

#### RHODE ISLAND

#### DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

#### **OFFICE OF AIR RESOURCES**

235 Promenade Street Providence, Rhode Island 02908

November 15, 2018

VW Diesel Emissions Environmental Mitigation Trust for State Beneficiaries, PR and DC Mr. Russell Crane, 5th Floor c/o Wilmington Trust, N.A. as Trustee Rodney Square North 110 North Market Street Wilmington, Delaware 19890

Re: State of Rhode Island VW Settlement 1st Funding Request - Revision

Dear Mr. Crane,

Please find enclosed the State of Rhode Island's First Funding Request Revision for the VW Settlement. In response to the review completed by Wilmington Trust, DEM made the following revisions:

- Signature added to certifications (pg. 4);
- Signature added to both page 6 inclusions in Attachment A;
- Corrected Bank Routing Number provided for RIPTA and;
- Corrected Bank Routing Number provided for DEM

The revised documentation was submitted through the Intralinks portal this afternoon.

Please feel free to contact me at 401-222-2808 ext. 7143 or by email at laurie.grandchamp@dem.ri.gov if you have any questions.

Sincerely,

Laurie Grandchamp, P.E. Chief

Office of Air Resources

APPENDIX D-4
Beneficiary Eligible Mitigation Action Certification

#### BENEFICIARY ELIGIBLE MITIGATION ACTION CERTIFICATION

Beneficiary State of Rhode Island	· · · · · · · · · · · · · · · · · · ·
(Any authorized person with	cy Authorized to Act on Behalf of the Beneficiary Department of Environmental Management rized person with delegation of such authority to direct the Trustee delivered to the resuant to a Delegation of Authority and Certificate of Incumbency)  de:  Public Transit Bus Replacement Project  y's Project ID:  3765111  Request No.  (sequential) 1  ype:  Other (specify):  Other (specify):  Other (specify):  Other (specify):  Other (specify):  Attached to this Certification  Other (specify):  Action 2-Public Transit Bus Replacement Project & Administrative Costs  (Attachment A)  SUMMARY  SUMMARY  Action Action  Appendix D-2 item (specify): Action 2-Public Transit Bus Replacement Project & Administrative Costs  Item 10 - DERA Option (5.2.12) (specify and attach DERA Proposal):  of Rhode Island's BMP, this funding request fits into Beneficiary's Mitigation Plan (5.2.1):  of Rhode Island's BMP, this funding request fits into Beneficiary's Mitigation Plan (5.2.1):  to distribute approximately \$10M to fund the replacement of approximately 2D disease powered (MY200) wintage or earlier) class 4-8 transit buses with new all-electric iss. The project will be implemented in 3-phases as outlined in the BMP. These buses will run on various routes throughout the state. Enhanced service on these
Action Title:	Public Transit Bus Replacement Project
Beneficiary's Project ID:	
Funding Request No.	(sequential) 1
Request Type: (select one or more)	■ Reimbursement ■ Advance
Payment to be made to: (select one or more)	
Funding Request & Direction (Attachment A)	
	SUMMARY
· ·	
-	- ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` `
The BMP proposes to distribute approximately \$10 zero-emission vehicles. The project will be implement	M to fund the replacement of approximately 20 diesel powered (MY2009 vintage or earlier) class 4-8 transit buses with new all-electric ented in 3 phases as outlined in the BMP. These buses will run on various routes throughout the state. Enhanced service on these prospects of these environmentally and economically disadvantaged communities. The estimated lifetime emission reductions are (in
_	
Identification of Government Mitigation Action Funds to E	al Entity Responsible for Reviewing and Auditing Expenditures of Eligible nsure Compliance with Applicable Law (5.2.7.1):
Describe how the Beneficiary	will make documentation publicly available (5.2.7.2).
Please refer to attached pa	age titled "Attachment for 5.2.7.2" of this submittal for this description.
Consolidated Budget for RIPTA: R Total Budget funded by the Trust: \$	RIPTA Operating Funds(\$184,200); State Funds(\$2,161,810); Federal Funds (\$9,384,040); \$11,774,323 (Equipment: \$10,697,115 + Admin: \$1,077,208)
Describe how the Beneficiary Agencies (5.2.9).	complied with subparagraph 4.2.8, related to notice to U.S. Government
DEM sent emails to the representatives from the U.S. D	epartment of the Interior and the U.S. Department of Agriculture listed in subparagraph 4.2.8 of the State Trust Agreement on February 28, 2018.

If applicable, describe how the mitigation action will mitigate the impacts of NOx emissions on communities that have historically borne a disproportionate share of the adverse impacts of such emissions (5.2.10).

Please refer to attached page titled "Attachment for 5.2.10" of this submittal for this description.

#### ATTACHMENTS (CHECK BOX IF ATTACHED)

Ø	Attachment A	Funding Request and Direction.
☑	Attachment B	Eligible Mitigation Action Management Plan Including Detailed Budget and Implementation and Expenditures Timeline (5.2.4).
Ø	Attachment C	Detailed Plan for Reporting on Eligible Mitigation Action Implementation (5.2.11).
<b>7</b>	Attachment D	Detailed cost estimates from selected or potential vendors for each proposed expenditure exceeding \$25,000 (5.2.6). [Attach only if project involves vendor expenditures exceeding \$25,000.]
	Attachment E	DERA Option (5.2.12). [Attach only if using DERA option.]
	Attachment F	Attachment specifying amount of requested funding to be debited against each beneficiary's allocation (5.2.13). [Attach only if this is a joint application involving multiple beneficiaries.]

#### **CERTIFICATIONS**

By submitting this application, the Lead Agency makes the following certifications:

- 1. This application is submitted on behalf of Beneficiary Rhode Island and the person executing this certification has authority to make this certification on behalf of the Lead Agency and Beneficiary, pursuant to the Certification for Beneficiary Status filed with the Court.
- 2. Beneficiary requests and directs that the Trustee make the payments described in this application and Attachment A to this Form.
- 3. This application contains all information and certifications required by Paragraph 5.2 of the Trust Agreement, and the Trustee may rely on this application, Attachment A, and related certifications in making disbursements of trust funds for the aforementioned Project ID.
- 4. Any vendors were or will be selected in accordance with a jurisdiction's public contracting law as applicable. (5.2.5)
- 5. Beneficiary will maintain and make publicly available all documentation submitted in

support of this funding request and all records supporting all expenditures of eligible mitigation action funds subject to applicable laws governing the publication of confidential business information and personally identifiable information. (5.2.7.2)

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September 7, 2018

Laurie Grandchamp, Chief, Office of Air Resources

[NAME] [TITLE]

Rhode Island Department of Environmental Management

[LEAD AGENCY]

for

Rhode Island

[BENEFICIARY]

Beneficiary: State of Rhode Island Beneficiary's Project ID: 3765111

Lead Agency: Rhode Island Department of Environmental Management Beneficiary Eligible Mitigation Action Certification – Support Documentation

#### ATTACHMENT B

### PROJECT MANAGEMENT PLAN / PROJECT SCHEDULE & MILESTONES

#### Phase I of RIPTA Bus Replacement Project Timeline

Lead Agency= RI Department of Environmental Management (RIDEM)
Project Sponsor= RI Public Transit Authority (RIPTA)
Bold Items are Complete

Date	Activity
2017, Q4	Lead Agency Provides Notice of Availability of Mitigation Action Funds
2018, Q1	Project Sponsor Submits Proposal to Lead Agency
2018, Q2	Lead Agency Incorporates Project Sponsor's Proposal into Mitigation Plan
2018, Q2	Lead Agency Releases Draft Mitigation Plan to the Public
2018, Q3	Lead Agency Submits Final Mitigation Plan to the Trustee
2018, Q3	Lead Agency Enters into MOU with Project Sponsor
2018, Q3	Lead Agency Submits Delegation of Authority – Incumbency and
	Security Procedures Documentation to Trustee
2018, Q3	Lead Agency Submits Funding Request to Trustee
2018, Q3-4	Trustee Acknowledges Receipt of Project Certification and Funding Request
2018, Q3-4	Trustee Directs Funds to Lead Agency & Project Sponsor
2018, Q3-4	Project Sponsor Obtains Cost Share, Notifies or Certifies Lead Agency
2018, Q3-4	Project Sponsor Enters into Contracts, Purchase Orders, etc
2018, Q3-4	Project Installation
2019, Q1	

# MEMORANDUM OF UNDERSTANDING REGARDING THE DISTRIBUTION OF FUNDS FOR THE PROCUREMENT OF ELECTRIC BUSES BY THE RHODE ISLAND PUBLIC TRANSIT AUTHORITY

This Memorandum of Understanding is entered into this day of September, 2018 (the "Agreement") by the Rhode Island Public Transit Authority ("RIPTA") and the Rhode Island Department of Environmental Management ("RIDEM"), which together may be referred to as the "Parties."

#### RECITALS

WHEREAS, through a nationwide settlement with Volkswagen AG, the State of Rhode Island (the "State") has received \$14,368,858 in funds from the Volkswagen Mitigation Trust, which funds must be used for environmental mitigation projects (the "VW Funds");

WHEREAS, the terms for expenditure of the funds is set forth in Rhode Island's Beneficiary Mitigation Plan ("BMP");

RIDEM has been designated as the state lead agency and the administrator of the VW Funds for the State;

WHEREAS, the BMP provides that \$10,776,644 of the VW Funds shall be allocated to RIPTA for the procurement of zero emission electric buses ("ZEV Bus or Buses") and associated charging infrastructure, and for the development and operation of a ZEV Bus fleet in the State of Rhode Island;

WHEREAS, the BMP further provides that no more than \$2,155,329 shall be spent on administrative support for the program;

WHEREAS, the purpose of this Agreement is to set forth the terms and conditions under which RIDEM will provide RIPTA with the foregoing VW Funds, and conditions under which RIPTA will use such funds;

NOW, THEREFORE, in consideration of the foregoing recitals and mutual promises contained in this Agreement, the sufficiency of which is acknowledged, the Parties agree as follows:

#### **PROVISIONS**

1. <u>Project Scope.</u> In accordance with the BMP, and the provisions of this Agreement, RIPTA will procure ZEV Buses and associated charging equipment, and will administer the development and operation of a ZEV Bus fleet in the State of Rhode Island (the "Project"). The Project will commence on July 1, 2018, and be conducted in two phases:

- a. Phase 1. RIPTA will lease (with an option to buy) three ZEV Buses and associated charging equipment for three years. It is anticipated that these three buses and charging equipment will arrive on or about September 15, 2018. During the three-year lease period for these buses, RIPTA will evaluate the efficiency, efficacy, and viability of adding additional ZEV Buses to RIPTA's bus fleet. The information obtained during this evaluation period will be used to develop specifications and plans for the use of additional ZEV Buses. During the first year of the lease period, equipment retrofits and initial testing will be conducted. These buses shall be placed into revenue service by October 1, 2019.
- b. Phase 2. Based on the results of the evaluation conducted in Phase 1, RIPTA may purchase up to 20 additional ZEV Buses and associated charging equipment, and may also invest in utility upgrades necessary to support operation of such buses. Phase 2 work will also include the design, purchase, and installation of electrical charging equipment; purchase of charge-management software; purchase of ZEV Buses; and improvements to RIPTA's vehicle garages in connection with the deployment of ZEV Buses. Phase 2 will commence by September 2019.
- 2. <u>Project Management</u>. RIPTA staff will manage all procurement, administrative, financial, and technical aspects of the Project.
- 3. Funding. RIDEM will direct the Trustee to provide to RIPTA \$10,776,644 for ZEV project funds and between \$1,077,664 and \$1,616,497 for ZEV project related administrative funds. Administrative funds shall be allocated to RIPTA for project management, analysis and testing, personnel training, operating support, ancillary building improvements, and general technical assistance, all of which shall relate to the procurement and operation of ZEV Buses.
- 4. <u>Disbursement of Funds.</u> RIDEM shall direct the Trustee to disburse the VW Funds to RIPTA as follows:
  - a. FY 2019: The State is entitled to request one third (\$4,789,619.33) of total funds during the first year of the program. RIDEM will direct the Trustee to provide to RIPTA \$3,900,000, as documented and requested by RIPTA, which funds RIPTA will use for the leasing of three (3) ZEV Buses, design and installation of electrical infrastructure and associated charging equipment, and administrative costs for procurement, project management, technical and engineering assistance, and training in connection with the operation and maintenance of the ZEV Buses, The administrative share will not exceed \$359,221; During FY 2020, RIDEM and RIPTA will meet to reconsider the allocation of administrative funds.

- b. FY 2020: RIDEM will direct the Trustee to provide to RIPTA an additional \$3,900,000, as documented and requested by RIPTA, which funds RIPTA shall use for the design, purchase, and installation of electrical charging equipment; purchase of charge-management software; improvements to RIPTA's vehicle garages in connection with the deployment of ZEV Buses; and toward the purchase of up to 10 ZEV Buses (in September 2020), of which the administrative share will be a minimum of \$359,221.
- c. FY 2021: RIDEM will direct the Trustee to provide to RIPTA an additional \$3,900,000, which funds RIPTA shall use, together with funds provided in September 2019, towards project expenses, charging infrastructure, charging equipment, and the purchase of up to 10 additional ZEV vehicles, of which the administrative share will be a minimum of \$359,221.
- d. FY 2022: RIDEM will direct the Trustee to provide to RIPTA the balance of the funds assigned to the RIPTA ZEV project, a minimum of \$154,309, as documented and requested by RIPTA.
- e. Any funds assigned to the RIPTA ZEV project and not requested when first available will continue to be available for the RIPTA ZEV project through FY 2026.
- 5. Qualified Expenditures. The Parties agree that the expenditures set forth in this Agreement are authorized by and consistent with the terms of the BMP. In the event that RIDEM learns or determines that any of these expenditures may not be qualified under the BMP, RIDEM shall immediately notify RIPTA, in which case RIPTA will be under no obligation to make such expenditures, and RIDEM shall be under no further obligation to provide funding for such expenditures.
- 6. Accounting and Reporting. On a quarterly basis, RIPTA will provide to RIDEM an accounting of all expenditures of the VW Funds. RIPTA shall provide any and all invoices and receipts related to such expenditures upon request.
- 7. Replacement Vehicles. Within two months after a bus enters revenue service, RIPTA shall remove an existing bus (model year 2009 or earlier) from service, and provide proof of such to RIDEM in a form satisfactory to RIDEM.
- 8. <u>Public Programming.</u> RIPTA and RIDEM will work together to promote the use of the ZEV Buses and to educate the public on environmental and economic benefits of a ZEV Bus fleet.
- 9. Recitals. The recitals above are true and correct and are a part of this Agreement for all purposes.

- Complete Agreement. This Agreement represents the full and final 10. understanding of the Parties with respect to its subject matter and supersedes all prior oral or written understandings or agreements. This Agreement may not be modified except in a writing signed by both Parties.
- 11. Counterparts. This Agreement may be executed in one or more counterparts, all of which together shall constitute one binding Agreement.
- 12. Joint Preparation. This Agreement has been jointly prepared by the Parties, and shall not be construed more strictly against either party.
- 13. Severability. In the event any part of this Agreement is found to be unenforceable by any court of competent jurisdiction or any agency of the State of Rhode Island or federal agency, that part shall be deemed severed from this Agreement and the balance of this Agreement shall remain in full force and effect.
- 14. Termination. Either party may terminate this Agreement upon sixty (60) days' notice to the other party. In the event of any such termination, RIPTA shall retain all funds distributed to RIPTA before notice of termination, and any RIPTA expenses then outstanding shall be paid to RIPTA, but all other obligations hereunder shall terminate.

RHODE ISLA	AND PUBLIC TRANSIT AUTHORITY
By: Scott Avedisian, CEO	Date: 9(5/18
Accepted as to form and correct	ness by:
Berjamin Salzillo, Chief Legal Co	Date: 9-5-18
By: Janet Coit, Director	Date: 9/7/18
Accepted as to form and correctr	ess by:
Mean E. Kay	Date: 9/4/18
Mary Kay, Executive Counsel	

#### Attachment B - RIPTA - ZEV Project

#### Overview of RIPTA drawdown request

Rhode Island's mitigation plan allocates 75% of equipment funds (\$10,776,644) and a portion of the 15% Administrative set aside (\$1,077,664 minimum) to fund the replacement of approximately 20 diesel powered (MY2009 vintage or earlier) class 4-8 transit buses with new all-electric zero-emission vehicles. Funds will also be used towards associated charging equipment and project administration (testing, etc).

The project takes place in two phases. There is no overall cost-share requirement, however, RIPTA has committed to a cost share for the ZEV bus purchases in Phase II.

**Phase I** is a three year lease with option to buy three all-electric vehicles and associated charging equipment. During the three-year lease period for these buses, RIPTA will evaluate the efficiency, efficacy, and viability of adding additional ZEV buses to RIPTA's bus fleet. Performance data will be analyzed and used to develop a future deployment plan for all-electric zero-emission transit buses to operate successfully across RIPTA's fleet. There is no cost share requirement for Phase I.

**Phase II** is anticipated to include the purchase of up to 20 ZEVs at a split of 13% state funds, 37% VW funds, and 50% federal funds. Current estimates have slightly lower VW contribution. A demonstration of the cost share for the bus purchase portion of the overall project budget is found in the attachments as "Phase II Bus Funds Breakout."

Phase II also includes the design, purchase, and installation of electrical charging equipment; purchase of charge-management equipment; and improvements to RIPTA's vehicle garages in connection with the deployment of all-electric zero-emission transit buses. There is no cost-share requirement for the balance of the Phase II purchases, but RIPTA is actively seeking additional funds and is likely to contribute other dollars, including federal funds, as shown in the tables under "Sum of State," "TBD" etc.

Over the course of the project, within two months after an all-electric zero emission transit bus enters revenue service, RIPTA will remove an existing bus (model year 2009 or earlier) from service and provide proof of such to RIDEM.

All procurements will be selected in accordance with state public contracting laws. (Section 5.2.5)

#### **Current Request**

The current request is for a portion of the FY 2019 anticipated costs (all of which are part of Phase I). The agency is requesting \$2,567,115 for equipment (buses, electrical charging). The request also includes a request of \$209,223 in administrative support for analysis, project management, and workforce development. This request is itemized on the Contractor Support table in Attachment B.

Note that we did not request all Administrative funds budgeted for 2019 in the ZEV Project Funding Allocations table (\$209,223 out of a total estimated cost of \$343,223). A request for the balance of the project funds will be made when cost estimates supporting these items are complete. The table will be adjusted to introduce cumulative trustee payments and balances.

The request is supported by cost estimates found in Attachment D (**Section 5.2.6**). Attachment D includes a cover sheet followed by back up with detail from vendors.

Attachment B - RIPTA - Consolidated Budget - 5.2.4

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	\$413,440	\$391 960	\$599,040	\$4,404,440			\$1,404,440
n of Federal St	16,800	7.50,000	AND	736,800	8,647,240	8,647,240	9,384,040
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2	\$644,556	\$208,012	\$224,640	\$ <b>1,077,208</b> \$110,838	\$10,586,277	\$10,697,115	\$11,774,323
ated Sum	\$1,078,996	\$599,972	\$823,680	\$3,40 <b>2,648</b> \$110,838	\$21,395,327	06,165	\$24,908,813
Values Sum of Estim Budget	\$1,0 \$	\$ \$\$	8\$	5. 5.	\$21,3	521,5	524,9
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Type	Administrative			oment		quipment lotal	lotal
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Phase II Bus Funds Breakout This table shows the Phase II bus purchase project estimate with cost share as required by the BMP

Sum of Total	\$9,880,000	\$7,134,050	\$17,014,050
Sum of Federal	\$4,984,000	\$3,663,240	\$8,647,240
Sum of RIPTA e Ops	000	310	310
Sum of Stan	00 \$1,246,000	00 \$915,810	00 \$2,161,810
Sun of WW	\$3,650,000	\$2,555,000	\$6,205,000
of Estimated Budget	\$9,880,000	\$7,134,050	\$17,014,050
Values	cles	chase 7 additional vehicles	
liem Item	Purchase 10 vehicles	P	
VW Cost Type	Edulpment		Grand Total

-	
Federal	51%
RIPTA Ops	%0
State	13%
	36%
MΛ	
	Relative Share of Funding for Phase II Vehicles total

Attachment B - RIPTA - ZEV Project Funding Allocations - 5.2.4

Note: This first drawdown request includes only a portion of the total 2019 Administrative funds shown here. The balance of the \$352,973 will be requested later this year.

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### Attachment B - RIPTA - Contractor Support - 5.2.4 Proposed Expenditures for First Funding Request for ZEV Project

Note: This is a list of Approved Contractors for first drawdown. There is a 0% cost share requirement for the Admin and Equipment in Phase I

First Reques

Row Labels	Sum of VW S	oum of Total
Administrative	\$209,223	\$209,223
Analysis/Data/Testing	\$97,863	\$97,863
GNA: Start up technical consulting	\$49,000	\$49,000
Adil: Data Collection Quality Control	\$48,863	\$48,863
Project management	\$74,880	\$74,880
RIPTA staff person	\$74,880	\$74,880
Workforce Development	\$36,480	\$36,480
RIPTA maintenance	\$22,800	\$22,800
RIPTA drivers	\$13,680	\$13,680
Equipment	\$2,567,115	\$2,567,115
Electrical Charging Equipment	\$110,838	\$110,838
Audet	\$110,838	\$110,838
Pilot Lease (chargers, bus, parts, etc)	\$2,456,277	\$2,456,277
Proterra	\$2,456,277	\$2,456,277

**Total VW Drawdown Request** 

\$2,776,338

Lead Agency: Rhode Island Department of Environmental Management Beneficiary Eligible Mitigation Action Certification – Support Documentation

#### ATTACHMENT C

## DETAILED PLAN FOR REPORTING ON ELIGIBLE MITIGATION ACTION IMPLEMENTATION

The Rhode Island Department of Environmental Management (DEM) will provide detailed reporting on this Action 2- Public Transit Bus Replacement Project and associated administrative costs in two ways: 1, timely updates to DEM's Volkswagen Environmental Mitigation Trust Fund webpage; and 2, Rhode Island's semiannual reporting obligation to Wilmington Trust (the "Trustee").

DEM maintains a VW Environmental Mitigation Trust Fund specific webpage that has been designed to support public access. The DEM's VW specific webpage can currently be found at <a href="http://www.dem.ri.gov/programs/air/vwsettle.php">http://www.dem.ri.gov/programs/air/vwsettle.php</a>. Timely updates to the webpage will inform the general public on the project's status.

Subparagraph 5.3 of the Environmental Mitigation Trust Agreement for State Beneficiaries details Rhode Island's Reporting Obligations:

"For each Eligible Mitigation Action, no later than six months after receiving its first disbursement of Trust Assets, and thereafter no later than January 30 (for the preceding sixmonth period of July 1 to December 31) and July 30 (for the preceding six-month period of January 1 to June 30) of each year, each Beneficiary shall submit to the Trustee a semiannual report describing the progress implementing each Eligible Mitigation Action during the six month period leading up to the reporting date (including a summary of all costs expended on the Eligible Mitigation Action through the reporting date). Such reports shall include a complete description of the status (including actual or projected termination date), development, implementation, and any modification of each approved Eligible Mitigation Action. Beneficiaries may group multiple Eligible Mitigation Actions and multiple sub-beneficiaries into a single report. These reports shall be signed by an official with the authority to submit the report for the Beneficiary and must contain an attestation that the information is true and correct and that the submission is made under penalty of perjury. To the extent a Beneficiary avails itself of the DERA Option described in Appendix D-2, that Beneficiary may submit its DERA Quarterly Programmatic Reports in satisfaction of its obligations under this Paragraph as to those Eligible Mitigation Actions funded through the DERA Option. The Trustee shall post each semiannual report on the State Trust's public-facing website upon receipt."

DEM shall, in the next semiannual report following the Trustee's approval of this project, describe the progress implementing this Eligible Mitigation Action that will include a summary of all costs expended on the Eligible Mitigation Action through the reporting date. The report will also include a complete description of the status, development, implementation (including project schedule and milestone updates), and any modification to this Eligible Mitigation Action.

Attachment D - RIPTA - Cost estimates for vendors exceeding \$25,000 - 5.2.6

Note: For the purposes of internal reporting consistancy, we are including cost estimates for ALL project expenses in the drawdown request, including those under \$25,000

Category	Category Vendor Detail	Detail	Count	Rate	Hours/wk Weeks	s Total		Description of backup materials
Analysis/	Analysis/Data/Testing	. 8	٠			-		
	Adil - Te	Adil - Temporary QA/QC help		1 \$ 39.09	25	50 \$	48,862.50	Adil A: See 2019 State Master Price Agreement for Data Collection/QC (selected pages)
	GNA: St	GNA: Start Up Technical Assistance	ээг			w	49,000.00	GNA A: Quote from GNA - ongoing support plus test plan; GNA B: RIPTA board approval
Project N.	Project Management			-			•	
	RIPTA	ZEV Project Director		1 \$ 64.00	30	39 \$	74,880.00	Loaded hourly rate; no further documentation
Workforc	Workforce Development	nent						
	RIPTA	Maintenance		2 \$ 57.00	40	5 \$	22,800.00	Loaded hourly rate; no further documentation
	RIPTA	Driver	)   	30 \$ 57.00	80	44	13,680.00	Loaded hourly rate; no further documentation
Electrical	Electrical Charging Equipment	quipment						
	E W Audet	et				ŵ	110,838.00	General backup: A: RIPTA board aproval Equipment Detail: B: Price proposal; C: Electrical Meter cost estimate
	Pilot Lea	Pilot Lease Proterra				\$ 2,	\$ 2,456,277.18	General backup: A: Bus Spec; B: vendor cost estimate  Equipment Detail: C: Vehicle unit cost; D: Tools Cost

Total First Request

\$ 2,776,337.68

### Notice of Blanket Purchase Agreement



State Of Rhode Island and Providence Plantations
Department of Administration
Division of Purchases
One Capitol Hill
Providence, RI 02908-5860

1994年				
V.				
E	ADIL BUSINESS SYSTEMS	INC	• .	
Ná	55 MINEOLA BLVD STE 3			
D	MINEOLA, NY 11501		*	
O	United States			
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H SEI	BELOW	CE AGREE	. 11757 7.71		
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16 C (18)					

MPA-393 TEMPOR CONTRACT	ARY PROFESSIONAL OR SERVICES
Award Number	3573506
Revision Number	0
Effective Period	31-DEC-2012 - 30-JUN-2019
Approved PO Date	29-JUN-2018
Vendor Number	11222-iSupplier

Type of Requisition	*OTHER
Requisition Number	
Change Order Requisition Number	
Solicitation Number	7458070
Freight	Paid
Payment Terms	NET 30
Buyer	
	Francis, David
Requester Name	
Work Telephone	

This Purchase Order is issued pursuant to and in accordance with the terms and conditions of the solicitation and applicable federal, state, and local law, including the State of Rhode Island's purchasing regulations, available at www.purchasing.ri.gov.

PO #3496305 EXTENSION REISSUED AS PO #3573506 MPA-393,

**CHANGE EFFECTIVE PERIOD:** 

FROM: 12/31/12 - 06/30/18 TO: 12/31/12 - 06/30/19

The effective period is contigent upon the receipt by the Division of Purchases of a revised performance bond covering the period of 1/1/2019 -6/30/2019. Failure to submit the performance bond prior to 1/1/2019 will result in the termination of this Purchase Order.

#### INVOICE TO

The State of Rhode Island accepts electronic invoices via its supplier portal. To register and submit electronic invoices, visit the supplier portal at http://controller.admin.ri.gov/iSupplier/isup/index.php

To submit paper invoices, mail to: Department of Administration Controller, One Capitol Hill, 4th Floor, Providence 02908.

STATE PURCHASING AGENT

Landarde

Nancy R. McIntyre

# [unuded pages omitted - scores relevant page only]

State of Rhode Island

Blanket Purchase Agreement 3573506, 0

Line	Description	Unit	Unit Price (USD)
35	MPA-393 FY19 Clinical Reviewer - Physician	Hour	70.5
36	MPA-393 FY19 Clinical Reviewer - Physician (Vocational Rehabilitation) (0-3 years)	Hour	61.1
37	MPA-393 FY19 Clinical Reviewer - Physician (Vocational Rehabilitation) (4-7 years)	Hour	64.63
18	MPA-393 FY19 Clinical Reviewer - Physician (Vocational Rehabilitation) (8+ years)	Hour	66.98
9	MPA-393 FY19 Clinical Reviewer - Psychologist and/or Speech Language Pathologist (0-3 yrs.)	Hour	61.1
0	MPA-393 FY19 Clinical Reviewer - Psychologist and/or Speech Language Pathologist (4-7 yrs.)	Hour	64,63
1	MPA-393 FY19 Clinical Reviewer - Psychologist and/or Speech Language Pathologist (8+ yrs.)	Hour	66.98
2	MPA-393 FY19 Communications Liaison — Office of Economic Recovery and Reinvestment (OERR)	Hour	35,25
3	MPA-393 FV19 Communications Manager	Hour	41.13
4	MPA-393 FY19 Communications Manager 2	Hour	52.88
5	MPA-393 FY19 Community Outreach Liaison	Hour	24.68
б	MPA-393 FY19 Community Outreach Office Assistant	Hour	12.93
7	MPA-393 FY19 Community Work Incentives Coordinator	Hour	28.79
8	MPA-393 FY19 Computer Forensic Analyst	Hour	40.85
9	MPA-393 FY19 Computer Programmer	Hour	35.01
0	MPA-393 FY19 Coordinator of Consumer Affairs	Hour	29.38
1	MPA-393 FY19 Culinary Aide	Hour	17.63
2	MPA-393 FY19 Curriculum Assessment Coordinator	Hour	34.43
3	MPA-393 FY19 Cyber Terrorism Program Manager	Hour	34.08
4	MPA-393 FY19 Data and Applications Assistant	Hour	29.18
5	MPA-393 FY19 Data Collection Quality Control Specialist	Hour	39.09
6	MPA-393 FY19 DBE/Public Information Coordinator	Hour	28.2
7	MPA-393 FY19 Dental Assistant	Hour	16.45
8	MPA-393 FY19 Dental Hygienist	Hour	29.38
9	MPA-393 FY19 Dental Hygienist (ACI)	Hour	35.25
0	MPA-393 FY19 Dentist	Hour	76.38
1	MPA-393 FY19 Dentist (ACI)	Hour	76.38
2	MPA-393 FY19 Dentist-Eleanor Slater Hospital (ESH)	Hour	58.75
3	MPA-393 FY19 Diagnostic Evaluator	Hour	58.75
•	MPA-393 FY19 Dietittan	Hour	28.79
5	MPA-393 FY19 Dietitian - Zambarano Unit	Hour	34.66
5	MPA-393 FY19 Domestic Preparedness Program Assistant	Hour	25.26
7	MPA-393 FY19 Domestic Preparedness Program Assistant 2	Hour	28,2
3	MPA-393 FY19 Domestic Preparedness Program Assistant 3	Hour	32.9
1.1	MPA-393 FY19 Domestic Preparedness Program Assistant 3 - OVERTIME RATE STELLA EMERGENCY OPERATIONS	Hour	49.35
)	MPA-393 FY19 Drum Therapy Specialist	Hour	41.13
)	MPA-393 FY19 Editor 2	Hour	47

INVOICE TO

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To submit paper invoices, mail to: Department of Administration Controller, One Capitol Hill, 4th Floor, Providence 02908.

STATE PURCHASING AGENT

Nancy R. McIntyre

#### **CLEAN TRANSPORTATION & ENERGY CONSULTANTS**

July 27, 2018
Lillian Picchione
Rhode Island Public Transit Authority
lpicchione@ripta.com

CC:

Michael McGrane, Rhode Island Public Transit Authority

RE: Contract Modification - Sustainable Fleet Transition Plan Development

Dear Lilly:

Thank you for our recent discussions regarding additional work elements requested by RIPTA under GNA's current Sustainable Fleet Transition Plan contract, PO#: 173135. This proposal outlines the scope of work and budget augmentation requested for GNA to assist RIPTA in the design of a battery-electric bus demonstration test plan to further inform the Sustainable Fleet Transition Plan development process.

RIPTA is currently concluding the initial development of a Sustainable Fleet Transition Plan prepared with the assistance of GNA. During the course of developing the Transition Plan, it has become clear that conducting a pilot demonstration of battery-electric buses is critical to validating and refining assumptions made in the Transition Plan analysis. In mid-August, RIPTA anticipates receiving three Proterra E2 battery-electric transit buses and supporting charging infrastructure. These buses will constitute the core of the current pilot demonstration and are expected to be available to RIPTA for a period of three years, possibly longer. Given the complex nature of RIPTA's operations and limited pilot program resources, careful design of a demonstration plan is necessary to ensure that maximum useful information can be extracted from the pilot program.

As described in our original proposal, GNA is well qualified to support RIPTA in the development of a demonstration test plan for the current pilot program. GNA has more than two decades of experience providing technical consulting and project development services to transit agencies. GNA's team includes technical engineers and specialists in the field of alternative fuel vehicles, fueling stations, and advanced vehicle technology project implementation. GNA's experience includes the development of technology demonstration programs, securing grant funds for these programs, and assessing the environmental and economic benefits of such deployments.

We look forward to continuing our support of RIPTA as you seek to transition your fleet to more sustainable technologies. It is our hope that the scope of work and budget detailed below meets your expectations and vision for this effort. Should you have any questions or wish to discuss any part of this proposal, please do not hesitate to contact me at 949-852-7391

Thank you,

Patrick Louch

Vice President - Gladstein, Neandross and Associates

#### **Proposed Scope of Work**

#### Task 1 - Demonstration Test Plan Design

Under this task, GNA will:

- Collaborate with RIPTA staff to identify key groups of routes, based on various route features, for pilot operation of the battery-electric buses.
- Define metrics for vehicle performance, energy use, reliability, range, and infrastructure utilization for the battery-electric and baseline diesel buses to be collected during the pilot program.
- Identify mechanisms and procedures to collect data for each of the metrics identified. These
  mechanisms may include existing or new data collection hardware and software, standard
  procedures to be conducted by RIPTA staff, surveys, logs and other paper forms, utility and fuel
  invoices, etc.
- Synthesize the test plan data collection requirements, mechanisms, and route information into a test plan document detailing:
  - o Data collection procedures
  - Route groupings and scheduling of pilot bus deployments
  - o Intended outputs from subsequent implementation of the test plan

#### Task 2 - Continued Support of Pilot Program Start-up and Implementation

Under this task, GNA will:

- Participate in meetings with RIPTA, its vendors, utilities, and other entities as relates to the design and implementation of the pilot program.
- Provide technical and strategic input to RIPTA related to the pilot program design and implementation.

#### **Cost and Timeline:**

GNA proposes to perform the scope of work under the terms and conditions of the purchase order PO#: 173135. GNA proposes a not to exceed amount of \$44,000 based on the estimated costs for each task shown in the table below.

#### **Estimated Task Cost Breakdown**

Task	Estimated Hours	Cost
Task 1 – Demonstration Test Plan Design	140	\$28,000
Task 2 — Continued Support of Pilot Program Start-up and Implementation	70	\$16,000
Total	210	\$44,000

GNA will provide to provide notice to RIPTA when the expended budget reaches 50% and then 75% of the Not-to-Exceed amount. GNA does not anticipate or propose travel to conduct the proposed scope of work. GNA proposes to complete all work under this proposed contract modification by November 30, 2018.



### RHODE ISLAND PUBLIC TRANSIT AUTHORITY STAFF SUMMARY FORM

TO: RIPTA CEO

**DATE: August 12, 2018** 

PREPARED BY: Lillian Shuey Picchione

**DEPARTMENT:** Planning / Procurement

#### TITLE: RFP 17-09 SUSTAINABLE FLEET TRANSITION PLAN

RIPTA staff requests a change order to a contract with Gladstein, Neandross and Associates (GNA) pursuant to RFP 17-09, in an amount not to exceed \$49,000. The change order will allow them to continue their work on sustainable fleet transition planning via 1) preparation of a demonstration test plan (\$28,000) and 2) short-term support of a pilot zero-emission fleet program (\$16,000). Staff request award of \$44,000 plus \$5,000 in contingency funds.

#### **BACKGROUND:**

A Request for Proposals for a sustainable fleet transition plan was issued on November 2, 2016. It was publicly advertised via electronic media. Eight companies submitted responses to the RFP and the contract was awarded to Gladstein, Neandross and Associates of Santa Monica, CA. The study recommended that RIPTA develop a pilot ZEV project. Subsequent to the award, GNA was issued a change order using \$28,100 in original contingency funds to support RIPTA's efforts to secure VW settlement funds and FTA Low/No Emission program grant funds for ZEV implementation.

#### JUSTIFICATION:

As envisioned, GNA has helped RIPTA secure discretionary funds for a pilot ZEV program. The time frame for this pilot is approaching much faster than could have been anticipated due to the availability of three vehicles for lease from Proterra. The vehicles will arrive in several weeks. RIPTA needs expert help to create a preliminary analysis and testing program, GNA is well-versed in RIPTA's operations and has extensive experience with developing test plans for a wide range of alternative fuels, including electrification. They have proposed a \$28,000 task for development of the testing plan. They have also proposed an additional \$16,000 for continued support by weekly conference call for pilot program start up and implementation.

An ICE was conducted using rates from the original contract. Staff estimated \$48,000 total cost, which is close to the \$44,000 actually proposed.

#### **FUNDING:**

This project will be 100% funded through VW settlement program funds. Previously, GNA's work was paid for using planning funds matched by Planning department match. This is a new source of funds and will not be immediately available for payment; extended payment time frame will be discussed with GNA.

#### **ALTERNATIVES:**

The CEO may choose not to award this contract or to go out to bid. However, the pilot program has assumed urgency with the arrival of vehicles in late summer/early fall and a bid process would mean the plan would not be in place when vehicles first arrive.



#### RECOMMENDATION:

RIPTA staff recommends that the CEO award a change order to Gladstein, Neandross and Associates in an amount not to exceed \$49,000, consisting of a base contract amount of \$44,000 and a contingency of \$5,000 to 1) Develop a demonstration test plan design and 2) continue to support the pilot program.

APPROVALS (shaded Departments must approve all Staff Summaries) Projects between \$5,000 and \$10,000 must have Department Director/AGM. Projects between \$10,000 and \$50,000 must have CEO also. Projects greater than \$50,000 must also have Board of Directors Approval

Department	Initial	Date	Department	Initial	Date
Budget/Finance	ĆĎ	4/28/18	Maintenance		
Customer Service			Marketing		
Environmental/Safety			Planning	67	B 2848
Flex/Paratransit			Procurement		
Human Resources			Security		
Inform, Services			Training		
Legal/Risk Mgmt			Transportation	زيسي	
			Chief Exec. Officer	75	6 128 118



Audet A

Circuits \$95,000

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100,762

110838

#### RHODE ISLAND PUBLIC TRANSIT AUTHORITY STAFF SUMMARY FORM

TO: RIPTA Board of Directors PREPARED BY: L Picchione

DATE: August 7, 2018 DEPARTMENT: Planning

#### INSTALLATION OF CHARGERS FOR ELECTRIC BUSES

RIPTA Board of Directors is requested to award a contract to E. W. Audet and Sons, Inc of Providence, Ri, to supply electrical circuits and install chargers for the Pilot Electric bus project in advance of delivery. The cost of the project is \$100,762. Staff request 10% contingency to be awarded for a total award of \$110,838.

#### BACKGROUND:

Through a nationwide settlement with Volkswagen AG, the State of Rhode Island has received approximately \$14.3 million in funds from the Volkswagen Mitigation Trust. The State has allocated approximately \$10.7 million of these funds to RIPTA for the procurement of three pilot zero emission electric buses and associated charging infrastructure, and for the development and operation of a larger electric bus fleet over the next three to five years.

The first phase calls for RIPTA to obtain three electric buses this fall. RIPTA's Electrical Engineering Consultant, Fuss and O'Neil, evaluated two likely locations on the RIPTA campus for placement of the required electric vehicle chargers. Staff chose 265 Melrose Avenue, RIPTA's former headquarters and the current location of the building and grounds department. This location makes sense from an operational perspective and chargers can be installed with minor updates to the current electric system. Fuss and O'Neil estimated the work at \$70,000, excluding demolition, electric meters, and bollards.

Due to the short time frame, RIPTA Procurement solicited quotes from five Vendors on the State of Rhode Island Master Price Agreement to provide the work. One Vendor, E.W. Audet, provided a price for the work. RIPTA Procurement contacted several of the vendors that did not submit price to determine why they chose not to bid. They stated that they were too busy.

RIPTA's Electrical Engineering Consultant for this project reviewed the proposal submitted by E. W. Audet and deemed it fair and reasonable. The \$95,000 initial proposal plus \$5,762 for meters includes some demolition work as well as installation of protective bollards to ensure the charging units are not damaged by mobile equipment.

#### JUSTIFICATION:

RIPTA's sustainable fleet transition plan recommends engaging in a pilot program to determine the feasibility of using electric vehicles to transition to a Zero Emissions Vehicle (ZEV) fleet. Volkswagen funds are identified in the RI Volkswagen Settlement Beneficiary Mitigation Plan (BMP) for such a pilot program. RIPTA has been working with Proterra, Inc, to obtain ZEVs and anticipates their arrival shortly. Vehicle chargers are needed in order for the ZEVs to operate and undergo testing/technology integration. This contract is needed in order to ensure that the vehicles can be charged at RIPTA without expensive temporary chargers.

RIPTA's Electrical Engineering Consultant for this project reviewed the proposal submitted by E. W. Audet and deemed it fair and reasonable.

#### FUNDING:

Funds for this project will come from an overall allotment of \$10.7 M in Volkswagen Settlement funds apportioned to the RIPTA ZEV program. The electrical work is budgeted as 100% VW Settlement funds. Because the first allotment of funds has not yet been requested, RIPTA anticipates paying the vendor out of operating budget funds for later reimbursement by VW funds.



#### ALTERNATIVES:

Award is necessary to ensure that the vehicles can be charged at RIPTA. A longer bid process would increase the costs associated with temporary generator power.

#### RECOMMENDATION:

Staff recommend that the Board of Directors award a contract to E. W. Audet and Sons, inc., of Providence, RI, to supply electrical circuits and install chargers for the Pilot Electric bus project. The cost of the project is \$100,762 plus 10% contingency, for a total of \$110,832.

APPROVALS (shaded Departments must approve all Staff Summaries) Projects between \$5,000 and \$10,000 must have Department Director/AGM. Projects between \$10,000 and \$100,000 must have CEO siso. Projects greater than \$100,000 must also have Board of Directors Approval

Department	Initial	Date	Department	Initial	na na
Customer Service			Marketing		
Environmental/Safety			Planning	(aV)	Diale
Budget and Finance	RAS	PINIK	Procurement	77 1 440	2/14/70
Flex/Paratrensit	Salara a Salara		Security	/*/SOVY	104415
Human Resources			Training		
Inform. Services			Transportation	28.2	
Legel/Risk Mgmt.			GM Strategic Advance.	10-14-	SINTER
Maintenance/Fecility			Chief Exec. Officer	~~~	700 100-110



E.W. Audet & Sons, Inc.

Electrical Contractors August 3, 2018

Rhode Island Public Transit Authority

Attn: Michael McGrane, Contracts Manager

RE: Replacement of Existing Electrical Service @ Building 265

We are pleased to submit our amended cost proposal for the electrical work associated with the referenced project.

#### \$95,000.00

Prepared in accordance with plans & specifications, we no longer include independent testing. RIPTA, in an effort to save cost, will provide all electrical demolition & safe disposal except where the work includes a disconnect/reconnect or disconnect/removal of the existing main service conductors between Buildings 265 & 269.

At your request, we have investigated options to meter the three bus charger feeders. A cost proposal is being forwarded under separate cover.

We appreciate the opportunity to be of service & encourage you to call with any questions or comments.

Respectfully submitted,

E.W. AUDET & SONS, INC.

John Osowa, Jr. President

P.O. Box 2039

169 Bay Street

Providence, RI

cc: bid file - 2018

02905

(401) 467-3510

(800) 523-3513

Fax:

(401) 781-8822

www.ewandet.com

E.W. Ander & Sims, Inc. is an Equal Opportunity Employer

E. W. AUDET & SONS, INC.

169 Bay Street

P.O Box 2039

Providence, RI 02905

Telephone: (401) 457-3510

Fax: (401) 781-8822

То:	Authorit		•		DATE:	August 3, 20	18
		wood Aver					
ATTENTION:			,,,,		JECT: JOB ECT NAME:	Proposal Electrical Se 265 Melrose	rvice @ Street
ALLENLION:			E	VA TRANSMI	TTAL NO.:		
We are forwarding	g herewith	$\boxtimes$	Under separa				
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إلسنبة			By: 1	Robert S. Wilb	ur		

#### CHANGE ORDER WORK SHEET

Proposal	EW AUDET & SONS, INC	Date:	8/3/2018	1
	COST PROPOSAL WORKSHEET			:
OWNER:	Rhode Island Public Transportation Authority			· <del> </del>
PROJECT:	Electrical Service @ 265 Melrose Street			ļ
WORK:	EMON Meter of Charging Stations			<b> </b>
REFERENCE			ener simoliji	
NOTE:		<u> </u>		
QUANTITY	MATERIAL DESCRIPTION	MATERIAL UNIT COST	EXTENDED COST	LABO
· · · · · · · · · · · · · · · · · · ·	3 EMON METER	LOT	2,775.00	
	3 SET OF CT'S (3)	LOT	0.00	<del>,,,,,,</del> ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
	1 MOUNTING RACK FOR CT'S	150,00	150.00	
	1 CABLE MANAGEMENT	50,00	50.00	A
	0 3/4" EMT	2.00	100.00	
	2 3/4" EMT CONN	1.00	2.00	<del>ali andara</del> kika
	3/4" EMT COUP	1.00	6.00	
	3/4" EMT SUPPORT	1.00	6.00	
	#12 THWN	0.20	30.00	***************************************
	JUNCTION BOX	10.00	10.00	
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	NOTE: THESE METERS WILL READ LOADS		0.00	
1	INDIVIDUALLY & WILL PROVIDE PEAK			
	DEMAND DATA FOR EACH CHARGING	]		
	STATION. IF YOU WANT THESE LOADS	ľ	1	
	CONSOLIDATED TO PROVIDE OVERALL			
	LOAD & DEMAND, YOU WOULD NEED TO ADD	:		
	AN EMON ENERGY & SOFTWARE PACKAGE			
	AT A COST OF \$6,325.			
		****	0.00	er speci
<u> </u>	DIRECT MATERIALS		0.00	*****
1 and the second			3,129.00	
	MISCELLANEOUS MATERIALS	2.00%	62.58	
····	SUBTOTSL MATERIAL		3,191.58	
	OVERHEAD & PROFIT LABOR	15.00%	478.74	
^ ~? <i>~</i>	<u></u>	\$85.60	1,883.20	22.00
	SUPERVISION	\$94.72	208.38	2.20
	SUB TOTAL		5,761.90	
	PERMIT FEE		0.00	
- luc	BOND	0.00%	0.00	
	TOTAL		5,761.90	

## CLASS 5000 Smart Meter Energy Monitoring Products & Systems

#### Advanced kWh/Demand Meters with Communication Features

Advanced 4-line display showing:

- kWh

kW demand (with peak date & time)

· Power factor per phase - Amps per Phase

- Real-time load in kW Volts per phase

On-board set-up option for: - IP address

- Meter date/time

- ID codes for EZ7, Modbus and BACnet

0-2 volt output split-core current sensors allow for enhanced safety and accurate remote mounting of sensors up to 500 feet from meter without power interruption. (Optional solid-core sensors available.)

Onboard installation diagnostics and verification system.

Two pulse outputs and two external meter inputs (water, gas, BTU, etc.) (Channels 5 & 6, available via E-Mon Energy only)

Phase loss alarm. (N.O. Contact)

Built-in RS-485 communication capability supports the following connection configurations (or combinations not to exceed 52 devices per channel): - Up to 52 Din-Mon D2 & D5, Class 3200, 3400 and 5000 meters and/or IDR interval data recorders Cabiling is daisy chain configuration, 3-cond., 18-22 AWG, up to 4,000 cable ft total per channel.

Built-in RS-485 and Ethernet communication, Optional telephone modern available.

Protocols

- EZ7

- BACnet MS/TP\*

- Modbus RTU - Modbus TCP/IP - BACnet IP\* - LonWorks FT-10 (Twisted Pair)\*

Records kWh and kVARh delivered, kWh and kVARh received in first four channels. Data stored in 15-min. for up to 72 days or 5-minute intervals for up to 24

days. Maintains data in a first-in, first-out format.

Compatible with E-Mon Energy software via EZ7 protocol for automatic meter reading, energy billing and profiling.

Meter is designed for use on both 3-phase, 3-wire (delta) and 3-phase, 4-wire (wye) circuits. Optional single-phase, 3-wire configuration available.

Outdoor NEMA 4X polycarbonate enclosure (standard) with padiocking hasp & mounting flanges for indoor/ outdoor installation (stand alone) with one 1 1/16" KO on bottom of enclosure.

Optional industrial grade JiC steel enclosure with padiocking hasp and mounting flanges for indoor installation. Knockouts: 1 1/16" (3/4" cond.) boltom, 7/8" (1/2" cond.) top

UL/CUL listed. Meets or exceeds ANSI C12,20 national accuracy standards, (+/- 0.2% from 1% to 100% of rated load)

CE Mark approved.

Meter meets or exceeds MID accuracy standards,

BACnet protocol is BTL certified. LonWorks protocol is LonMark certified.

MV-90 compatible (with EZ7 only.)



Dimensions: 6" H x 6" W x 4 1/4" D

#### Model Numbers

120/208-240V. 127/220V, 3-Phase

E50-208100-R01KIT (100 amp) E50-208200-R01KIT (200 amp) E50-208400-R01KIT (400 amp) E50-208800-RQ1KIT (800 amp) E60-2081800FI01KIT (1600 amp) E50-2083200Fl01KIT (3200 amp) 220/380V, 230/400V, 240/415V, 3-Phase

E50-400100-Fi<u>01</u>KIT (100 amp) E50-400200-R01KIT (200 amp) E50-400400-PO1KIT (400 amp) E50-400800-R01KIT (800 amp) E50-4001600R01KIT (1600 amp) E50-4003200R01KIT (3200 amp)

#### 277/480V, 3-Phase

E50-480100-R01KiT (100 amp) E50-480200-RQ1KIT (200 amp) E50-480400-RQ1KIT (400 amp) E50-480800-RQ1KIT (800 amp) E50-4801600Fl01KIT (1600 amp) E50-4803200F(01KiT (3200 amp)

#### 347/600V, 3-Phase, 4 W (Wye Configuration)

E50-600100-R01KIT (100 amp) E50-600200-P01KIT (200 amp) E50-600400-PQ1KIT (400 amp) E50-600800-RQ1KIT (800 amp) E50-6001600FIQ1KIT (1600 amp) E50-6003200RD1KIT (3200 amp)

#### **Enclosure Options**

Meters supplied standard in NEMA 4X outdoor enclosures. Not available in MMU Configuration. To order a JIC Steel enclosure replace "R" in model number with "J" (E60-208100-J01KiT)

#### Communication Protocol & Option Packages

The models above represent the D1 protocol package. To specify a different protocol package replace "01" in model number with the specification below.

RS-485 Port	Ethernet Port	Specify
EZ7	EZ7 Ethernet	01
Modbus RTU	EZ7 Ethernet	02
BACnet MS/TP	E27 Ethernet	03
EZ7	Modbus TCP/IP	04
EZ7	BACnet IP	05
Modbus RTU	Modbus TCP/IP	06
Lanworks FT-10	EZ7 Ethemet	07
Lonworks FT-10	Modbus TCP/IP	08
EZ7 w/Telephone Madem	EZ7 Ethernet	09
EZ7 w/Telephone Modem	Modbus TCP/IP	10
EZ7 w/Telephone Modem	BACnel IP	17

#### Options

Three-phase meter kits are supplied with (3) split-core current sensors.

To order a single-phase, 3-wire meter kit add "-SP" before "KiT in the model number, Ex. E50-208100-R01-SPKIT Single-phase meters will be supplied with (2) split-core current sensors.

\*NOTE: Interval data not available via BACnet or LonWorks.

**Energy Monitoring Products** 

## CLASS 5000 Smart Meter [E-MonD-Mon] Engineering Specifications

#### Class 5000 Smart Meter Specifications

Meter shall be fully electronic with 4 line LCD display showing:

- kWh

- kW demand (with peak date and time) - Real-time load in kW

 Power factor per phase Amps per phase

Volts per phase

Mater shall utilize 0-2 volt AC output current sensors to allow paralleling and/or mounting up to 500 feet from meter. Sensors shall be of split-core configuration to allow installation without disconnecting cabling, etc. Sensors shall be available from 100 amp to 3200 amp. Sensors shall be optionally available in solid-core configuration (100 & 200 amp.)

Meter shall provide current sensor installation diagnostics indicator, phase error indicator and phase angle diagnostics on display.

Meter shall be fleld programmable for meter date/time, IP address and ID code for communication options.

Meter shall be enclosed in a NEMA 4X polycarbonate enclosure (standard) with padiocking hasp & mounting flanges for indoor/outdoor installation (stand alone) with one 1 1/16" KO on bottom of enclosure. Optional heavy duty JIC steel enclosure available for indoor installation.

Meter shall be UUCUL listed to latest applicable standards for safety.

Meter shall meet or exceed ANSI C12.20 accuracy standards.

Meter shall be CE Mark approved.

Meter shall meet or exceed MID accuracy standards.

Moter shall provide non-volatile memory to maintain reading during power outages.

Meter shall store interval data for kW and kVAR for up to 72 days in first-in first-out format. Interval data not available via BACnet or LonWorks.

Moler shall be optionally available in single-phase, 3-wire configuration.

Meter shall operate as slave device when used with Modbus or LonWorks options. Meter works as a master device on BACnet MS/TP.

Meter shall provide optional 5th & 6th channel for logging inputs from third-party metering devices (gas, water, BTU, etc.) Both channels provide interval data logging that can be read via E-Mon Energy software and Modbus.

Meter shall provide two (2) pulse outputs.

Meter shall be capable of daisy-chain connection using RS-485 communications in combinations of Din-Mon D2 & D5, Class 3200s, 3400s, 5000s, IDR-8s, IDR-16s not to exceed 52 devices. Cabling shall be through RJ-11 modular jack (4-conductor) or terminal block (3-conductor), 18-26 AWG, up to 4,000 cable feet total.

Meter shall be MV-90 compatible (With EZ7 Only)

Meter shall be available with the following communication protocol & option packages:

RS-485 Port		Specify
EZ7	EZ7 Ethernet	01
Modbus RTU	EZ7 Ethernet	02
BACnet MS/TP	EZ7 Einemet	03
EZ7	Modbus TCP/IP	04
EZ7	BACnet IP	05
Modbus RTU	Modbus TCP/IP	06
Lonworks FT-10	EZ7 Ethernet	07
Lonworks FT-10	Modbus TCP/IP	.08
EZ7 w/Telephone Modem	EZ7 Ethernet	09
EZ7 w/Telephone Modern	Modbus TCP/IP	10
EZ7 w/Telephone Modem	BACnet IP	11

BACnet protocol shall be BTL certified. LonWorks protocol shall be LonMark pertified.

**Energy Monitoring Products** 

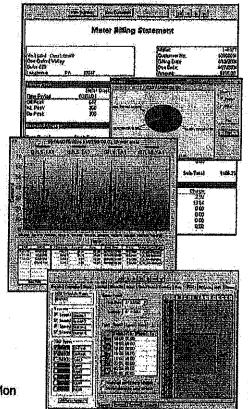
### **E-Mon Energy Software** Single License Version



E-Mon Energy software is an energy-monitoring system that allows users to read and monitor energy consumption easily and effectively via on-site or off-site non-dedicated computers. The software allows the user to generate graphs and profiles of energy data for demand analysis and usage reduction. E-Mon Energy will also generate itemized tenant electrical bills for tenant allocation, departmental allocation, and usage verification. Communication options include Telephone, Ethernet, Internet and Wireless.

#### Features

- E-Mon Energy software operates with computers running Windows XP, 7 or 8.
- Graphic profiling provides analytical charts and graphs with demand profiling for 5-, 15-, 30- or 60-minute sampling rates.
- Generate and print itemized electric bills (using coincidental peak demand date and time). Software will generate bills from user-specific time periods via profile data (you need not be present to generate meter readings).
- Reads up to 8 time periods, 4 seasons and multiple holidays for time-of-use (TOU) monitoring.
- Reads E-Mon D-Mon<sup>®</sup> meters, either on-site or off-site, via modem, Ethernet, wireless or a directly connected computer.
- Optional wireless metering allows users to remotely read Class 2100, Class 4100 E-Mon D-Mon meters and E-Mon third-party wireless socket meters via Internet, Ethernet or telephone communication. (Additional components required.)
- Reads all E-Mon D-Mon meters via IDRs and Class 3200/3400/5000 meters directly. Can also read gas, water, BTU and steam meters via IDR for billing purposes & graphical displays of usage.
- Exports data to spreadsheets for analysis (\*.csv files).
- Exports data to MV-90 system (\*.hhf files).
- Optional modems can be used with E-Mon Energy allowing meters to be read anywhere in the world where telephone or cellular service is available.
- Meter reading and billing services are available for both E-Mon D-Mon and utility-type meters.



#### Model Numbers

\*EMONENERGYSW (Software) RS232K (E-Mon Energy Key) USBK (USB Key) EKM-T (Telephone Key/Modem) EKM-E (Ethernet Key/Modem)

\*E-Man Energy software packages includes USB Key (RS-485 to USB converter.)

E-Mon'
Energy Monitoring Products

(800) 334-3666 - www.emon.com

Effective Date: 7/1/2013

# E-MON ENERGY MENGINEERING SPECIFICATIONS

Energy Monitoring Products & Systems

### E-Mon Energy Software Specifications-Single License Version

E-Mon Energy software shall operate with a PC with the following minimum specifications:

- CD-Rom Drive
- 4 GB RAM, 80 GB Hard Drive Space Available
- Color Monitor
- (1) RS-232 Serial or USB port, Modern or Ethernet
- Real-Time Clock
- Microsoft Windows XP, Windows 7 or Windows 8

E-Mon Energy software shall provide for reading kilowatt hours and demand from the IDR or wireless data collector connected to E-Mon D-Mon meters and provide this information for analysis and/or billing.

E-Mon Energy software shall be capable of reading "real-time" data from Class 3200/3400/5000 meters (kW, kVAR, kVa, Amps, Volls, Power Factor and Frequency.)

E-Mon Energy software shall be capable of reading utility type meters via IDR interval data recorder such as gas, water, electric, BTU, steam, etc. equipped with a pulse output.

E-Mon Energy software shall be capable of printing out electric bills and usage information.

E-Mon Energy software shall have graphic capabilities (profile) to provide analytical charts and graphs, with demand profiling for 5-, 15-, 30- or 60-minute sampling rates.

E-Mon Energy software shall be capable of supporting declining block tariffs, up to eight time-of-use rates and up to four seasonal rates.

E-Mon Energy software shall provide file export to spreadsheets for specialized applications.

E-Mon Energy software shall be capable of reading gas, water and other meter types with pulse output.

E-Mon Energy software shall be capable of supporting 1,000 locations.

E-Mon Energy software shall be capable of exporting MV-90 (hhf) files.

**E-Mon**°

Energy Monitoring Products

# CATALYST®: 40 FOOT BUS



	Description	and the state of t
VEHICLE DIMENSIONS		
Length	42'6"	
Height	1/2"	TO THE RESIDENCE OF THE PROPERTY OF THE PROPER
Wheelbase	248"	Marie and the second
Approach Angle	179 M	ะกรุงกรุงการกรับกระบ <sub>ุ</sub> งกุลสร้าง <del>และ กรุงการกรุงกรุงการการะจัการการการกระบา</del> กการการกระบา
Breakover Angle	4 19 19 19 19 19 19 19 19 19 19 19 19 19	Market and the commence of the
Departure Angle	9.	anno anno anno anno anno anno anno anno
Turning Radius		erina erina de la composição de la compo
INTERIOR		
Seating Capacity	40	
Door Width	Front 43.2", Rear 49.1"	
Lighting	LED interior lighting system	na di ingerimany yanna yanan da mana da mana a manayan a di ingerimangan ana ana a di ingerimangan ana ana a d Di ingerimangan da di ingerimangan
Handles	Stainless-steel stanchion system	
Stop Request	ADA pull cord or touch tape stop request	
Doors	Sensitive edges on both front and rear door	·
Wipers	Electric wipers and washers	**************************************
HVAC	Overhead integrated system	**************************************
XTERIOR PARTIES.		医类性性 医骨骨骨骨部
Bus Body	Carbon-fiber-reinforced composite material	
Tires	Standard: Michelin 305/70R22.5	And Management of the Control of the
Exterior Lights	LED (Final Control of	The second secon
RAKES & SUSPENSION		A Language and Association and the con-
Braking System	Regenerative braking; front & rear air disk brakes	
Traction	4-wheel ABS with optional traction control	
Suspension	Multi-Link Air Ride rear suspension	The state of the s
LECTRICAL SYSTEM		
Battery System	Integrated battery management system	
Low Voltage	Two, Group 31 700 CCA 12v batteries	A. C.
Charge Ports	J1772 CCS: One port standard at curb-side rear, 2nd port optional at str	eet-side rear
Overhead Charging	Optional Continued The Continu	77/09/09/10/07/07/07/07/07/07/07/07/07/07/07/07/07
DA		
	Two ADA locations, one on each side of the aisle directly behind the f	ront wheel
	ADA securement system	
	Front ADA power wheelchair ramp (41, 61 slope)	CONTROL OF THE PROPERTY OF THE
	Rear door modesty panels	anan inganinanan a saman antanga anan ang papanan ang malaning an <del>agamatan anan a</del> saman
	Aisle width between front wheel wells: 35,5"	
/ARRANTY		
/ehicle	Complete Bus = 1 year or 50,000 miles Extended warranties and service contracts available upon requ	est
atteries.	12 years / unlimited miles, materials and workmanship	and the second s



August 28, 2018

Ms. Lillian Picchione Rhode Island Public Transit Authority 705 Elmwood Ave Providence, RI 02907

RE: RIPTA Cost Estimate for Leasing Proterra Electric Buses

Dear Ms. Picchione.

Proterra has prepared the following project Total Project Cost calculations for the leasing of three Proterra 40 ft. Catalyst E2 battery electric buses for three years. The following calculations assume a three year lease with a single lease payment paid at the beginning of the lease term and with the option to purchase the buses at the end of the lease at a fair market value within a predetermined minimum or maximum amount:

RIPTA Proterra Battery Electric Bus Lease Total Project Cost

Equipment	<b>Purchase Price</b>	VIN or Serial #	Lease Payment	Min. FMV Price	Max. FMV Price
Proterra 40 ft. Catalyst E2 Bus with Configuration	\$970,765.00	1M9TH16J5JL816288		\$271,814.20	\$310,644.80
Proterra 40 ft. Catalyst E2 Bus with Configuration	\$970,765.00	1M9TH16J5JL816291	\$782,615.15	\$271,814.20	\$310,644.80
Proterra 40 ft. Catalyst E2 Bus with Configuration	\$970,765.00	1M9TH16JXJL816285	\$782,615.15	\$271,814.20	\$310,644.80
Diagnostic Tool	\$7,000.00		\$5,643.29	\$1,960.00	\$2,240.00
60 kW Depot Charger	\$42,500.00		\$34,262.82	\$11,900.00	\$13,600.00
60 kW Depot Charger	\$42,500.00		\$34,262.82	\$11,900.00	\$13,600.00
60 kW Depot Charger	\$42,500.00		\$34,262,82	\$11,900.00	\$13,600.00
Total	\$3,046,795.00		\$2,456,277.18	\$853,102.60	\$974,974.40

Sincerely,

Alan Westenskow Director of Business Development Proterra Inc.

#### Picchione, Lillian

From: Sent: Steve O'Neil <soneil@proterra.com> Wednesday, July 11, 2018 12:30 PM

To:

Picchione, Lillian

Cc:

TJ Nass; Alan Westenskow; Michael Hennessy

Subject:

bus pricing and lease

Lilly,

FYI.

I did speak with Alan and he will send you the lease document this pm.

This will provide you with one and two-year scenarios.

He will do his best to talk with you and others once he sends the lease.

As a suggestion, and because he's on vacation, perhaps you could send Alan any questions your team has once you've read the document and he can respond once he reaches a location with internet.

I'm headed out to Logan shortly, but I should be available to talk about pricing while at the airport or after I land after 7:00 pm.

In the meantime, here is the revised per bus I'm authorized to offer.

Base cost	\$898,000
Options	\$61,995
Options	
markup	\$30,998
Surveillance	(\$10,228)
Total	
proposed	\$980,765
Discount	\$10,000
Revised	
pricing	\$970,765

#### Note:

- We've eliminated the surveillance camera system cost; Proterra will absorb this.
- Oher configurable items will remain as we discussed on Monday.
- We've included a discount of \$10,000.

#### Steve



PROTERRA Stephen F. O'Neil

Regional Sales Director 508.847.1993 soneil@proterra.com



## PROTERRA

## **Suggested Tools**

Part Number (if applicabl e)	ITEM NAME	Suggested Quantity	Selling Price per Unit	Extended Selling Price Per Unit
	REQUIRED FOR MAINTENANCE			
	PROTERRA DIAGNOSTIC TOOL	$oldsymbol{1}$	\$5,000.00	\$5,000.00
014063	DIAGNOSTIC LAPTOP COMPUTER	" 1 <b>1</b> "	\$2,500.00	\$2,500.00
026024	NEXIQ USB-Link (WIFi)	1.111	\$1,214.00	\$1,214.00
026025	NEXIQ J1962 Adaptor	1 1	\$100.00	\$100.00
035868	GLOVES, ELECTRICAL, SIZE 8	1	\$126.00	\$126.00
035869	GLOVES, ELECTRICAL, SIZE 9	1	\$126.00	\$126.00
035870	GLOVES, ELECTRICAL, SIZE 10	1	\$126.00	\$126.00
035871	GLOVES, ELECTRICAL, SIZE 11	1.1	\$126.00	\$126.00
035872	GLOVES, ELECTRICAL, SIZE 12	1	\$126.00	\$126.00
035873	SUIT, ARC FLASH, SIZE S		\$691.00	\$691.00
035874	SUIT, ARC FLASH, SIZE M	1 1	\$691.00	\$691.00
035875	SUIT, ARC FLASH, SIZE L	1.	\$691.00	\$691.00
035876	SUIT, ARC FLASH, SIZE XL	1	\$691.00	\$691.00
035877	SUIT, ARC FLASH, SIZE 2XL	. 1.	\$691.00	\$691.00
031438	Red Lockout Padlock	2	\$30.00	\$60.00
031440	Grip-Cinching Cable Lockout, Red, 8 ft	2	\$99,00	\$198.00
031439	Lockout Tag, Package of 10	2	\$39.00	\$78.00
035021	LIFT TABLE, E2 BATTERY (E2 BUSES ONLY)	1	\$9,780.00	\$9,780.00
	KIT, DEUTSCH, COMPLETE	1	\$394.00	\$394.00
	ABS Programming Tool		\$ 947.70	\$ 947.70
	Insulated Crimper			\$ 117.98
	Deutsch Crimper			\$ 444.00
	MUX Crimper			\$ 242,00
	Deutsch Pin Removal Tool		and the second s	\$ 18.00
36780	VOLTMETER, FLUKE 175	1 :	\$ 371.00	\$ 371.00

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