Electrify America’s
California ZEV Investment Plan - Cycle 2

November 16, 2018
Presentation Outline

• Background
  • The 2.0-liter Consent Decree
  • The ZEV Investment Commitment
  • The Cycle 1 ZEV Investment Plan
• Cycle 1 Progress to Date
• The proposed Cycle 2 ZEV Investment Plan
• Cycle 2 Plan Assessment
• Public Comments
• Ongoing Oversight and Coordination
• Staff Recommendation
Background – The 2.0-liter Consent Decree

- Settlement between CARB, U.S. EPA, and VW
- Resolves Clean Air Act and California claims resulting from VW’s use of illegal defeat devices
- Part Punitive:
  - Appendices A & B prescribe repair and buyback
  - Appendix D is the $422M NOx Mitigation Trust
- Part Injunctive Relief:
  - Appendix C is the ZEV Investment Commitment
  - It addresses the impact to California’s ZEV market from VW’s “clean diesel” vehicles
Background –
The ZEV Investment Commitment

• Invests $800 million in California
• Four 30-month, $200 million investment plans
• Allowable expenditures include
  • ZEV infrastructure
  • ZEV awareness
  • Increased ZEV access (including Green Cities)
Background –
The Cycle 1 ZEV Investment Plan

• Approved by the Board on July 27, 2017
• Commits:
  • $120M to highway and metro area infrastructure
  • $44M to ZEV Access through 1st Green City
  • $20M to ZEV Awareness
  • $16M to allowable operational expenses
• Electrify America has established strong foundations
  • Contracts with partners and service providers
  • Connections with government, municipal, and community organizations
Cycle 1 Progress to Date

- **Site Leased or Licensed**: 110
- **Preliminary Design Submitted**: 71
- **In Permitting**: 63
- **Permit Received or in construction**: 19
- **Site work complete**: 5

**Percentage in a Disadvantaged or Low-income Community**

- **50%**
- **51%**
- **54%**
- **58%**
- **60%**

*All data as of November 5, 2018*
Cycle 1 Progress to Date

- ~600 DCFC ordered; 9 delivered
- 64 Level 2 sites acquired
- 3 operational; 2 in disadvantaged communities
- Green City
  - GIG - Car share permits approved; 260 Chevy Bolt EVs
  - Envoy – 30 L2 locations signed; first L2 unit installed
  - 12 Charging site leases signed
- Media campaign and website up; targeted to almost 4,000 DAC census tracts
The proposed Cycle 2 ZEV Investment Plan

$153M to fueling infrastructure
$17M for ZEV awareness and education
$10M for efforts to drive station utilization, and
$20M for allowable operational expenses

$200M total

Note: Approximate values shown here for simplicity
Cycle 2 Infrastructure - Metro Areas

- $95-115M
- 6 existing metro areas
  - Fresno
  - Los Angeles
  - Sacramento
  - San Diego
  - San Francisco
  - San Jose
- 3 new metro areas
  - Riverside
  - Santa Cruz
  - Santa Rosa

Source: Electrify America proposed Cycle 2 ZEV Investment Plan
Cycle 2 Infrastructure - Regional Routes

• $25-30M
• Increase density along high PEV travel routes

Source: Electrify America proposed Cycle 2 ZEV Investment Plan
Cycle 2 Infrastructure - Other Investments

- $8-12M - residential Level 2
- $4-6M - electrified transit bus
- $2-4M - autonomous vehicle
- $2M - rural Level 2 charging
- Up to $5M for renewable generation

Source: https://www.proterra.com/technology/chargers/
Cycle 2 Contribution to the 2025 Infrastructure Vision

- 1.5 Million ZEVs will need ~ 250,000 EVSEs
- $1B Investor-owned utilities portfolio
- Cycle 1 & 2 represent just over 2 percent of the total

![Pie chart showing contributions to VW Investments, Installed, Planned Installations, and Remaining Gap.](chart)
Cycle 2 Contribution to the 2030 Infrastructure Vision

• Cycle 1 & 2 represent less than 1 percent of the total 2030 projection
• Infrastructure gap grows from 46 to 86 percent
Cycle 2 ZEV Awareness and Education

- $17M
  Increase public awareness via traditional and social media

- $10M
  Communicate charger locations, speeds, payment methods and amenities to drive station utilization

Source: Adapted from Electrify America JetStones ad campaign
Cycle 2 Plan Assessment
2.0-liter Consent Decree requirements

- A description of all ZEV investments
  - Should serve diverse regions and communities
  - Should describe how they will be monitored/maintained
  - ZEV Infrastructure must be non-proprietary
  - ZEV Awareness campaigns must be brand neutral
- An explanation of how each investment meets one or more identified goals
- An estimated schedule in 6-month intervals
- A projection of anticipated Creditable Costs
  - Itemized $200 million 30-month investment
Cycle 2 Plan Assessment
Senate Bill 92

• Cycle 2 Plan will be:
  • Posted for public comment;
  • Approved by the Board at a public hearing
• Electrify America will report progress to CARB
• CARB will:
  • Report annually to the Legislature
  • Strive to ensure 35% investment in low-income or disadvantaged communities
Cycle 2 Plan Assessment
Board Resolution 17-23

- Strive to ensure that at least 35% of Cycle 2 Plan benefits low-income and disadvantaged communities
- Include evaluation of heavy-duty hydrogen opportunities
- Include job creation/training estimates
- Implement projects fairly and transparently
- Execute projects in a manner that ensures investments are self-sustaining and continue after 10-year investment period
Cycle 2 Plan Assessment

Conclusion

Electrify America’s proposed Cycle 2 Plan meets the requirements of:

- The 2.0-liter Consent Decree;
- Senate Bill 92; and
- CARB’s Board Resolution17-23
Public Comments

• Support for Plan
• Requests for greater spending on:
  • Transit
  • Renewables
  • Rural and disadvantaged communities
• Request to make public both decision metrics and data
• Reconsider regional infrastructure siting
Ongoing Oversight and Coordination

• Electrify America will
  • Meet monthly with CARB staff, and
  • provide it with quarterly & annual public reports
• CARB will report annually to the Legislature
• EV Charger Planning Coordination
• Annual independent third party auditor reports
Benefits to California

• Contribution to California’s 2025 & 2030 infrastructure goals
• Signals improved infrastructure availability and public awareness to support ZEV market development
• Helps transform California’s vehicle market, and economy through increased ZEV adoption
• Promotes California’s climate strategy and improves public health for all
• Benefits disadvantaged and low income communities
• Drives industry competition, builds industry labor pool
CARB Staff Recommendation to the Board

CARB staff recommends that the Board adopt Resolution 18-54

- Approves Electrify America’s Cycle 2 ZEV Investment Plan
- Allows continued investments without spending delays.