

Indiana Volkswagen Environmental Mitigation Trust Fund Committee Meeting

- I. Welcome - Chair, Beverly Gard
- II. Call to Order - Chair, Beverly Gard
- III. Round 1 Onroad-Nonroad Project Implementation
 - A. Status Report - IDEM
- IV. DERA Option Applications
 - A. Overview of Scoring – IDEM
 - B. Project Award Recommendations – IDEM
 - C. Committee Discussion and Action - Committee
- V. Electric Vehicle Charging Infrastructure Request for Proposals
 - A. Overview of Workshop and Stakeholder Input – IDEM
 - B. Identification of Goals and Objectives for Infrastructure Investment – IDEM
-Discussion and Action - Committee
 - C. Outline of Key Decision Points and Considerations – IDEM
-Discussion and Action - Committee
- VI. Round 2 Onroad-Nonroad RFP
 - A. Overview of Refinements to RFP and Scoring Criteria – IDEM
 - B. Direction on Path Forward - Committee
- VII. 2020 In Perspective
 - A. Schedule of Milestones - IDEM
 - B. Preliminary Meeting Schedule - IDEM
- VIII. Public comment - Open floor for stakeholders
- IX. Closing remarks – Chair, Beverly Gard
- X. Adjournment



Indiana Volkswagen Environmental Mitigation Trust Program

*Round 1 Update, DERA Option, Electric Vehicle
Charging Infrastructure, Round 2 Refinements,
and Program Next Steps*

January 31, 2020



Round 1

Onroad-Nonroad Projects Update



Round 1 Onroad and Nonroad Project Implementation

- 34 projects awarded
 - 4 electric school bus projects underway and on schedule
 - 12 nonelectric school bus projects underway and on schedule (4 diesel, 8 propane)
 - 1 propane project reimbursement request from Trustee underway
 - 4 nonroad equipment and vehicle projects underway and on schedule (1 diesel, 3 electric)
 - 1 regional haul project underway and on schedule (CNG)
 - 3 transit bus projects underway (1 CNG, 2 electric)
 - CNG project on schedule
 - Electric projects potentially delayed
 - 7 short haul/drayage projects underway and on schedule (4 diesel, 2 CNG, 1 electric)
 - 1 diesel project reimbursement request from Trustee underway
 - 3 refuse hauler projects underway and on schedule (CNG)
- Total vehicles funded: 179
- Total project costs: \$31,012,421
- Total Indiana VW award support: \$9,830,683



Round 1

DERA Option Applications

Overview of Scoring

- 5 applications received
 - 1 switcher locomotive to electric alternative
 - 1 diesel landfill compactor to clean-diesel alternative (2 units)
 - 2 diesel terminal trucks to electric alternatives
 - 1 diesel front end loader to clean-diesel alternative
- Each application reviewed for eligibility
 - Outstanding questions on one application
- Each application's cost effectiveness and total NOx emission reductions were calculated using U.S. EPA's Diesel Emission Quantifier
- Each application scored by 3 technical staff making up the review team using VW Committee-approved criteria

Round 1 Application Considerations

- A total of \$1,800,000 was made available for Round 1 of the DERA Option Program
- A total of \$1,311,298 was requested from Round 1 of the DERA Option Program
- Remaining DERA Option funding should be rolled into DERA Option Round 2 after RFP refinements
- Although IDEM received only 5 applications in Round 1, all are quality projects with notable emission reduction potential, for example:
 - NO_x reductions from 1 diesel-to-diesel compactor would require replacement of 13 diesel-to-propane school buses
 - Diesel-to-diesel compactor is 38% more cost-effective than a diesel-to-propane school bus

Round 1 Application Considerations

- Several reasons have been communicated for why the number of applications was lower than expected
 - Wanted to compare Round 1 Volkswagen and Round 1 DERA Option in relation to technology options and competition before proceeding in future rounds
 - Waiting to see what others in their industries are doing to determine technology options
 - Timing around holidays made contact between vendors, staff, decision-makers, and consultants difficult for approvals to move forward
 - Weather was good and physical port activities were priority over administrative priorities
 - Several interested applicants did not place matching funds into their 2019 budgets; likely have for 2020



Round 1 DERA Option Award Recommendations

Applicant	Project County	Project Type	Funding Request	Applicant Match
Steel Dynamics, Inc.	Hendricks	Diesel to Electric Terminal Truck	\$143,944	55%
Ruan Transport Corporation	Newton	Diesel to Electric Terminal Truck	\$150,242	55%
South Side Landfill, Inc.	Marion	Diesel to Clean-Diesel Landfill Compactors (2)	\$455,000	75%
Frick Services, Inc.	Porter	Diesel to Clean-Diesel Front End Loader	\$89,612	75%
ArcelorMittal Burns Harbor	Porter	Diesel Switcher Locomotive to Electric Shuttlewagon	\$472,500	55%
TOTAL			\$1,311,298	



Electric Vehicle Charging Infrastructure RFP

Background and Workshop

- Indiana's Beneficiary Mitigation Plan (BMP) includes the maximum 15% allotment of our funding to light-duty electric vehicle charging equipment (\$6.14 million)
- This funding can be used for Direct-Current Fast Charger (DCFC) or Level 2 (L2) charging equipment
- To gather relevant and detailed information on the development of a statewide EV charging network for Indiana, the EV Charging Infrastructure Workshop was held on October 8, 2019 with panelists that included:
 - Electrify America with an update on the current network and future plans
 - EV manufacturers including General Motors, Subaru, and Cummins
 - Insight on EV implementation strategies from South Shore Clean Cities, Ohio EPA, and Argonne National Lab
 - EV charging equipment manufacturers and users including ChargePoint, Greenlots, and the City of Bloomington
 - Infrastructure development insight from NIPSCO, Duke Energy, and Wabash Valley Power Alliance
- Roughly 75 interested parties attended the EV Charging Infrastructure Workshop

Request for Information

- On December 12, 2019, IDEM posted a Request for Information (RFI) to obtain stakeholder input to help guide the development of the Indiana EV Charging Infrastructure Program and the associated Request for Proposals (RFP)
- In this RFI, IDEM posed seven key questions for stakeholder consideration and input:
 1. Should DCFC or L2 be the higher priority?
 2. Should we fund at highest level permitted under Appendix D-2 of the national consent decree, or work to leverage where possible public and private funds?
 3. Should EV chargers be installed where the EVs are currently registered or based on maximum distance between charging locations?
 4. Should priority be DCFC along interstates and highways or L2 at workplace, shopping, destination, and multi-unit housing locations?
 5. How should total funding be split (if at all) between DCFC and L2 (i.e., 60% for DCFC and 40% for L2)?
 6. How many rounds of funding should Indiana make available and how might Indiana split those funds (i.e., Round 1: 40% for L2, followed by Round 2: 60% for DCFC)?
 7. Several questions intended to gather information from current EV drivers as well as those who are considering a move to an EV

Stakeholder Input in Response to Request for Information

IDEM received 30 unique comment submissions with the following considerations:

- Wide support for statewide Direct-Current Fast Charger (DCFC) network
 - Located 50 – 100 miles apart
 - Reliable and redundant (multiple charging ports and types at each location)
 - Serves greatest number of EV drivers (urban, rural, apartment dwellers)
 - Should focus on statewide network as opposed to where EVs are located
 - Determine DCFC network needed, then allot that amount of funding to it
- Support for Level 2 (L2) charging
 - Need both for comprehensive program
- Funding split between DCFC and L2
 - Ranged from 40% DCFC and 60% L2 to 100% DCFC
- Rounds of Funding
 - One round for 100% DCFC (majority of DCFC comments supported one round)
 - If one round of funding, provide ample time to applicants to respond to RFP
 - Support also existed for multiple rounds of funding with a possible higher funding amount in later years to allow for technology costs to lower



Goals, Objectives, and RFP Development for EV Infrastructure Investment Discussion and Committee Action

Goals and Objectives for EV Infrastructure Investment

In developing the Indiana EV Charging Infrastructure Program and RFP, Indiana should strive for the following goals and objectives:

- To develop a statewide EV charging network that provides EV charging locations to the greatest number of citizens
- To create a diverse statewide network that meets the needs of Indiana citizens using both DCFC and L2 charging equipment
- To implement a program that is reliable through multiple charging stations at each location
- To maximize the available funds of \$6.14 million (achieve greatest bang for the buck)
- To maximize leveraging of public and private where possible to obtain the greatest number of charging locations possible



Key Decision Points and Considerations for EV Infrastructure Investment Discussion and Committee Action

Key Decision Points and Considerations for EV Infrastructure Investment

1. Should EV chargers be installed where the EVs are currently registered or based on maximum distance between charging locations?
 - a. Focusing on areas of EV registrations better supports and could grow current demand, while focusing on distance between creates better statewide network
2. Should priority be DCFC along interstates and highways or L2 at workplace, shopping, destination, and multi-unit housing locations?
 - a. Interstate and highway priority focuses on longer distance travelers, while L2 in these locations prioritizes local EV users
3. How should total funding be split (if at all) between DCFC and L2 (i.e., 60% for DCFC and 40% for L2)?
 - a. Based on current estimates, a \$200,000 investment would cover the cost of one (1) DCFC or the cost of twenty (20) L2 chargers
4. How many rounds of funding should Indiana make available and how might Indiana split those funds (i.e., Round 1: 40% for L2, followed by Round 2: 60% for DCFC)?
 - a. One round gets projects underway as quickly as possible, while multiple rounds provide opportunity for costs savings as installation and technology costs decrease over time



Round 2

Onroad and Nonroad RFP

Overview of Recommended Refinements

Indiana has now completed Round 1 funding for both the Volkswagen Onroad and Nonroad as well as the DERA Option programs. IDEM is always looking for ways to improve programs and the following are recommended revisions for Round 2 funding:

- Remove points for Indiana business and MBE/WBE/VBE applicants and redistribute to transformational potential and leveraging of resources (these points had little impact in scoring or separating projects)
- Clarify that applications will not be considered if not fully funded and shovel-ready (several current projects are delayed due to contingent funding from 3rd parties)
- Require 1,000 operating hour requirement for only switcher locomotives and not nonroad and marine equipment (this is consistent with Appendix D-2 and was a limiting factor in both RFPs)
- When EPA's Diesel Emission Quantifier does not have default values, general business practices or industry averages will be used in emission reduction calculations
- Only allow diesel-to-diesel projects for certain types of onroad vehicles (diesel-to-diesel projects should focus on most locally impactful vehicles such as school buses and refuse haulers)



Overview of Recommended Refinements Discussion and Committee Action



2020 in Perspective



2020 Schedule of Milestones

Milestone	Estimated Completion	Volkswagen Committee Involvement
Round 2 Onroad and Nonroad RFP posted (60 days)	February/March 2020	NA
Round 2 Onroad and Nonroad awards announced	May/June 2020	Review and/or Approve
EV Infrastructure RFP (180 days)	March/April 2020	NA
EV Infrastructure awards announced	October/November 2020	Review and/or Approve
Round 2 DERA Option RFP posted (60 days)	September 2020	NA
Round 2 DERA Option RFP awards announced	December 2020	Review and/or Approve



2020 Preliminary Meeting Schedule

Related Program	Potential Meeting Date	Volkswagen Committee Involvement
EV Infrastructure RFP	March/April 2020	Review and/or Approve
Round 2 Onroad and Nonroad awards	May/June 2020	Review and/or Approve
EV Infrastructure awards	October/November 2020	Review and/or Approve
Round 2 DERA Option awards	December 2020	Review and/or Approve



Opportunity for Committee to Seek Input or Public Comments from Attendees

For More Information

Indiana Volkswagen Mitigation Trust Program website:

www.idem.IN.gov/vwtrust

For program assistance:

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