



Federal Aviation Administration

Memorandum

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To: Office of Airports Regional Directors, AXX-600s
Regional Airport Planning & Programming Branch Managers, AXX-610s
Airports District Office Managers, XXX-ADOs

From: Robert Craven, Director, Office of Airport Planning and Programming, APP-1

Subject: Reauthorization Program Guidance Letter (R-PGL) 19-05: ZEV, VALE, and Energy Efficiency Programs

This Reauthorization Program Guidance Letter (R-PGL) 19-05 explains and implements provisions in the FAA Reauthorization Act of 2018 (the 2018 Act) (P.L. 115-254) impacting airport zero emissions vehicle (ZEV) programs, the Voluntary Airport Low Emissions (VALE) Program, and airport energy efficiency programs under 49 U.S.C. Chapter 471 (the primary statutory provision governing the Airport Improvement Program [AIP]). This R-PGL is directed to Office of Airports' staff for the purpose of helping them implement statutory changes. This R-PGL is not legally binding in its own right and will not be relied upon by the FAA as a separate basis for affirmative enforcement action or other administrative penalty.

This PGL includes analyses and implementation strategies for the following topics and bill sections:

Bill Section(s)	Topic	49 USC Section(s) impacted
165(1)(A)	Amendments to Definitions: VALE projects	47102(3)(K), (L)
165(1)(B)	Amendments to Definitions: VALE vehicles and equipment	47102(3)(K), (L)
165(1)(C)	Amendments to Definitions: ZEV eligibility	47102(3)(Q)
171	Funding Eligibility for Airport Energy Efficiency Assessments	47140 (as re-designated)
192	ZEV Vehicles and Technology	47136 (as re-designated)

Section 165(1)(A), Amendments to Definitions: VALE projects.

Section 165(1)(A) amends a subparagraph included under the definition of airport development in 49 U.S.C. § 47102, *Definitions*. Subparagraph (3)(K), which describes projects to construct or modify airport facilities to provide low-emission fuel systems, gate electrification, and other air quality improvements at a commercial service airport (commonly referred to as VALE projects), is now conditioned upon the airport being able to receive Airport Emission Reduction Credits (AERCs). In the past, VALE project eligibility was conditioned upon the airport actually receiving AERCs.

Moving forward:

Airport sponsors will still be required to apply to their state for a determination on their project's AERC eligibility. The FAA will work with the U.S. Environmental Protection Agency to update VALE Program guidance to reflect the change.

Guidance and Tools:

The FAA will update the VALE Technical Report to reflect that actual receipt of AERCs is no longer required. Changes to the current version of the AIP Handbook (FAA Order 5100.38D, Change 1) for both VALE provisions in section 165(1)(A) and 165(1)(B) are described later in this R-PGL.

Section 165(1)(B), Amendments to Definitions: VALE vehicles and equipment.

Section 165(1)(B) amends a subparagraph included under the definition of airport development in 49 U.S.C. § 47102, *Definitions*. Subparagraph (L), which describes projects at commercial service airports in air quality nonattainment or maintenance areas that result in the airport acquiring airport-owned vehicles or ground support equipment equipped with low-emission technology (commonly referred to VALE vehicles and equipment), is amended to refine where and how vehicles and equipment may be used. The amended definition continues to permit the use of VALE vehicles on-airport and specifies allowable off-airport uses. Allowable off-airport uses are for transportation of passengers and employees between the airport and an airport sponsor's consolidated rental car facilities, or an intermodal surface transportation facility adjacent to the airport.

Moving forward:

The change in the statute now specifies the allowable off-airport uses for certain VALE vehicle projects. This statutory change will not result in significant changes to the VALE Program because a vehicle that previously required intermittent travel outside the airport boundary could still be an "airport-dedicated" vehicle and therefore, eligible for a VALE grant ("airport-dedicated" is defined in the VALE Technical Report).

Guidance and Tools:

The FAA will update the VALE Technical Report and the special conditions for VALE grants to specify the allowable off-airport uses for VALE vehicles. Changes to the current version of the AIP Handbook to reflect both VALE provisions in section 165(1)(A) and 165(1)(B) will be as follows:

1. Paragraph 6-53 of the AIP Handbook, FAA Order 5300.38D, Change 1 is revised to read:

“Section 165 of the 2018 FAA Reauthorization eliminated the requirement in 49 U.S.C. § 47102(3)(K) that a sponsor receive the appropriate emissions credits described in 49 U.S.C. § 47139. That requirement has been replaced with a requirement that the airport demonstrate they would be able to receive emission credits (instead of needing to have credits in hand).

“Section 165 of the 2018 FAA Reauthorization (P.L.115-254), specifies off-airport use of VALE vehicles is exclusively for the transportation of passengers and employees between the airport and the airport’s consolidated rental car facility or an intermodal surface transportation facility adjacent to the airport.”

2. Appendix S, Line K is changed as follows:

Table -1 Environmental Planning/Mitigation Project Requirements

What Can Be Done If Justified	Factors to Consider For Justification and Eligibility	Required Usable Unit of Work and Required Outcome	Work Code*
k. Voluntary Airport Low Emissions (VALE) Infrastructure	(1) The ADO must coordinate all proposed projects with APP-400 and receive their approval for the project prior to programming the grant. (2) The airport must be a commercial service airport. (3) The vehicle must be equipped with low-emission technology. (4) The airport must be able to receive appropriate airport emission reduction credits. (5) A large volume of guidance on this subject is available at the Airports Organization website. (6) Terminal gate air conditioning, heating, and electric power is	A fully functional VALE infrastructure.	EN EQ MS

Table -1 Environmental Planning/Mitigation Project Requirements

What Can Be Done If Justified	Factors to Consider For Justification and Eligibility	Required Usable Unit of Work and Required Outcome	Work Code*
	eligible as terminal development outside of the VALE program and does not require the airport to be in a nonattainment or maintenance area per 49 U.S.C. § 47102(3)(O). If the work is not approved under VALE, the ADO must code this work as terminal development and follow the terminal development requirements in Appendix N.		

4. Appendix S, Line l is replaced as follows:

Table -2 Environmental Planning/Mitigation Project Requirements

What Can Be Done If Justified	Factors to Consider For Justification and Eligibility	Required Usable Unit of Work and Required Outcome	Work Code*
I. VALE Vehicle	(1) The ADO must coordinate all proposed projects with APP-400 and receive their approval for the project prior to programming the grant. (2) The airport must be a commercial service airport. (3) The vehicle must be equipped with low-emission technology. (4) The airport must be able to receive appropriate airport emission reduction credits. (5) The vehicle must be: (a) Used exclusively on airport property; or (b) Used exclusively to transport passengers and employees between the airport and the	A fully functional VALE vehicle.	EN EQ MS

Table -2 Environmental Planning/Mitigation Project Requirements

What Can Be Done If Justified	Factors to Consider For Justification and Eligibility	Required Usable Unit of Work and Required Outcome	Work Code*
	airport's consolidated rental car facility, or an intermodal surface transportation facility adjacent to the airport. (6) A large volume of guidance on this subject is available at the Airports Organization website.		

Section 165(1)(C), Amendments to Definitions: ZEV eligibility.

Section 165(1)(C) adds a new subparagraph under the definition of airport development in 49 U.S.C. § 47102, *Definitions*. Subparagraph (Q) defines airport development to include converting or retrofitting of vehicles and ground support equipment (as defined in newly redesignated 49 U.S.C. § 47136) to zero emissions and for acquiring, by purchase or lease, eligible zero emission vehicles and equipment (commonly referred to as Airport ZEV Program projects). Previously, funding for ZEV projects was limited to participants in the Airport ZEV and Infrastructure Pilot Program. The new definition requires these projects conform to the provisions set forth in § 47136, which was modified by Section 192, as explained later in this document.

Moving forward:

The FAA will permit eligible airport sponsors to request AIP funding for ZEV projects. Eligible ZEV vehicles and equipment may be purchased or leased.

Grant funding of leased equipment follows the requirements in 2 CFR part 200. Additional clarifying information will be provided in a new paragraph in the AIP Handbook. The new paragraph on leasing Zero Emissions equipment will follow the paragraph in the AIP Handbook entitled *Equipment Leasing (instead of Purchase) Costs*.

Guidance and Tools:

To implement Subparagraph Q, the FAA will update its Airport ZEV and Infrastructure Pilot Program Technical Guidance and the current version of the AIP Handbook.

Section 171, Funding Eligibility for Airport Energy Efficiency Assessments.

Section 171 amends newly redesignated 49 U.S.C. § 47140, *Increasing the energy efficiency of airport power sources*, in two ways. First, it amends paragraph (a) to permit AIP funds to be

used to reimburse an airport sponsor for the cost of conducting an assessment of the airport's energy needs to identify opportunities to increase energy efficiency at the airport.¹ Second, it amends paragraph (b) to require the airport sponsor to submit, with its AIP grant application, a certification stating that no safety projects are being deferred by the airport sponsor's request to use AIP funding for an energy assessment.

Moving forward:

The grant process for airport energy efficiency assessments will, for the most part, remain the same. This is because the FAA initially implemented airport energy efficiency assessment grants with the assumption that the costs of an assessment could either be funded through AIP in advance or reimbursed (provided the sponsor prepared the assessment in accordance with the statutory requirements for energy assessments in Section 47140(a)-(b) and FAA grant requirements). Therefore, with the exception of a separate certification process to be incorporated into the grant application package, the FAA will continue this practice. The 2018 Act expanded the eligible energy projects under this provision (see R-PGL-02 for those projects), but the grant process remains the same. Because energy assessments and projects are not eligible for set-aside funding, airport sponsors typically seek AIP funding for them when higher priority AIP-eligible and justified needs are addressed.

If the sponsor is requesting a grant under Section 47140 for eligible costs not yet incurred, the RO/ADO should include the following special condition in the grant agreement:

Airport Energy Efficiency Assessment. *The Sponsor certifies that it is not deferring any safety project on its airport capital plan, as prescribed by 49 U.S.C. 47140(b)(2) and that it has no knowledge of safety projects not identified on its capital plan for the fiscal year for which the assessment is being conducted. The Sponsor understands that it may not seek any subsequent AIP grant funds for any safety project initiated in the same fiscal year which this grant is issued.*

If the sponsor is requesting a grant under Section 47140 for eligible costs previously incurred for reimbursement, the RO/ADO should include the following special condition in the grant agreement:

Airport Energy Efficiency Assessment. *The sponsor certifies that it did not defer any safety projects to conduct eligible aspects of this assessment, as prescribed by 49 U.S.C. 47140(b)(2)...The Sponsor understands that it may not seek any subsequent AIP grant funds for any safety project initiated in the same fiscal year which this grant is issued.*

All other project eligibility, justifications, and outcomes currently explained in Appendix S of the AIP Handbook (FAA Order 5100.38D, Change 1), amended herein, remain applicable.

¹ Congress initially referred to airport energy efficiency assessments in the FAA Modernization and Reform Act of 2012 (FMRA).

Guidance and Tools:

The FAA will update the current version of the AIP Handbook to reflect this change. The FAA has updated its grant system (SOAR) to reflect the special conditions prescribed above.

Section 192, ZEV Vehicles and Technology.

Section 192 amends newly redesignated 49 U.S.C. § 47136, *Zero-emission airport vehicles and infrastructure*, in two ways. First, it modifies the AIP pilot program for ZEV, ZEV equipment, and ZEV infrastructure activities (commonly referred to as Airport ZEV Program projects). Second, it creates a zero emission airport technology program.

The Airport ZEV Program now:

- Provides AIP grants to airport sponsors for activities associated with the acquisition, by purchase or lease, and operation of eligible ZEV and equipment. Eligible equipment includes removable power sources for vehicles. Eligible construction or modification of infrastructure facilitates the delivery of fuel, power, or services necessary for the use of such vehicles.
- Allows program participants to utilize separate transactions for the vehicle purchase (or lease) and its removable power source purchase (or lease).
- Requires any vehicle funded under this program to be tested by a Federal vehicle testing facility acceptable by the Secretary. Sponsors must certify their compliance with this provision.
- Limits the use of ZEV vehicles to on-airport property, but permits limited off-airport use. Off-airport use is limited to transporting passengers and employees to nearby facilities owned or controlled by the airport, or which directly support the functions or services provided by the airport, and intermodal surface transportation facilities adjacent to the airport.
- Requires FAA to give priority consideration to applicants that will achieve the greatest air quality benefits measured by the amount of emissions reduced per dollar of funds expended.
- Sets the federal grant share to that of other AIP projects (per 49 U.S.C. §47109).
- Limits the combined amount of funding for technical assistance and project management to up to 10% of the grant. Technical assistance and project management support may be provided by a nonprofit selected by the Secretary or by a university transportation center receiving grants under 49 U.S.C. § 5505 in the region of the airport.
- Provides specific definitions for eligible zero emission vehicle and equipment, removable power source, and zero emission vehicle.

- Permits the FAA to create and make available materials identifying best practices, based on previous ZEV-related projects, for carrying out ZEV activities funded under the program.

The new Zero Emission Airport Technology Program:

- Facilitates the deployment of commercially viable zero emission airport vehicles, technology, and related infrastructure by permitting the FAA to provide assistance, on a competitive basis, to no more than three geographically diverse organizations to conduct zero emission airport technology and infrastructure projects. The assistance may be in the form of grants, contracts, and cooperative agreements.
- FAA must consider the applicants' ability to contribute significantly to deploying airport operations related zero emission technology, the financing plan and cost-share potential, and other factors deemed appropriate. Priority consideration must be given to applicants that have successfully managed advanced transportation technology projects.
- The federal share of the cost of a project carried out under this program may not exceed 80 percent.

Moving forward:

Section 192 results in several alterations to the Airport ZEV Program:

- The FAA will no longer be required to prioritize projects in nonattainment areas. The FAA will instead give priority consideration to those projects that deliver the most cost-effective emissions reduction.
- Airport sponsors will be permitted to lease vehicles. Airport sponsors were previously required to purchase the vehicles.
- Airport sponsors may separate the purchase or lease of the vehicle from its power source. This will allow a possible path to Buy American compliance. The Airport Improvement Program Branch (APP-520) is responsible for Buy American processing for the power source.
- There are both expansions and limits to off-airport use. The word "exclusive" is tied to nearby facilities owned or controlled by the airport, or directly supporting the functions or services provided by the airport, and intermodal surface transportation facilities adjacent to the airport.
- Federal participation is no longer restricted to 50%. It is now aligned with AIP-funded levels for projects.
- Project management and technical assistance are combined and limited to 10% of the grant.

- Both non-profits and University Transportation Centers are able to provide technical assistance and project management support to assist airports with solicitation, acquisition, and deployment of ZEV, related equipment, and supporting infrastructure.
- The legislation requires vehicles be tested by a Federal Vehicle testing facility. To ensure compliance with this requirement, the FAA will advise sponsors to submit certification results from a Federal Vehicle testing facility with their grant application.

Section 192 also requires the creation of a new program for zero emission technology for a limited number of projects.

Guidance and Tools:

The FAA will update its Airport ZEV Program Technical Guidance to reflect changes to the program. The APP-520 Buy American program manager will advise Regional Airports Divisions/ADOs of the progress of the power source waiver. In a future FY, the Airport Planning and Environmental Division (APP-400) will establish the Airport Zero Emissions Technology Program and solicit nominations from airport sponsors through the Regional Airports Divisions/ADOs.