standards include the:

- a. Davis-Bacon Act, which requires payment of prevailing wage rates for laborers and mechanics on construction contracts of \$2,000 or more;
- b. Copeland "Anti-Kickback" Act, which prohibits a contractor or subcontractor from inducing an employee into giving up any part of the compensation to which he or she is entitled; and
- c. Contract Work Hours and Safety Standards Act, which requires overtime wages to be paid for over 40 hours of work per week, under contracts in excess of \$100,000.

3. Recipient Responsibilities When Entering Into and Managing Contracts

- a. Solicitation and Contract Requirements:

(1) Include the Correct Wage Determinations in Bid Solicitations and Contracts: Recipients are responsible for complying with the procedures provided in [29 CFR 1.6](#) when soliciting bids and awarding contracts.

(2) Include DBRA Requirements in All Contracts: Include the following text on all contracts under this grant:

"By accepting this contract, the contractor acknowledges and agrees to the terms provided in the DBRA Requirements for Contractors and Subcontractors Under EPA Grants (<https://www.epa.gov/grants/contract-provisions-davis-bacon-and-related-acts>)."

b. After Award of Contract:

(1) Approve and Submit Requests for Additional Wages Rates: Work with contractors to request additional wage rates if required for contracts under this grant, as provided in [29 CFR 5.5\(a\)\(1\)\(iii\)](#).

(2) Provide Oversight of Contractors to Ensure Compliance with DBRA Provisions: Ensure contractor compliance with the terms of the contract, as required by [29 CFR 5.6](#).

4. Recipient Responsibilities When Establishing and Managing Additional Subawards

a. Include DBRA Requirements in All Subawards (including Loans): Include the following text on all subawards under this grant:

"By accepting this award, the EPA subrecipient acknowledges and agrees to the terms and conditions provided in the DBRA Requirements for EPA Subrecipients (<https://www.epa.gov/grants/contract-provisions-davis-bacon-and-related-acts>)."

b. Provide Oversight to Ensure Compliance with DBRA Provisions: Recipients are responsible for oversight of subrecipients and must ensure subrecipients comply with the requirements in [29 CFR 5.6](#).

5. Consideration as Part of Every Prime Contract Covered by DBRA

The contract clauses set forth in this Term & Condition, along with the correct wage determinations, will be considered to be a part of every prime contract covered by Davis-Bacon and Related Acts (see [29 CFR 5.1](#)), and will be effective by operation of law, whether or not they are included or incorporated by reference into such contract, unless the Department of Labor grants a variance, tolerance, or exemption. Where the clauses and applicable wage determinations are effective by operation of law under this paragraph, the prime contractor must be compensated for any resulting increase in wages in accordance with applicable law.

F.] Cybersecurity

a. The recipient agrees that when collecting and managing environmental data under this assistance agreement, it will protect the data by following all applicable State or Tribal law cybersecurity requirements.

b. (1) The EPA must ensure that any connections between the recipient's network or information system

and EPA networks used by the recipient to transfer data under this agreement, are secure. For purposes of this Section, a connection is defined as a dedicated persistent interface between an Agency IT system and an external IT system for the purpose of transferring information. Transitory, user-controlled connections such as website browsing are excluded from this definition.

If the recipient's connections as defined above do not go through the Environmental Information Exchange Network or the EPA's Central Data Exchange, the recipient agrees to contact the EPA PO no later than 90 days after the date of this award and work with the designated Regional/Headquarters Information Security Officer to ensure that the connections meet EPA security requirements, including entering into Interconnection Service Agreements as appropriate. This condition does not apply to manual entry of data by the recipient into systems operated and used by the EPA's regulatory programs for the submission of reporting and/or compliance data.

(2) The recipient agrees that any subawards it makes under this agreement will require the subrecipient to comply with the requirements in (b)(1) if the subrecipient's network or information system is connected to EPA networks to transfer data to the Agency using systems other than the Environmental Information Exchange Network or the EPA's Central Data Exchange. The recipient will be in compliance with this condition: by including this requirement in subaward agreements; and during subrecipient monitoring deemed necessary by the recipient under 2 CFR 200.332(d), by inquiring whether the subrecipient has contacted the EPA Project Officer. Nothing in this condition requires the recipient to contact the EPA Project Officer on behalf of a subrecipient or to be involved in the negotiation of an Interconnection Service Agreement between the subrecipient and the EPA.

G.] Climate Resilience

To the extent practicable, the recipient agrees to incorporate current and future climate change risk in planning, siting, design, and operation of the project. Approaches for incorporating climate change risk may make use of climate change data and information (e.g., projections and emission scenarios) that are reflective of the project's anticipated lifespan. This includes consideration of the climate change risks posed to the individuals, communities, local governments, organizations, or other entities served by the project over its anticipated lifespan.

H.] Subawards

Refer to the General Terms and Condition, "Establishing and Managing Subawards" and EPA Subaward Policy webpage (<https://www.epa.gov/grants/grants-policy-issuance-gpi-16-01-epa-subaward-policy-epa-assistance-agreement-recipients>) for access to additional information, including a subaward agreement template found in Appendix D. The recipient must include the Build America, Buy America terms in any subawards, request for proposals, or solicitations for bids, and in all contracts.

I.] Subawards for For-Profit Entities

In addition to the EPA General Term and Condition "Establishing and Managing Subawards", the recipient (i.e. "pass-through entity") agrees to require that for-profit subrecipients comply with Subparts A through F of the Uniform Grant Guidance (2 CFR Part 200) and the Federal cost principles applicable to for-profit entities located at 48 CFR Part 31, with the exception of the method of payment to for-profit subrecipients must be "reimbursement" rather than "advance". Pass-through entities must obtain documentation that the for-profit subrecipient has incurred eligible and allowable costs prior to releasing EPA funds to the subrecipient.

J.] Equipment and Devices

1. Procurement of Systems, Equipment and Devices

When purchasing replacement systems, equipment and/or devices, the recipient agrees the replacement systems, equipment or device:

- a. will continue to perform a similar function and operation as the system, equipment or device that is being permanently rendered inoperable;
- b. will achieve the estimated emission reductions included in the EPA-approved work plan; and
- c. is consistent in its intended use, operation and location as described in the EPA-approved work plan.

The procurement of systems, equipment or devices should follow the EPA's Best Practice Guide for Procuring Services, Supplies, and Equipment Under EPA Assistance Agreements (<https://www.epa.gov/grants/best-practice-guide-procuring-services-supplies-and-equipment-under-epa-assistance>).

2. Operation and Maintenance

The recipient will assure the continued proper operation and maintenance of systems, equipment and devices funded under this agreement. Such practices shall be operated and maintained for the expected lifespan of the specific measure and in accordance with commonly accepted design standards and specifications. The recipient shall include a provision in every applicable sub-agreement (subaward or contract) awarded under this grant requiring that the management practices for the project be properly operated and maintained. Likewise, the sub-agreement will assure that similar provisions are included in any sub-agreements that are awarded by the sub-recipient.

3. Equipment Use and Management

Equipment is defined as tangible personal property having a useful life of more than one year and a per-unit acquisition cost which equals or exceeds the lesser of the capitalization level established by the non-Federal entity for financial statement purposes (see Capital assets at 2 CFR 200.1 Definitions), or the amount specified in Equipment at 2 CFR 200.1. Under 2 CFR 200.313, if the CPRG grant recipient purchases equipment with CPRG federally-awarded funds, title to the equipment vests in the grant recipient and there will be no ongoing requirements for the grant recipient for the purchased equipment after the end of the grant period.

These conditions must be met by the grant recipient for equipment use and management during the grant period:

- a. Use the equipment for the authorized purposes of the project during the period of performance or until the property is no longer needed for the purposes of the project. If the equipment and/or equipment components are to be sold during the period of performance, the recipient must comply with the program income requirements (see the Program Income section below).
- b. Not encumber the property without approval of the Federal awarding agency or pass-through entity.

c. Use and dispose of the property as described below. Equipment use and management instructions are applicable to assistance agreement recipients and subrecipients acquiring equipment under this award. Per 2 CFR 200.313(b), state agencies may use and manage equipment acquired through a Federal award by the state in accordance with state laws and procedures. Per 2 CFR 200.313(b), Indian Tribes must use, manage, and dispose of equipment acquired under a Federal award in accordance with tribal laws and procedures.

Recipient agrees that at the end of the project period the recipient will continue to use the equipment purchased under this assistance agreement in the project or program for which it was acquired as long as needed, whether or not the project or program continues to be supported by the Federal award. After the end of the grant period, equipment purchased under this award that is no longer needed, may be retained, sold, or otherwise disposed of with no further obligation to the Federal awarding agency.

Consistent with 2 CFR 200.313, unless instructed otherwise, a grant recipient may keep the equipment and continue to use it on the project originally funded through this assistance agreement or on other federally funded projects whether or not the project or program continues to be supported by Federal funds. When acquiring replacement equipment, the non-Federal entity may use the equipment to be replaced as a trade-in or sell the property and use the proceeds to offset the cost of the replacement property.

Subrecipients are subject to the same federal requirements as the grant recipient (also known as the "pass-through entity") and they must comply with applicable subaward provisions of 2 CFR Part 200, the EPA Subaward Policy, and the EPA's General Term and Condition for Subawards.

Under 2 CFR 200.313, if the CPRG grant recipient purchases equipment with CPRG federally-awarded funds, title to the equipment vests with the grant recipient and there will be no ongoing requirements for the grant recipient for the purchased equipment after the end of the grant period.

K.] Quality Assurance

Authority: Quality Assurance applies to all assistance agreements involving environmental information as defined in [2 C.F.R. § 1500.12](#) Quality Assurance.

The recipient shall ensure that subawards involving environmental information issued under this agreement include appropriate quality requirements for the work. The recipient shall ensure sub-award recipients develop and implement a Quality Assurance (QA) planning document in accordance with this term and condition; and/or ensure sub-award recipients implement all applicable approved QA planning documents.

1. Quality Management Plan (QMP)

a. Prior to beginning environmental information operations, the recipient must notify the EPA Project Officer (PO) in writing that their current, EPA-approved QMP is acceptable for this agreement. If their current, EPA-approved QMP is not acceptable for this agreement, the recipient needs to update the QMP, as directed by the PO, in coordination with the EPA Region 9 Quality Assurance Branch, and email the updated QMP to the PO for review and approval by EPA Region 9 Quality Assurance Manager or designee (hereafter referred to as QAM).

b. The recipient must review their approved QMP at least annually. These documented reviews shall be

pass-through entity, or any of their authorized representatives, have the right of access to any documents, papers or records of the recipient which are pertinent to the grant award. The rights of access are not limited to the required retention period, but last as long as the records are retained.

M.] Program Audit

The EPA will conduct random reviews of recipients to protect against waste, fraud, and abuse. As part of this process, the EPA, or its authorized representatives may request documentation from current recipients to verify statements made on the application and reporting documents. Recipients may be selected for advanced monitoring, including a potential site visit to confirm project details. The EPA, or its authorized representatives, may also conduct site visits to confirm documentation is on hand and that the project is completed as agreed upon, as well as confirm applicable infrastructure adheres to Build America, Buy America (BABA) requirements. Recipients are expected to comply with site visit requests and recordkeeping requirements and must supply the EPA with any requested documents for three years from the date of submission of the final expenditure report, or risk cancellation of an active grant application or other enforcement action.

N.] Use of Submitted Information

Applications and reporting materials submitted under this competition may be released in part or in whole in response to a Freedom of Information Act (FOIA) request. The EPA recommends that applications and reporting materials not include trade secrets or commercial or financial information that is confidential or privileged, or sensitive information that, if disclosed, would invade another individual's personal privacy (e.g., an individual's salary, personal email addresses, etc.). However, if such information is included, it will be treated in accordance with [40 CFR 2.203](#). (Review EPA clause IV.a, Confidential Business Information, under EPA Solicitation Clauses (<https://www.epa.gov/grants/epa-solicitation-clauses>))

The EPA may make publicly available on the EPA's website or another public website copies or portions of CPRG grant project information.

The EPA reserves a royalty-free, nonexclusive and irrevocable right to reproduce, publish, or otherwise use, and to authorize others to use, for federal purposes, submitted project photos, including use in program materials.

O.] Participant Support Costs

Participant support costs include rebates, subsidies, stipends, or other payments to program beneficiaries. Participant support costs are not subawards as defined by 2 CFR §200.1 and should not be treated as such. Program beneficiaries may be individual owner/operators or private or public fleet owners, however program beneficiaries cannot be employees, contractors or subrecipients of the grant recipient. The recipient may provide financial assistance and project-deployment technical assistance to enable low-income and disadvantaged communities to deploy and benefit from eligible zero emissions technologies in the form of participant support costs. The recipient agrees to the following eligibility, restrictions, timelines, and other programmatic requirements on participant support costs:

1. Participant support costs must be reasonable, incurred within the project period and otherwise allocable to the EPA assistance agreement. Participant support costs for rebates must be supported by guidelines issued by the recipient and approved by the EPA's Award Official or Grants Management Officer, defining the rules, restrictions, timelines, programmatic requirements, reporting and transaction

documentation requirements, eligibility, and funding levels that rebate beneficiaries must follow.

2. Recipient must abide by EPA Participant Support Cost regulation(s) and guidelines including but not limited to "Interim EPA Guidance on Participant Support Costs" (<https://www.epa.gov/grants/rain-2018-g05-r1>). "The EPA Guidance on Participant Support Costs" specifies requirements for rebate program approval by Authorized EPA Officials.

3. Recipient must enter into a written agreement with the program beneficiary that receives participant support costs. Such agreement should not be structured as a subaward agreement, and the administrative grant regulations under 2 CFR Part 200 and 2 CFR Part 1500, as well as the EPA's general terms and conditions do not flow down to program beneficiaries receiving participant support costs. Such written agreement is also required if a subrecipient or contractor intends to issue participant support costs to a program beneficiary. The written agreement must:

- a. describe the activities that will be supported by rebates, stipends, subsidies or other payments;
- b. specify the amount of the rebate, subsidy, stipend, or other payment;
- c. identify which party will have title to equipment (if any) purchased with a rebate or subsidy or other payment;
- d. specify any reporting required by the program beneficiary and the length of time for such reporting;
- e. establish source documentation requirements (e.g., invoices) for accounting records; and
- f. describe purchasing controls to ensure that the amount of the participant support cost is determined in a commercially reasonable manner as required by 2 CFR 200.404.

4. Recipient must obtain prior written approval from the EPA's Award Official if recipient wants to transfer funds budgeted for participant support costs to other budget categories. If the recipient's request would result in undermining the integrity of the competition this grant or cooperative agreement was awarded under, the EPA will not approve the request.

Rebates, subsidies, and similar one-time, lump-sum payments to program beneficiaries for the purchase of eligible emissions control technologies and vehicle replacements are eligible participant support costs under this award when the program participant rather than the recipient owns the equipment, per 2 CFR 1500.1(a)(1). Engine replacements, marine and locomotive shorepower projects, and most electrified parking space technology projects are not eligible as participant support costs. Rebates can only fund a participating fleet owner's equipment purchase and installation costs (i.e. parts and labor, including costs incurred to scrap the existing vehicle); if a participating fleet owner requires funding for project administration, travel, extensive design/engineering, construction, etc., in order to carry out the project a subaward is the more appropriate option. Questions regarding the use of rebates under this award should be directed to the EPA Project Officer. Rebates are not considered subawards/subgrants as defined in 2 CFR Part 200 and should not be treated as such under this award.

P.] Signage Requirements

1. Investing in America Emblem: The recipient will ensure that a sign is placed at construction sites

supported in whole or in part by this award displaying the official Investing in America emblem and must identify the project as a "project funded by President Biden's Inflation Reduction Act" as applicable. The sign must be placed at construction sites in an easily visible location that can be directly linked to the work taking place and must be maintained in good condition throughout the construction period. The recipient will ensure compliance with the guidelines and design specifications provided by the EPA for using the official Investing in America emblem available at: <https://www.epa.gov/invest/investing-america-signage>

2. Procuring Signs: Consistent with section 6002 of RCRA, 42 U.S.C. 6962, and 2 CFR 200.323, recipients are encouraged to use recycled or recovered materials when procuring signs. Signage costs are considered an allowable cost under this assistance agreement provided that the costs associated with signage are reasonable. Additionally, to increase public awareness of projects serving communities where English is not the predominant language, recipients are encouraged to translate the language on signs (excluding the official Investing in America emblem or the EPA logo or seal) into the appropriate non-English language(s). The costs of such translation are allowable, provided the costs are reasonable.

Q.] Use of Logos

If the EPA logo is appearing along with logos from other participating entities on websites, outreach materials, or reports, it must not be prominently displayed to imply that any of the recipient or subrecipient's activities are being conducted by the EPA. Instead, the EPA logo should be accompanied with a statement indicating that the South Coast Air Quality Management District (or name of the subaward recipient) received financial support from the EPA under an Assistance Agreement. More information is available at: <https://www.epa.gov/stylebook/using-epa-seal-and-logo#policy>

R.] Public or Media Events

The EPA encourages the recipient to notify the EPA Project Officer listed in this award document of public or media events publicizing the accomplishment of significant events related to construction projects as a result of this agreement and provide the opportunity for attendance and participation by federal representatives with at least ten (10) working days' notice.

S.] Fellowship, Internship Programs and Similar Programs Supported by EPA Financial Assistance

1. EPA funds for this program may only be used for participant support cost payments, scholarships, tuition remission and other forms of student aid for citizens of the United States, its territories, or possessions, or for individuals lawfully admitted to the United States for permanent residence.
2. The recipient and program participants are responsible for taxes, if any, on payments made to or on behalf of individuals participating in this program that are allowable as participant support costs under 2 CFR 200.1 or [2 CFR 200.456](#) and scholarships and other forms of student aid such as tuition remission under [2 CFR 200.466](#). EPA encourages recipients and program participants to consult their tax advisers, the U.S. Internal Revenue Service, or state and local tax authorities regarding the taxability of stipends, tuition remission and other payments. However, EPA does not provide advice on tax issues relating to these payments.
3. Participant support cost payments, scholarships, and other forms of student aid such as tuition remission are lower tiered covered Nonprocurement transactions for the purposes of [2 CFR 180.300](#) and EPA's Suspension and Debarment Term and Condition. Recipients, therefore, may not make participant

support cost payments to individuals who are excluded from participation in Federal Nonprocurement programs under [2 CFR Part 180](#). Recipients are responsible for checking the eligibility of program participants in the System for Award Management (SAM) or obtaining eligibility certifications from the program participants.

See EPA Guidance on Participant Support Costs: <https://www.epa.gov/sites/default/files/2020-11/documents/epa-guidance-on-participant-support-costs.pdf>.

T.] Competency of Organizations Generating Environmental Measurement Data

In accordance with Agency Policy Directive Number FEM-2012-02, Policy to Assure the Competency of Organizations Generating Environmental Measurement Data under Agency-Funded Assistance Agreements, the Recipient agrees, by entering into this agreement, that it has demonstrated competency prior to award, or alternatively, where a pre-award demonstration of competency is not practicable, Recipient agrees to demonstrate competency prior to carrying out any activities under the award involving the generation or use of environmental data. Recipient shall maintain competency for the duration of the project period of this agreement and this will be documented during the annual reporting process. A copy of the Policy is available online at <https://www.epa.gov/sites/production/files/2015-03/documents/competency-policy-aaia-new.pdf> or a copy may also be requested by contacting the EPA Project Officer for this award.

U.] Geospatial Data Standards

All geospatial data created must be consistent with Federal Geographic Data Committee (FGDC) endorsed standards. Information on these standards may be found at <https://www.fgdc.gov/>.

V.] Health and Safety Plan

Before beginning field work, the recipient must have a health and safety plan in place providing for the protection of on-site personnel and area residents, unless specifically waived by the award official. This plan need not be submitted to the EPA but must be made available to the EPA upon request. The recipient's health and safety plan must comply with Occupational Safety and Health Administration (OSHA) 29 CFR 1910.120, entitled "Hazardous Waste Operations and Emergency Response."

W.] Foreign Entity of Concern

The recipient agrees to not directly transfer EPA funds through a subaward, contract, or participant support costs to a foreign entity of concern (FEOC). The EPA considers FEOCs to include foreign entities that are owned by, controlled by, or subject to the jurisdiction or direction of a government of a foreign country that is a covered nation as defined by Congress in Section 40207 of the Infrastructure Investment and Jobs Act. The EPA uses the proposed interpretive rule from the U.S. Department of Energy (DOE) to provide additional guidance in determining FEOCs. See 88 Fed. Reg. 84,082 (Dec. 4, 2023). If DOE finalizes an interpretive rule that differs in material respects from the proposal, the EPA may amend the award agreement accordingly.

Additionally, the recipient agrees to develop and implement internal controls that ensure EPA funds are not directly transferred to FEOCs, including through subawards, contractors, and participant support costs.

X.] Leveraging

The recipient agrees to provide the proposed leveraged funding that is described in its proposal dated April 1, 2024. If the proposed leveraging does not materialize during the period of award performance, and the recipient does not provide a satisfactory explanation, the Agency may consider this factor in evaluating future proposals from the recipient. In addition, if the proposed leveraging does not materialize during the period of award performance then EPA may reconsider the legitimacy of the award; if EPA determines that the recipient knowingly or recklessly provided inaccurate information regarding the leveraged funding the recipient described in its proposal dated April 1, 2024, EPA may take action as authorized by 2 CFR Part 200 and/or 2 CFR Part 180 as applicable.

Y.] Historic Preservation

National Historic Preservation Act (NHPA)

Section 106 of the NHPA requires all federal agencies to consider the effects of their undertakings, including the act of awarding a grant or cooperative agreement, on historic properties, and to provide the Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to comment on such undertakings. The recipient must assist the EPA Project Officer in complying with NHPA if any activities funded under this grant impact a historic property. Historic properties include: (a) land or buildings listed in or eligible for listing on the National Register of Historic Places; (b) archaeologically sensitive areas or in an area where traditional cultural properties are located; and (c) properties that are associated with significant historic events, are associated with significant people, embody distinctive characteristics, and contain important precontact information.

The recipient should work with their Project Officer to ensure that subrecipients are available to work with EPA on any required consultation process with the State or Tribal Historic Preservation Office prior to commencing the project to ensure compliance with Section 106 of the NHPA.

If NHPA compliance is required, necessary Section 106 consultation activities, such as historic or architectural surveys, structural engineering analysis of buildings, public meetings, and archival photographs, can be considered allowable and allocable grant costs.

Archeological and Historic Preservation Act (AHPA)

This law applies if archeologically significant artifacts or similar items are discovered after an EPA-funded construction project has begun, and compliance may be coordinated with the NHPA, discussed above. The AHPA requires federal agencies to identify relics, specimens, and other forms of scientific, prehistorical, historical, or archaeological data that may be lost during the construction of federally-sponsored projects to ensure that these resources are not inadvertently transferred, sold, demolished or substantially altered, or allowed to deteriorate significantly. The recipient must ensure that subrecipients performing construction projects are aware of this requirement, and the recipient must notify EPA if the AHPA is triggered.

Z.] Other Federal Requirements

In addition to the statutes outlined in the Labor and Equitable Workforce Programmatic Term and Condition, Build America, Buy America Programmatic Act Term and Condition, Historic Preservation Programmatic Term and Condition, the recipient must comply with all federal cross-cutting requirements.

These requirements include, but are not limited to:

- Endangered Species Act, as specified in 50 CFR Part 402: Non-Federal entities must identify any impact or activities that may involve a threatened or endangered species. Federal agencies have the responsibility to ensure that no adverse effects to a protected species or habitat occur from actions under Federal assistance awards and conduct the reviews required under the Endangered Species Act, as applicable.

- Federal Funding Accountability and Transparency Act: Recipients of financial assistance awards must comply with the requirements outlined in 2 CFR Part 170, Reporting Subaward and Executive Compensation and in the General Term and Condition "Reporting Subawards and Executive Compensation."

- Farmland Protection Policy Act: This statute requires EPA to use criteria developed by the Natural Resources Conservation Service (NRCS) to identify the potential adverse effects of Federal programs on farmland and its conversion to nonagricultural uses, to mitigate these effects, and to ensure that programs are carried out in a manner that is compatible with the farmland preservation policies of state and local governments, and private organizations. Recipients may need to work with EPA or NRCS, as appropriate, to ensure compliance.

- Coastal Zone Management Act: Projects funded under federal financial assistance agreements must be consistent with a coastal State's approved management program for the coastal zone.

For additional information on cross-cutting requirements visit <https://www.epa.gov/grants/epa-subaward-cross-cutter-requirements>.

END OF DOCUMENT

AMENDMENTS TO THE EPA FUNDING INFORMATION UPDATED 12/16/2025

5E - 97T15501 - 1 Page 3

Budget Summary Page

Table A - Object Class Category (Non-Construction)	Total Approved Allowable Budget Period Cost
1. Personnel	\$ 7,860,685
2. Fringe Benefits	\$ 4,350,890
3. Travel	\$ 0
4. Equipment	\$ 0
5. Supplies	\$ 0
6. Contractual	\$ 1,000,000
7. Construction	\$ 0
8. Other	\$ 476,200,000
9. Total Direct Charges	\$ 489,411,575
10. Indirect Costs: 0.00 % Base : see General T/C	\$ 10,585,840
11. Total (Share: Recipient 0.00 % Federal 100.00 %)	\$ 499,997,415
12. Total Approved Assistance Amount	\$ 499,997,415
13. Program Income	\$ 0
14. Total EPA Amount Awarded This Action	\$ 0
15. Total EPA Amount Awarded To Date	\$ 499,997,415

EPA Funding Information

FUNDS	FORMER AWARD	THIS ACTION	AMENDED TOTAL
EPA Amount This Action	\$ 499,997,415	\$ 0	\$ 499,997,415
EPA In-Kind Amount	\$ 0	\$ 0	\$ 0
Unexpended Prior Year Balance	\$ 0	\$ 0	\$ 0
Other Federal Funds	\$ 0	\$ 0	\$ 0
Recipient Contribution	\$ 0	\$ 0	\$ 0
State Contribution	\$ 0	\$ 0	\$ 0
Local Contribution	\$ 0	\$ 0	\$ 0
Other Contribution	\$ 0	\$ 0	\$ 0
Allowable Project Cost	\$ 499,997,415	\$ 0	\$ 499,997,415

Assistance Program (CFDA)	Statutory Authority	Regulatory Authority
66.046 - Climate Pollution Reduction Grants	Clean Air Act: Sec. 137	2 CFR 200, 2 CFR 1500 and 40 CFR 33

Programmatic Conditions

Previous Programmatic Conditions remain the same; except Condition W. is updated and AA. applies.

W.] Foreign Entity of Concern (Updated 01/07/25)

As part of carrying out this award, Recipient agrees that they are not:

1. an entity owned by, controlled by, or subject to the direction of a government of a "covered nation" as defined at 10U.S.C. §4872(d);
2. an entity headquartered in a "covered nation" as defined at 10U.S.C. §4872(d); or
3. a subsidiary of an entity described above in (1) or (2).

As of the date these terms and conditions become effective, covered nations under 10 U.S.C. § 4872(d) are the Democratic People's Republic of North Korea; the People's Republic of China; the Russian Federation; and the Islamic Republic of Iran.

AA.] Termination

Notwithstanding the General Term and Condition "Termination," EPA maintains the right to terminate the Assistance Agreement only as specified in 2 CFR 200.339 and the version of 2 CFR 200.340 effective as of October 1, 2024, when the noncompliance with the terms and conditions is substantial such that effective performance of the Assistance Agreement is materially impaired or there is adequate evidence of waste, fraud, or abuse, prompting adverse action by EPA per 2 CFR 200.339, through either a partial or full termination. If EPA partially or fully terminates the Assistance Agreement, EPA must (1) de-obligate uncommitted funds and re-obligate them to another Eligible Recipient to effectuate the objectives of Section 137(c) of the Clean Air Act, 42 USC § 7437(c) within 90 days of the de-obligation and (2) amend the Recipient's Assistance Agreement to reflect the reduced amount, based on the de-obligation. In accordance with 2 CFR 200.341, EPA will provide the Recipient notice of termination.

END OF DOCUMENT