### THE PORT AUTHORITY OF NY & NJ

# PROCUREMENT DEPARTMENT 4 WORLD TRADE CENTER 150 GREENWICH STREET, 21st FL. NEW YORK, NY 10007

11/8/2019

#### ADDENDUM # 5

To prospective Proposers on RFP # 58819, entitled "Operate, Manage and Maintain the On-Airport Bus Fleet at John F. Kennedy and LaGuardia Airports":

• RFP due December 11, 2019 at 2:00 PM

#### I. CHANGES/MODIFICATIONS

- A. Exhibit 1A, Page 3, Section entitled, "TIMES FOR PERFORMANCE OF SCHEDULED MAINTENANCE," first sentence of the first paragraph will be revised as follows:
  - "All "A", "B", "C" and "D" Maintenance Services shall be completed within 500 miles or 15 engine hours of the respective maintenance service, whichever occurs last."
- B. Attachment B, Part I, entitled "Contract Specific Terms and Conditions," The first sentence of Section 13, entitled "Performance-Based Incentives," subparagraph (b) will be revised as follows:
  - "Performance-based Incentives under this Contract shall be calculated on the total JFK and LGA fleet and be as follows:"
- C. The first sentence of Part 3, entitled "Proposer Prerequisites," Section B, will be revised as follows:
  - "The Proposer shall have at least one (1) year of continuous experience immediately prior to the date of the submission of its Proposal in the management and operation of a business which provides management, maintenance and operation of zero-emission electric buses in the United States of America."
- D. Part 8, entitled "Proposal Submission Requirements" will be revised as follows:

The title of Section G, "Acknowledgement of Addenda" will be revised to "H. Acknowledgment of Addenda"

The title of Section H will be revised to "I. Acceptance of Standard Contract Terms and Conditions"

The title of Section I will be revised to "J. MBE/WBE Plan"

E. The first portion of Attachment B, Part I, entitled "Contract Specific Terms and Conditions for Facility Services," Section 19, entitled "Fleet Electrification and Refurbishment of Buses" will be revised as follows:

"The Contractor understands and acknowledges that the LGA and JFK fleets may be converted to a fully electrified fleet during the life of this Contract. The Port Authority is responsible for the cost of electric for the bus fleet. The Contractor understands that it shall be responsible for the maintenance and operation of these buses as they are placed into service by the Port Authority."

- F. Section 26, entitled "Vehicles of the On-Airport Ground Transportation Service" that provides details of the current fleet shall be revised as shown on Attachment G, Exhibit 21 Updated Inventory.
- G. Page 21, Section 8, G, 1, B, 4, will be modified to include the following sentence at the end of the paragraph:

"Approximately twenty (20) buses will require a mid-Life overhaul during the first three (3) years of the Contract."

H. Page 74, Section 35, (a), shall be modified to include the following:

"g. regularly scheduled meetings at each airport and, to the degree there are performance issues, possibly more often, at the direction of the Port Authority."

- I. The following Exhibits shall become part of the RFP:
  - a. Attachment G, Exhibit 21—Updated Inventory
  - b. Attachment G, Exhibit 22—LGA 2018 Mileage, Fuel Usage, etc.
  - c. Attachment G, Exhibit 23—JFK 2018 Mileage, Fuel Usage, etc.
  - d. Attachment G, Exhibit 24—Catalyst Recommended Spares
  - e. Attachment G, Exhibit 25—Proterra Catalyst Preventive Maintenance
- J. Section 8, entitled "Proposal Submission Requirements," Page 26, add the following Section:

#### "K. Safety Program

The Proposer shall submit a summary of the overall Safety Program. This shall include, but not be limited to, the following requirements:

1. Identify the corporate Health and Safety Plan and what is being proposed for the JFK/LGA Bus Contract;

- 2. Identify who is, or will be, responsible for overseeing the overall safety including qualifications and scope of safety related duties, and their affiliation to the Proposer (if not an employee);
- 3. Provide the overall safety record, for the last five (5) years, such as the results of any state or federal safety inspections, citations, and proposed penalties;
- 4. Provide existing or proposed recordkeeping and recording program such as Occupational Safety and Health Administration (OSHA) injury and illness logs, results of safety audits, and Insurance Experience Modification Rate (EMR)."

#### II. BIDDER'S OUESTIONS AND ANSWERS

The following information is available in response to questions submitted by prospective Bidders. The responses should not be deemed to answer all questions, which have been submitted by Proposers to the Port Authority. It addresses only those questions, which the Port Authority has deemed to require additional information and/or clarification. The fact that information has not been supplied with respect to any questions asked by Bidders does not mean or imply, nor should it be deemed to mean or imply, any meaning, construction, or implication with respect to the terms.

The Port Authority makes no representations, warranties or guarantees that the information contained herein is accurate, complete or timely or that such information accurately represents the conditions that would be encountered during the performance of the Contract. The furnishing of such information by the Port Authority shall not create or be deemed to create any obligation or liability upon it for any reason whatsoever and each Bidder, by submitting its Proposal, expressly agrees that it has not relied upon the foregoing information, and that it shall not hold the Port Authority liable or responsible therefor in any manner whatsoever. Accordingly, nothing contained herein and no representation, statement or promise, of the Port Authority, its Commissioners, officers, agents, representatives, or employees, oral or in writing, shall impair or limit the effect of the warranties of the Bidder required by this Bid or Contract and the Bidder agrees that it shall not hold the Port Authority liable or responsible therefor in any manner whatsoever.

- Q 1. Can the Port Authority provide current staffing schedule for each job classification?
  - A. Current staffing is not being provided, however page 75, Section 38 contains Job Descriptions and their requirements.
- Q 2. Can the Port Authority provide wage and/or pricing information for the current contract or a copy of the current contract?
  - A. Proposers are required to submit a response in accordance to the requirements, terms, conditions and quantities set forth in this solicitation.
- Q 3. Is there a union performing the work under the current contract?
  - A. Yes. International Brotherhood of teamsters- Local 295 & IAM District 15, Local Lodge 447.

- Q 4. Please clarify the certified statement calculations of Exhibit 2 are the calculations done as an average of each job classification as a group or by individual employees?
  - A. The calculations would be for each job classification.
- Q 5. Should there be an underpayment in supplemental benefits, how should the payment be made to employees at the end of the contract?
  - A. See Page 8, Section M, entitled "Note on Minimum Wages, Health Benefits and Supplemental Benefits Other Than Health Benefits," and Page 39, Section 8, entitled "Wages, Health and Supplemental Benefits." Any further clarifications needed can be arranged with the Port Authority Audit Department once a Contractor is selected.
- Q 6. Regarding the health and welfare benefits, please clarify the "interest charged on the underpayment"?
  - A. Page 44, Section 8, subparagraph L, states that, "the Port Authority may deduct interest on the Underpayment Amount calculated at 19.2% annual interest from any subsequent payment to the Contractor."
- Q 7. In event that state minimum wage should change during the Contract, how would the Port Authority compensate for such change?
  - A. Please see Page 24, Section 4, subparagraph d, which states that the Proposal should describe the Proposer's approach for handling any adjustments for wages during the Contract period. Please also see page 42, Section F, which states that "In the event that the compensation payable under this Contract is subject to adjustment from time to time as provided in Section 10, entitled "Escalation Term and Option Years" in the Contract Specific Terms and Conditions, then the Average Direct Hourly Wages and Supplemental Benefits set forth in the Calculation of Average Hourly Rate Form and accepted by the Port Authority, shall be adjusted by multiplying said amounts by the same percentage amount which was used to adjust the compensation payable under this Contract, as the same may have been further adjusted."
- Q 8. For a company that is self-insured, what documentation would be needed to meet audit requirements to show proof of coverage?
  - A. See Pages 57 through 59, Section 22, entitled "Insurance Procured by the Contractor." Proof of coverage shall be written on an ISO occurrence form CG 00 01 0413 or its equivalent covering the obligations assumed by the Contractor under this Contract. Within five (5) days after the award of the Contract and prior to the start of work, the Contractor must submit an original certificate of insurance to the Port Authority Facility Contract Administrator. This certificate must show evidence of the insurance policy(ies).
- Q 9. Can the Port Authority provide a list of technologies that are currently used on the buses (i.e. to track passenger usage, GPS, camera, etc.)?
  - A. Clever Devices –DR700 and 600 for signage/announcement system.

Clever Devices – Apollo camera/recording system.

Clever Devices – Verint camera/recording system.

Clever Devices – GPS tracking

Clever Devices/Luminator – Bus sign display.

Nextbus/Cubic – GPS bus tracking system.

Otterra- WIFI

Comtran – Two-way radios and repeaters.

- Q 10. The pricing sheet does not allocate pricing for Affinity/Contingency service for LGA. Is that correct?
  - A. Correct, as LGA does not have an AirTrain at present.
- Q 11. With the extensive amount of construction anticipated at both airports, and the current amount of body work being experienced during normal operating condition, will the Contractor still be required to cover the expense of body damage to the fleet?
  - A. As per pages 66-70, Section 31, entitled "Vehicle Maintenance," the Contractor is responsible for the expense of repairs to the fleet.
- Q 12. Will the current fleet require DOT inspection?
  - A. Yes, the current fleet requires NYSDOT inspection as stated on Page 66, Section 31, subparagraph (a).
- Q 13. Page 99, Section 48, entitled "Bus Battery Replacement," referenced that the batteries are a pass through to the Authority does this include any other components of the Hybrid System?
  - A. No, the Port Authority only covers the battery.
- Q 14. The RFP references the ability or requirement to provide a Mid-Life Overhaul Program. Which buses in the current fleet does the Authority anticipate needing to be overhauled during the term of the Contract?
  - A. There are approximately twenty (20) buses that will require a Mid-Life overhaul during the first three (3) years of the Contract.
- Q 15. Has the Port Authority obtained extended warranties on the existing electric buses and major components?
  - A. No.
- Q 16. Page 63, Section 28, entitled "Additional Vehicles," references providing additional buses. Is this in addition to the leased bus fleet?
  - A. Yes, these Additional Vehicles, as defined in Section 28, are in addition to the Vehicles of Service.
- Q 17. What are the capabilities needed for replacement, refurbishment and/or retrofitting, and what is the timeframe in which this will be required in order to electrify buses during the Contract term?
  - A. See Page 53, Section 19, entitled "Fleet Electrification and Refurbishment of Buses." The Contractor or its subcontractor(s) will be expected to know the requirements for refurbishment and retrofitting. Currently there are no plans and no timeline to refurbish the diesel buses to electric.
- Q 18. During an AirTrain outage, the requirement is to be fully operational in three (3) hours. Does the Contractor get reimbursed/paid for keeping drivers on standby in the event an AirTrain outage requires emergency service?
  - A. The contingency service is a separate line item from the regular bus fleet on Exhibit 2b, Cost Proposal Form. That allows the Contractor to consider any differences in cost for providing drivers on short notice.
- Q 19. Exhibit 1A, Page 3, references maintenance to be performed at 500 miles, or 15 engine hours. Is the 15 Engine hours correct?
  - A. See Changes/Modifications Item A.
- Q 20. Are all current schedules for both JFK and LGA accurately depicted in the RFP document?
  - A. Yes.
- Q 21. Will the lease buses be transferred in "like new" condition, as the lease will be transferred to the new operator? From a physical review of the leased buses, there are

several buses that need body work. Will this work be completed prior to the transfer of the lease? Who will be responsible for making the repairs for damage that is potentially inherited from the current contract?

- A. All buses have recently passed NYSDOT inspections. Also, as per Page 61, Section 26, Paragraph 2, Sentence 2, the Contractor will receive the buses in "as is" condition.
- Q 22. Section 32, entitled "Lease Buses," indicates that "the Contractor shall be required to assume or transfer the agreement of any leased buses currently in use at the Airport operations." Will the leases be taken over by the Contractor at the start of the Contract?
  - A. Yes, these leases will be taken over by the Contractor at the start of the Contract.
- Q 23. Section 26, entitled "Vehicles of the On-Airport Ground Transportation Service" of the RFP gives the provide details of the current fleet. Can we get the Port Authority provide the split of this fleet by airport?
  - A. See Changes/Modifications Item F.
- Q 24. Can the Port Authority provide the current mileage for each bus?
  - A. See Changes/Modifications Item I, Attachment G, Exhibits 22 and 23.
- Q 25. Will the Port Authority extend the Proposal due date?
  - A. See Addendum #2.
- Q 26. Will flash drives be acceptable in place of CD's?
  - A. No. As stated on Page 5, Section E, entitled "Submission of Proposals," CDs must be submitted.
- Q 27. Is the Port Authority exempt from state and local sales tax?
  - A. Yes. See Page 27, Section J, entitled "Taxes and Costs."
- Q 28. How will the Port Authority address years where there are no CPI increases as the Contractors' costs rise?
- A. Refer to Page 45, Section 10, entitled "Escalation Term and Option Years." Q 29. What is the proposed location of the LGA Maintenance and Staging Area? What is the square footage? Is it capable of adding charging for the electric fleet?
  - A. The current LGA Maintenance and Staging Area is located west of Hangar 7 and currently exists for light maintenance. There is space for outdoor maintenance of 2-3 buses. Three chargers are provided at LGA Lot P10 and four will be provided in proximity to Hangar 7 North.
- Q 30. Has the Port Authority obtained extended warranties on the existing electric buses and will it obtain extended warranties for the additional twelve (12) electric buses that will be placed into service?
  - A. See Changes/Modifications Item I.
- Q 31. Page 61, Section 26, entitled "Vehicles of the On-Airport Ground Transportation Service," states that the Contractor will be operating twenty-four (24) electric buses, currently twelve (12). How will the Authority handle the additional insurance required for these twelve (12) buses?
  - A. See Page 57, Section 22, entitled "Insurance Procured by the Contractor."
- Q 32. What is the replacement schedule for the cutaway or sprinter fleet?
  - A. There is no replacement schedule for those vehicles.
- Q 33. The lease referenced in the RFP is expired. Can the Port Authority provide the current lease term that the operator is supplying the lease buses to the Port Authority?
  - A. The bus lease shown as Exhibit 20 expires 12/31/19. The Contractor will need to lease the buses for a three (3) year period with options for extension.

- Q 34. The Cost Proposal Form separates diesel, electric and hybrid buses between particular routes and services. Must these types of buses be used for these routes/services or can any bus be used on any route/service with Port Authority prior approval?
  - A. Any bus can be used on any route as directed by the Port Authority. See Page 62, Section 27, entitled "Rules Governing Use of Vehicles," subparagraph (a).
- Q 35. Exhibit 12 references a minimum spare parts requirement for Orion Diesel buses. Can the Port Authority provide a minimum spare parts list for Hybrid and Electric bus components?
  - A. See Changes/Modifications Item I, Attachment G, Exhibits 24 and 25.
- Q 36. Page 50, Section 13, entitled "Performance-Based Incentives," subparagraph B refers to a 98% fleet uptime in order to obtain a 5% bonus. How will this be calculated? Does this include buses that are out of service for routine Periodic Maintenance and/or in transport from JKF to LGA?
  - A. See Changes/Modifications, Item B.
- Q 37. Is there an additional line item in the Cost Proposal Form for the cost of fueling?
  - A. No. See Page 71, Section 34, entitled "Fueling." The Port Authority will purchase and supply to the Contractor all fuel necessary to operate the Service at LGA and JFK.
- Q 38. What is the make and model of the provided bus wash system that the Contractor must maintain?
- A. The bus wash system was custom made by Johnson Wash System, LLC and it is known as JFKWS1. Address is Whitmore Lake, MI 48189.
- Q 39. The RFP states that the Contractor must repair any damage to the paving or other surface of the areas caused by any oil, gasoline, grease, lubricants or other liquids and substances having a corrosive or detrimental effect thereon. Can the Authority provide the last three (3) years of the costs in this category?
  - A. The Port Authority is not aware of any of these damage costs in the last three (3) years.
- Q 40. How will the Authority establish a base line for damage as a result of use by previous service providers and other vehicles operating on these surfaces?
  - A. The existing contractor would be held responsible if damage occurs during the current contract period. The Port Authority Central Automotive Group is expected to inspect the buses prior to the transition.
- Q 41. Can the Authority provide the current odometer reading for each of the Authority provided buses as outlined in Exhibit 10? Please clarify if any major components (engines and transmissions) have been replaced for these vehicles. If yes, on what date and mileage?
  - A. See Changes/Modifications Item I, Attachment G, Exhibits 22 and 23.
- Q 42. Who is responsible for the maintenance and cost of the Charge Point charging stations at JFK and LGA?
  - A. The Port Authority is responsible for those costs.
- Q 43. Can the Authority provide the cost of body damage repairs on all buses due to the LGA roadway restrictions?
  - A. This is not quantifiable.
- Q 44. How many buses can stage at LGA for operational needs?
  - A. There are typically 48 buses located at LGA.
- Q 45. We understand that the Authority is providing parking at each airport, but it is not clear if all the employee vehicles can fit in the dedicated space. Will the Authority provide additional parking if the current designated space is not enough? Is there a cost?

- A. Contractor employee parking is currently provided and has been sufficient. Should the Contractor request additional parking the Port Authority would review the request and provide if deemed necessary and available. Otherwise, the Contractor would need to provide its own parking. See Page 75, Section 37, entitled "Parking," for additional information.
- Q 46. Who pays for the bus washing at JFK and LGA?
  - A. The Port Authority built the bus wash and pays for replacement of major components. The Contractor operates and maintains the car wash. See Page 97, Section 46, entitled "Space Provided by the Contractor."
- Q 47. Who covers the cost of fuel? What is the historical expense of fuel and the history of price escalation?
  - A. See Page 71, Section 34, entitled "Fueling."
- Q 48. Does the price for fuel include fuel tax or is the Authority exempt from local, State and Federal taxes?
  - A. The Port Authority is exempt. See Page 27, Section J, entitled "Taxes and Costs."
- Q 49. How is the cost of electricity in charging electric vehicles handled?
  - A. See Changes/Modifications Item E.
- Q 50. What is the per person cost the Contractor will be charged to perform background checks? Will existing employees of the incumbent be required to be rechecked? How many days does it take for a completed background check to be received from the time a check is submitted until the time it is received by the vendor?
  - A. See Page 127, Section 33, entitled "Notification of Security Requirements."
- Q 51. How many days are the payment terms?
  - A. See page 36, Section 5, entitled "Billing and Payment Provisions."
- Q 52. When will the forty-seven (47) Orion buses be replaced?
  - A. Currently, there are no plans to do so in the next three years.
- Q 53. What recourse does the Contractor have for improper maintenance performed by the previous contractor?
  - A. Please refer to Page 61, Section 26, entitled "Vehicles of the On-Airport Ground Transportation Service," Paragraph 2.
- Q 54. Will a takeover inspection be performed at time of transfer to baseline existing conditions for which the Contractor will be required to maintain?
  - A. An inspection will take place prior to the conclusion of the current contract to assess the condition of the buses.
- Q 55. What is the planned replacement schedule for any of these specific fleet vehicles over the term of the contract?
  - A. No planned replacement.
- Q 56. Can the Port Authority provide the maintenance records for all the buses highlighted on Page 61, Section 26?
  - A. Not available.
- Q 57. Can you provide two (2) years of history relating to Additional Vehicles? Please provide the current run cut, headways and blocking that are in place for this contract today.
  - A. None have been added in the last two years at JFK. Since 2016, at LGA twenty-one (21) buses were added and that has since dropped to sixteen (16) buses. Additionally, there were two (2) cutaways at LGA initially that were added and there is one (1) currently.

- Q 58. Can the Port Authority provide a copy of the current contract for each incumbent contractor for these services?
  - A. Submit a request for Public Records Access via the website at www.panynj.gov.
- Q 59. If local, state or federal governments change the laws, rules or regulations that affect minimum wages and/or benefits that are mandated for the employees that are employed by this contract, and this event was not known at the time of proposing, and this event occurs during the term of any contract resulting from this procurement how will the Authority respond to the request for increased compensation?
  - A. See Page 45, Section 10, entitled "Escalation Term and Option Years."
- Q 60. Can the Port Authority provide the annual revenue miles and revenue hours, total miles and total hours, and current deadhead miles and deadhead hours for the services contemplated by this RFP?
  - A. See Changes/Modifications Item I, Attachment G, Exhibit 22—LGA 2018 Mileage, Fuel Usage, etc. and Attachment G, Exhibit 23—JFK 2018 Mileage, Fuel Usage, etc.
- Q 62. Can the Authority provide a current seniority list along with seniority date? Please also indicate if these positions are full time or part time, and current rate of pay.
  - A. Such lists can be provided to the successful Proposer.
- Q 63. Can the Port Authority provide contact information for any local union representative that currently represents any of the current employees?
  - A. International Brotherhood of Teamsters, Local 295 & IAM District 15, Local Lodge 447;

Vincent Bruno, Local 295, Teamsters, Vice President;

Robert Motisi, Local 447, Machinist Union.

- Q 64. Can the Authority provide a listing of current positions provided by the current contractor, or an organizational chart outlining these positions, indicating the percentage that these current positions are dedicated to the current contract?
  - A. The Port Authority will not provide this information.
- Q 65. Have there been any challenges due to the incumbent contractor having driver shortages?
  - A. Yes, there have been driver shortages at times in the past.
- Q 66. Can the Port Authority provide any information about current incentive programs that are offered to the current employees of this contract?
  - A. The Port Authority currently does not provide incentive programs.
- Q 67. What are the average miles between breakdowns per year for each of the three (3) past years?
  - A. The requested information is not currently tracked or monitored.
- Q 68. Can the Port Authority provide a history of the Non-Performance Liquidated Damages assessed against the current contractor?
  - A. Non-Performance Liquidated Damages have not been assessed.
- Q 69. Are liquidated damages pyramiding (i.e. more than one assessment can be made for the same hour of work)?
  - A. No. Please see Page 47, Section 12, entitled "Non-Performance Liquidated Damages."
- Q 70. Is there a maximum liquidated damage?
  - A. There is no maximum liquidated damage.

- Q 71. Can the Port Authority provide performance reports on headway maintenance performance for the past twelve (12) months?
  - A. This information is not tracked or monitored.
- Q 72. Is the maximum amount a contractor can earn through incentives fifteen percent (15%) of the monthly invoice?
  - A. Yes. See Page 49, Section 13.
- O 73. How is the incentive calculated?
  - A. See page 13, Section 13, entitled "Performance-Based Incentives."
- Q 74. Will the Authority make any vehicles available to the Contractor to perform the necessary training during the transition period? If yes, how many and what type?
  - A. Such a request may be considered by the Port Authority once the Contractor has been selected.
- Q 75. What is the weight between Price and Technical in determining the most advantageous Proposal?
  - A. The weights are not provided, however, evaluation criteria are listed in order of importance. Refer to Page 12, Section 5, "Evaluation Criteria and Ranking."
- Q 76. Does any existing governance structure (committees/teams) focused on service improvements and innovations exist at the Port Authority? If they exist, how do they function?
  - A. The Port Authority has placed significant importance on customer service improvements and the Aviation Customer Care Standards are provided as RFP Exhibit 7.
- Q 77. Is there any governance structure in place where the Contractor and Port Authority staff may meet to discuss best practices and innovations?
  - A. See Clarifications/Modifications Item H.
- Q 78. Can Port Authority provide a document describing its long-term transportation strategy overall and for each airport?
  - A. Port Authority Traffic Engineering has long terms plans for bus routes especially as it relates to airport redevelopment. That would not need to be provided at this point as bus routes can change over time.
- Q 79. Has the Port Authority conducted a benchmark study on service performance between the airports and with any out of state airports?
  - A. The Port Authority conducted a study of the JFK/LGA bus fleet, and it was found to be sufficient.
- Q 80. Has Port Authority conducted any ridership satisfaction surveys in the past year? If so, can you share the results?
  - A. Mystery Shoppers are utilized from time to time and results can be made available to the successful proposer.
- Q 81. Can Port Authority provide a list of pilot programs for innovations currently under consideration?
  - A. There are no pilot programs currently under consideration.
- Q 82. What is the Port Authority fleet plan/replacement schedule?
  - A. There are no replacements planned in the next three years.
- Q 83. Can Port Authority provide information on current contractor driver turnover rates specifically over the last 12 months?
  - A. That information is not available.
- Q 84. Can Port Authority provide an organization chart of the Port Authority team overseeing airport services?

- A. This can be provided to the successful proposer.
- Q 85. Can Port Authority provide contractor performance audit results for the past year?
  - A. No.
- Q 86. What is the expected annual ridership and wheelchair ridership as a percentage of the total ridership?
  - A. Refer to RFP Exhibit 19 for annual ridership. Wheelchair ridership is not tracked.
- Q 87. Can the Authority provide the last three years of loss and accident information, including accident/incident frequencies per 100,000 miles?
  - A. That information is not available.
- Q 88. Will all vehicles have to be inspected by all parties in a transition situation?
  - A. No. See Page 61, Section 26, entitled "Vehicles of the On-Airport Ground transportation Service."
- Q 89. In the event of a dispute over a vehicle condition, what is the process for reconciliation?
  - A. All vehicles are being provided in "as-is" condition. See Page 61, Section 26, entitled "Vehicles of the On-Airport Ground transportation Service."
- Q 90. Can the successful proposer refuse to accept a vehicle for service?
  - A. No. See Page 61, Section 26, entitled "Vehicles of the On-Airport Ground transportation Service."
- Q 91. What, if any, guarantees or warranties will come with the transfer of vehicles?
  - A. All vehicles are being provided in "as-is" condition. See Page 61, Section 26, entitled "Vehicles of the On-Airport Ground transportation Service."
- Q 92. Regarding removal of staff, can Port Authority confirm that federal, state, local and CBA statues and rules must be applied to all staffing decisions?
  - A. The Contractor is required to abide by all Federal, state and local laws, rules and regulations.
- Q 93. What equipment, materials, supplies, maintenance area and property will be supplied to the Contractor?
  - A. See Page 33, Section 1, entitled "General Agreement."
- Q 94. Will the maintenance and administrative space allotted to the Contractor be ample amount of space to operate the entire Contract?
- A. The space is what has been available for the current contract to run the fleet. Q 95. Will the cost of replacement buses be the liability of the Contractor or the Port Authority?
  - A. The cost for bus leasing or bus replacement will be borne by the Port Authority.
- Q 96. Will a prospective proposer be able to negotiate with the incumbent maintenance subcontractor for this Contract?
  - A. Yes.
- Q 97. Is there any other space in building 141 or any other Port Authority property at JFK that may be available to lease by a proposer?
  - A. The Port Authority will assist the Contractor in locating additional space that it might lease and its availability will depend on how much space is needed, the type, and the lease term. However, space on-airport is generally scarce.
- Q 98. Can you provide the total annual miles for all vehicles for 2018?
  - A. See Changes/Modifications Item I, Attachment G, Exhibit 22 and 23.
- Q 99. Can you provide the total annual revenue hours for all vehicles for 2018?

- A. Estimated hours are provided in the RFP Exhibit 2B Cost Proposal Form.
- Q 100. Will the successful proposer have access to the wash bay in building 141?
  - A. Yes.
- Q 101. Will the successful proposer have access to the parts cage in building 141?
  - A. Yes.
- Q 102. For emergency services, will you accept operating coach buses?
  - A. No.
- Q 103. What provisions will the Port Authority consider for the first year of a contract for the "end of life" vehicle maintenance (2009 vehicles) (i.e., share cost for major repairs....)?
  - A. There is not an end of life program for the 2009 vehicles in the first year of the program as those vehicles have been refurbished.
- Q 104. Can the vendor install its own technology package on the buses?
  - A. The Port Authority may consider the Contractor's request to change or supplement the technology package.

This communication should be initialed by you and annexed to your submission.

In case any Proposer fails to conform to these instructions, its Proposal will nevertheless be construed as though this communication had been so physically annexed and initialed.

THE PORT AUTHORITY OF NY & NJ Selene Ortega, Manager Commodities and Service Division

INITIALED:	POSER'S FIRM NAME:
	TALED:
DATE:	E:

QUESTIONS CONCERNING THIS ADDENDUM MAY BE ADDRESSED TO Richard Grehl, WHO CAN BE REACHED AT (212) 435-4633 or at rgrehl@panynj.gov.

## **Attachment G, Exhibit 21--Updated Inventory**

	John F. Kennedy International Airport - On-Airport Bus Fleet											
	Unit #	Make	Year				Fuel (Hybrid or		Term (Own or	Assignme nt (LGA/JFK/		
							Diesel)		Lease)	EWR)		
1	721	Orion Mark VII	2007	1			Hybrid		Owned	JFK		
2	722	Orion Mark VII	2007	2			Hybrid		Owned	JFK		
3	723	Orion Mark VII	2007	3			Hybrid		Owned	JFK		
4	724	Orion Mark VII	2007	4			Hybrid		Owned	JFK		
5	725	Orion Mark VII	2007	5			Hybrid		Owned	JFK		
6	726	Orion Mark VII	2007	6			Hybrid		Owned	JFK		
7	727	Orion Mark VII	2007	7			Hybrid		Owned	JFK		
8	731	Orion Mark VII	2007		1		Diesel		Owned	JFK		
9	732	Orion Mark VII	2007		2		Diesel		Owned	JFK		
10	733	Orion Mark VII	2007		3		Diesel		Owned	JFK		
11	734	Orion Mark VII	2007		4		Diesel		Owned	JFK		
12	735	Orion Mark VII	2007		5		Diesel		Owned	JFK		
13	736	Orion Mark VII	2007		6		Diesel		Owned	JFK		
14	737	Orion Mark VII	2007		7		Diesel		Owned	JFK		
15	738	Orion Mark VII	2007		8		Diesel		Owned	JFK		
16	739	Orion Mark VII	2007		9		Diesel		Owned	JFK		
17	740	Orion Mark VII	2007		10		Diesel		Owned	JFK		
18	741	Orion Mark VII	2007		11		Diesel		Owned	JFK		
19	742	Orion Mark VII	2007		12		Diesel		Owned	JFK		
20	743	Orion Mark VII	2007		13		Diesel		Owned	JFK		
21	744	Orion Mark VII	2009	8			Hybrid		Owned	JFK		
22	745	Orion Mark VII	2009	9			Hybrid		Owned	JFK		
23	746	Orion Mark VII	2009	10			Hybrid		Owned	JFK		
24	747	Orion Mark VII	2009	11			Hybrid		Owned	JFK		
25	748	Orion Mark VII	2009	12			Hybrid		Owned	JFK		
26	749	Orion Mark VII	2009	13			Hybrid		Owned	JFK		
27	750	Orion Mark VII	2009	14			Hybrid		Owned	JFK		
28	751	Orion Mark VII	2009	15			Hybrid		Owned	JFK		
29	752	Orion Mark VII	2009	16			Hybrid		Owned	JFK		
30	753	Orion Mark VII	2009	17			Hybrid		Owned	JFK		
31	754	Orion Mark VII	2009	18			Hybrid		Owned	JFK		
32	755	Orion Mark VII	2009	19			Hybrid		Owned	JFK		
33	756	Orion Mark VII	2009	20			Hybrid		Owned	JFK		
34	757	Orion Mark VII	2009	21			Hybrid		Owned	JFK		
35	758	Orion Mark VII	2009	22			Hybrid		Owned	JFK		
36	759	Orion Mark VII	2009	23			Hybrid		Owned	JFK		
37	760	Orion Mark VII	2009	24			Hybrid		Owned	JFK		
38	761	Orion Mark VII	2009	25			Hybrid		Owned	JFK		

39	762	Orion Mark VII	2009	26			Hybrid	Owned	JFK
40	763	Orion Mark VII	2009	27			Hybrid	Owned	JFK
41	801-E	Catalyst E2	2018			1	Electric	Owned	JFK
42	802-Е	Catalyst E3	2018			2	Electric	Owned	JFK
43	803-E	Catalyst E4	2018			3	Electric	Owned	JFK
44	804-E	Catalyst E5	2018			4	Electric	Owned	JFK
45	805-E	Catalyst E6	2018			5	Electric	Owned	JFK
46	806-E	Catalyst E7	2018		·	6	Electric	Owned	JFK

		Make	Year		Fuel (Hybrid or Diesel)		Term (Own or Lease)	Assignme nt (LGA/JFK/ EWR)	
1	701	Orion Mark VII	2007	14	Hybrid		Owned	LGA	
2	702	Orion Mark VII	2007	15	Hybrid		Owned	LGA	
3	703	Orion Mark VII	2007	16	Hybrid		Owned	LGA	
4	704	Orion Mark VII	2007	17	Hybrid		Owned	LGA	
5	705	Orion Mark VII	2007	18	Hybrid		Owned	LGA	
6	706	Orion Mark VII	2007	19	Hybrid		Owned	LGA	
7	707	Orion Mark VII	2007	20	Hybrid		Owned	LGA	
8	708	Gillig	2000	21	Diesel	1	Leased	LGA	
9	709	New Flyer	2002	22	Diesel	2	Leased	LGA	Released from lease
10	710	Gillig	2000	23	Diesel	3	Leased	LGA	
11	711	New Flyer	2002	24	Diesel	4	Leased	LGA	
12	712	Gillig	2000	25	Diesel	5	Leased	LGA	
13	713	New Flyer	1998	26	Diesel	6	Leased	LGA	Released from lease
14	714	New Flyer	2001	27	Diesel	7	Leased	LGA	
15	715	New Flyer	2001		Diesel		Leased	LGA	
16	716	New Flyer	1998	29	Diesel	9	Leased	LGA	
17	717	New Flyer	1995	30	Diesel	10	Leased	LGA	
18	718	New Flyer	2001	31	Diesel	11	Leased	LGA	
19	720	New Flyer	2001	33	Diesel	13	Leased	LGA	
20	764	New Flyer	2001		Diesel		Leased	LGA	
21	766	New Flyer	2001	36	Diesel	16	Leased	LGA	
22	769	New Flyer	2001	39	Diesel	19	Leased	LGA	
23	770	New Flyer	2001	40	Diesel	20	Leased	LGA	
24	771	New Flyer	2001	41	Diesel	21	Leased	LGA	
25	772	New Flyer	2001	42	Diesel	22	Leased	LGA	
26	774	Ford Cutaway	2007	44	Diesel	24	Leased	LGA	Released from lease
27	775	Ford Cutaway	2009	45	Diesel	25	Leased	LGA	
28	850	Proterra Catalyst E2	2019		Electric		Owned	LGA	
29	851	Proterra Catalyst E2	2019		Electric		Owned	LGA	
30	852	Proterra Catalyst E2	2019		Electric		Owned	LGA	
31	853	Proterra Catalyst E2	2019		Electric		Owned	LGA	
32	854	Proterra Catalyst E2	2019		Electric		Owned	LGA	

33 855 Proterra Catalyst E2 2019 45 Electric 25 Owned LGA

Mobile c	ombustion emis	sions	(highwa	y vehicle		ĺ		LGA		2018			1			
Vehicle No.	State Make	Model	Fuel Type	% Biofuel (0 if N/A)	Actual Quantity of Fuel Consumed (gallons)	Odometer Reading 1: Date	Odometer Reading 1: Miles	Odometer Reading 2: Date	Odometer Reading 2: Miles	Estimated Fuel Efficiency	Vehicle Type (Car, Light Truck, Heavy Duty Vehicle, Motorcycle)	Model Year	Source	Name	Date	Notes
14701	NY ORION	BUS	Bio-Diesel	20%	11,091.0	January 1, 2018	280,761.0	December 31, 2018	319,584.0	3.5	Orion Bus	2007	PA Fuel Mgt	Vincent Delucia		LGA BUS - Hybrid #701
14702	NY ORION	BUS	Bio-Diesel	20%	11,431.0	January 1, 2018	296,095.0	December 31, 2018	331,448.0	3.1	Orion Bus	2007	PA Fuel Mgt	Vincent Delucia		LGA BUS - Hybrid #702
14703	NY ORION	BUS	Bio-Diesel	20%	9,402.0	January 1, 2018	332,162.0	December 31, 2018	366,188.0	3.6	Orion Bus	2007	PA Fuel Mgt	Vincent Delucia		LGA BUS - Hybrid #703
14704	NY ORION	BUS	Bio-Diesel	20%	12,546.0	January 1, 2018	315,790.0	December 31, 2018	355,242.0	3.1	Orion Bus	2007	PA Fuel Mgt	Vincent Delucia		LGA BUS - Hybrid #704
14705	NY ORION	BUS	Bio-Diesel	20%	9,010.0	January 1, 2018	98,325.0	December 31, 2018	128,848.0	3.4	Orion Bus	2007	PA Fuel Mgt	Vincent Delucia	5/23/19	LGA BUS - Hybrid #705- new meter
14706	NY ORION	BUS	Bio-Diesel	20%	9,625.0	January 1, 2018	339,707.0	December 31, 2018	372,115.0	3.4	Orion Bus	2007	PA Fuel Mgt	Vincent Delucia	5/23/19	LGA BUS - Hybrid #706
14707	NY ORION	BUS	Bio-Diesel	20%	8,888.0	January 1, 2018	335,268.0	December 31, 2018	358,897.0	2.7	Orion Bus	2007	PA Fuel Mgt	Vincent Delucia	5/23/19	LGA BUS - Hybrid #707
14732	NY ORION	BUS	Bio-Diesel	20%	13,099.0	January 1, 2018	180,683.0	December 31, 2018	217,548.0	2.81	Orion Bus	2007	PA Fuel Mgt	Vincent Delucia	5/23/19	JFK Bus - Diesel -JFK Bus
14733	NY ORION	BUS	Bio-Diesel	20%	-	January 1, 2018		December 31, 2018		#DIV/0!	Orion Bus	2007	PA Fuel Mgt	Vincent Delucia	5/23/19	JFK Bus - Diesel -JFK Bus
14734	NY ORION	BUS	Bio-Diesel	20%	8,256.0	January 1, 2018	169,400.0	December 31, 2018	184,359.0	1.81	Orion Bus	2007	PA Fuel Mgt	Vincent Delucia	5/23/19	JFK Bus - Diesel -JFK Bus
14735	NY ORION	BUS	Bio-Diesel	20%	8,617.0	January 1, 2018	104,473.0	December 31, 2018	120,247.0	1.83	Orion Bus	2007	PA Fuel Mgt	Vincent Delucia	5/23/19	JFK Bus - Diesel -JFK Bus
14740	NY ORION	BUS	Bio-Diesel	20%	-	January 1, 2018		December 31, 2018		#DIV/0!	Orion Bus	2007	PA Fuel Mgt	Vincent Delucia	5/23/19	JFK Bus - Diesel -JFK Bus
14741	NY ORION	BUS	Bio-Diesel	20%	7,540.0	January 1, 2018	134,872.0	December 31, 2018	183,391.0	6.43	Orion Bus	2007	PA Fuel Mgt	Vincent Delucia	5/23/19	JFK Bus - Diesel -JFK Bus
14742	NY ORION	BUS	Bio-Diesel	20%	5,339.0	January 1, 2018	174,392.0	December 31, 2018	185,429.0	2.07	Orion Bus	2007	PA Fuel Mgt	Vincent Delucia	5/23/19	JFK Bus - Diesel -JFK Bus
708	NY NF	BUS	Bio-Diesel	20%	5,622.0	January 1, 2018	89,222.0	December 31, 2018	89,222.0	0.00	Gillig	2000	PA Fuel Mgt	Vincent Delucia	5/23/19	lease bus Gillig-Diesel
709	NY NF	BUS	Bio-Diesel	20%	10,570.0	January 1, 2018	108,919.0	December 31, 2018	407,470.0	28.25	Newflyer	2002	PA Fuel Mgt	Vincent Delucia	5/23/19	lease bus newflyer-Diesel
710	NY NF	BUS	Bio-Diesel	20%	10,665.0	January 1, 2018	117,278.0	December 31, 2018	145,579.0	2.65	Gillig	2000	PA Fuel Mgt	Vincent Delucia	5/23/19	lease bus Gillig-Diesel
711	NY NF	BUS	Bio-Diesel	20%	6,035.0	January 1, 2018	87,054.0	December 31, 2018	104,475.0	2.89	Newflyer	2002	PA Fuel Mgt	Vincent Delucia	5/23/19	lease bus newflyer-Diesel
712	NY NF	BUS	Bio-Diesel	20%	8,905.0	January 1, 2018	97,957.0	December 31, 2018	123,062.0	2.82	Gillig	2000	PA Fuel Mgt	Vincent Delucia	5/23/19	lease bus Gillig-Diesel
713	NY NF	BUS	Bio-Diesel	20%	8,135.0	January 1, 2018	499,878.0	December 31, 2018	518,063.0	2.24	Newflyer	1998	PA Fuel Mgt	Vincent Delucia	5/23/19	lease bus newflyer-Diesel
714	NY NF	BUS	Bio-Diesel	20%	10,187.0	January 1, 2018	404,053.0	December 31, 2018	404,053.0	0.00	Newflyer	2001	PA Fuel Mgt	Vincent Delucia	5/23/19	lease bus newflyer-Diesel
715	NY NF	BUS	Bio-Diesel	20%	9,930.0	January 1, 2018	383,283.0	December 31, 2018	383,283.0	0.00	Newflyer	2001	PA Fuel Mgt	Vincent Delucia	5/23/19	lease bus newflyer-Diesel
716	NY NF	BUS	Bio-Diesel	20%	7,084.0	January 1, 2018	41,150.0	December 31, 2018	59,932.0	2.65	Newflyer	1998	PA Fuel Mgt	Vincent Delucia	5/23/19	lease bus newflyer-Diesel
717	NY NF	BUS	Bio-Diesel	20%	6,688.0	January 1, 2018	72,402.0	December 31, 2018	90,977.0	2.78	Newflyer	1995	PA Fuel Mgt	Vincent Delucia	5/23/19	lease bus newflyer-Diesel
718	NY NF	BUS	Bio-Diesel	20%	9,090.0	January 1, 2018	726,064.0	December 31, 2018	757,949.0	3.51	Newflyer	2001	PA Fuel Mgt	Vincent Delucia	5/23/19	lease bus newflyer-Diesel
719	NY NF	BUS	Bio-Diesel	20%	10,819.0	January 1, 2018	653,103.0	December 31, 2018	684,882.0	2.94	Newflyer	2001	PA Fuel Mgt	Vincent Delucia	5/23/19	lease bus newflyer-Diesel
720	NY NF	BUS	Bio-Diesel	20%	6,984.0	January 1, 2018	631,480.0	December 31, 2018	652,978.0	3.08	Newflyer	2001	PA Fuel Mgt	Vincent Delucia Vincent	5/23/19	lease bus newflyer-Diesel
764	NY NF	BUS	Bio-Diesel	20%	8,653.0	January 1, 2018	606,808.0	December 31, 2018	628,958.0	2.56	Newflyer	2001	PA Fuel Mgt	Delucia	5/23/19	lease bus newflyer-Diesel
765	NY NF	BUS	Bio-Diesel	20%	8,967.0	January 1, 2018	714,475.0	December 31, 2018	740,612.0	2.91	Newflyer	2001	PA Fuel Mgt	Vincent Delucia Vincent	5/23/19	lease bus newflyer-Diesel
766	NY NF	BUS	Bio-Diesel	20%	7,213.0	January 1, 2018	721,572.0	December 31, 2018	741,273.0	2.73	Newflyer	2001	PA Fuel Mgt	Delucia	5/23/19	lease bus newflyer-Diesel
767	NY NF	BUS	Bio-Diesel	20%	6,312.0	January 1, 2018	742,065.0	December 31, 2018	760,872.0	2.98	Newflyer	2001	PA Fuel Mgt	Vincent Delucia	5/23/19	lease bus newflyer-Diesel
768	NY NF	BUS	Bio-Diesel	20%	9,832.0	January 1, 2018	711,128.0	December 31, 2018	743,541.0	3.30	Newflyer	2001	PA Fuel Mgt	Vincent Delucia	5/23/19	lease bus newflyer-Diesel
769	NY NF	BUS	Bio-Diesel	20%		January 1, 2018	716,064.0	December 31, 2018	749,557.0	2.83	Newflyer	2001	PA Fuel Mgt	Vincent Delucia Vincent	5/23/19	lease bus newflyer-Diesel
770	NY NF	BUS	Bio-Diesel	20%		January 1, 2018	725,376.0	December 31, 2018	756,735.0	2.91	Newflyer	2001	PA Fuel Mgt	Delucia Vincent	5/23/19	lease bus newflyer-Diesel
771	NY NF	BUS	Bio-Diesel	20%		January 1, 2018	581,483.0	December 31, 2018	596,842.0	2.56	Newflyer	2001	PA Fuel Mgt	Delucia	5/23/19	lease bus newflyer-Diesel
772	NY NF	BUS	Bio-Diesel	20%	8,767.0	January 1, 2018	577,334.0	December 31, 2018	605,372.0	3.20	Newflyer	2001	PA Fuel Mgt	Vincent Delucia Vincent	5/23/19	lease bus newflyer-Diesel
773	NY NF	BUS	Bio-Diesel	20%	7,238.0	January 1, 2018	733,287.0	December 31, 2018	751,331.0	2.49	Newflyer	2001	PA Fuel Mgt	Delucia	5/23/19	lease bus newflyer-Diesel
	NY	BUS	Bio-Diesel	20%						#DIV/0!			1			
i	NY	BUS	Bio-Diesel	20%						#DIV/0!						

311,151.0 13,503,363 14,620,314 1,116,951

Mobile c	ombı	ustion emiss	sions			2018	1							7			
Vehicle No.			Model	Fuel Type	% Biofuel (0 if N/A)	Actual Quantity of Fuel Consumed (gallons)	Odometer Reading 1: Date	Odometer Reading 1: Miles	Odometer Reading 2: Date	Odometer Reading 2: Miles	Estimated Fuel Efficiency	Vehicle Type (Car, Light Truck, Heavy Duty Vehicle, Motorcycle)	Model Year	Source	Name	Date	Notes
14721	NY	ORION	BUS	Bio-Diesel	20%	2,180.8	January 1, 2018	135,058.0	December 1, 2018	135,718.0	0.3	Orion Bus	2007	PA Fuel Mgt	Vincent Delucia	5/23/19	JFK BUS - Hybrid #721
14722	NY	ORION	BUS	Bio-Diesel	20%	5,182.9	January 1, 2018	5,402.0	December 1, 2018	15,991.0	2.0	Orion Bus	2007	PA Fuel Mgt	Vincent Delucia	5/23/19	JFK BUS - Hybrid #722
14723	NY	ORION	BUS	Bio-Diesel	20%	5,525.8	January 1, 2018	115,469.0	December 1, 2018	128,901.0	2.4	Orion Bus	2007	PA Fuel Mgt	Vincent Delucia	5/23/19	JFK BUS - Hybrid #723
14724	NY	ORION	BUS	Bio-Diesel	20%	5,193.3	January 1, 2018	17,275.0	December 1, 2018	27,272.0	1.9	Orion Bus	2007	PA Fuel Mgt	Vincent Delucia	5/23/19	JFK BUS - Hybrid #724
14725	NY	ORION	BUS	Bio-Diesel	20%	1,275.9	January 1, 2018	32,574.0	December 1, 2018	37,075.0	3.5	Orion Bus	2007	PA Fuel Mgt	Vincent Delucia	5/23/19	JFK BUS - Hybrid #725
14726	NY	ORION	BUS	Bio-Diesel	20%	4,247.4	January 1, 2018	128,913.0	December 1, 2018	143,580.0	3.5	Orion Bus	2007	PA Fuel Mgt	Vincent Delucia	5/23/19	JFK BUS - Hybrid #726
14727	NY	ORION	BUS	Bio-Diesel	20%	5,088.1	January 1, 2018	4,589.0	December 1, 2018	16,314.0	2.3	Orion Bus	2007	PA Fuel Mgt	Vincent Delucia	5/23/19	JFK BUS - Hybrid #727
14731	NY	ORION	BUS	Bio-Diesel	20%	9,531.7	January 1, 2018	159,030.0	December 1, 2018	188,040.0	3.0	Orion Bus	2007	PA Fuel Mgt	Vincent Delucia	5/23/19	JFK BUS #731
14732	NY	ORION	BUS	Bio-Diesel	20%	10,113.8	January 1, 2018	180,683.0	December 1, 2018	217,548.0	3.6	Orion Bus	2007	PA Fuel Mgt	Vincent Delucia	5/23/19	JFK BUS #732
14733	NY	ORION	BUS	Bio-Diesel	20%	6,404.4	January 1, 2018	156,691.0	December 1, 2018	170,521.0	2.2	Orion Bus	2007	PA Fuel Mgt	Vincent Delucia	5/23/19	JFK BUS #733
14734	NY	ORION	BUS	Bio-Diesel	20%	8,683.6	January 1, 2018	169,400.0	December 1, 2018	184,359.0	1.7	Orion Bus	2007	PA Fuel Mgt	Vincent Delucia	5/23/19	JFK BUS #734
14735	NY	ORION	BUS	Bio-Diesel	20%	7,853.4	January 1, 2018	104,473.0	December 1, 2018	120,247.0	2.0	Orion Bus	2007	PA Fuel Mgt	Vincent Delucia	5/23/19	JFK BUS #735
14736	NY	ORION	BUS	Bio-Diesel	20%	4,892.8	January 1, 2018	11,692.0	December 1, 2018	25,038.0	2.7	Orion Bus	2007	PA Fuel Mgt	Vincent Delucia	5/23/19	JFK BUS #736
14737	NY	ORION	BUS	Bio-Diesel	20%	6,769.0	January 1, 2018	35,771.0	December 1, 2018	53,721.0	2.7	Orion Bus	2007	PA Fuel Mgt	Vincent Delucia	5/23/19	JFK BUS #737
14738	NY	ORION	BUS	Bio-Diesel	20%	4,617.6	January 1, 2018	158,251.0	December 1, 2018	168,397.0	2.2	Orion Bus	2007	PA Fuel Mgt	Vincent Delucia	5/23/19	JFK BUS #738
14739	NY	ORION	BUS	Bio-Diesel	20%	2,846.5	January 1, 2018	165,615.0	December 1, 2018	178,081.0	4.4	Orion Bus	2007	PA Fuel Mgt	Vincent Delucia	5/23/19	JFK BUS #739
14740	NY	ORION	BUS	Bio-Diesel	20%	5,212.6	January 1, 2018	28,019.0	December 1, 2018	42,618.0	2.8	Orion Bus	2007	PA Fuel Mgt	Vincent Delucia	5/23/19	JFK BUS #740
14741	NY	ORION	BUS	Bio-Diesel	20%	7,988.7	January 1, 2018	134,872.0	December 1, 2018	183,391.0	6.1	Orion Bus	2007	PA Fuel Mgt	Vincent Delucia	5/23/19	JFK BUS #741
14742	NY	ORION	BUS	Bio-Diesel	20%	6,032.7	January 1, 2018	174,392.0	December 1, 2018	185,429.0	1.8	Orion Bus	2007	PA Fuel Mgt	Vincent Delucia	5/23/19	JFK BUS #742
14743	NY	ORION	BUS	Bio-Diesel	20%	4,779.5	January 1, 2018	108,657.0	December 1, 2018	122,677.0	2.9	Orion Bus	2007	PA Fuel Mgt	Vincent Delucia	5/23/19	JFK BUS #743
14744	NY	ORION	BUS	Bio-Diesel	20%	3,783.3	January 1, 2018	1,513.0	December 1, 2018	14,390.0	3.4	Orion Bus	2009	PA Fuel Mgt	Vincent Delucia	5/23/19	JFK BUS - Hybrid #744
14745	NY	ORION	BUS	Bio-Diesel	20%	4,160.5	January 1, 2018	95,387.0	December 1, 2018	107,064.0	2.8	Orion Bus	2009	PA Fuel Mgt	Vincent Delucia	5/23/19	JFK BUS - Hybrid #745
14746	NY	ORION	BUS	Bio-Diesel	20%	5,733.2	January 1, 2018	120,243.0	December 1, 2018	133,379.0	2.3	Orion Bus	2009	PA Fuel Mgt	Vincent Delucia	5/23/19	JFK BUS - Hybrid #746
14747	NY	ORION	BUS	Bio-Diesel	20%	6,246.5	January 1, 2018	112,482.0	December 1, 2018	126,335.0	2.2	Orion Bus	2009	PA Fuel Mgt	Vincent Delucia	5/23/19	JFK BUS - Hybrid #747
14748	NY	ORION	BUS	Bio-Diesel	20%	6,097.7	January 1, 2018	137,332.0	December 1, 2018	152,735.0	2.5	Orion Bus	2009	PA Fuel Mgt	Vincent Delucia	5/23/19	JFK BUS - Hybrid #748
14749	NY	ORION	BUS	Bio-Diesel	20%	9,270.7	January 1, 2018	121,486.0	December 1, 2018	131,038.0	1.0	Orion Bus	2009	PA Fuel Mgt	Vincent Delucia	5/23/19	JFK BUS - Hybrid #749
14750	NY	ORION	BUS	Bio-Diesel	20%	2,029.0	January 1, 2018	111,713.0	December 1, 2018	116,642.0	2.4	Orion Bus	2009	PA Fuel Mgt	Vincent Delucia	5/23/19	JFK BUS - Hybrid #750
14751	NY	ORION	BUS	Bio-Diesel	20%	5,376.6	January 1, 2018	115,407.0	December 1, 2018	121,563.0	1.1	Orion Bus	2009	PA Fuel Mgt	Vincent Delucia	5/23/19	JFK BUS - Hybrid #751
14752	NY	ORION	BUS	Bio-Diesel	20%	9,097.8	January 1, 2018	156,213.0	December 1, 2018	179,304.0	2.5	Orion Bus	2009	PA Fuel Mgt	Vincent Delucia	5/23/19	JFK BUS - Hybrid #752
14753	NY	ORION	BUS	Bio-Diesel	20%	9,310.3	January 1, 2018	137,143.0	December 1, 2018	153,258.0	1.7	Orion Bus	2009	PA Fuel Mgt	Vincent Delucia	5/23/19	JFK BUS - Hybrid #753
14754	NY	ORION	BUS	Bio-Diesel	20%	6,199.7	January 1, 2018	140,831.0	December 1, 2018	157,089.0	2.6	Orion Bus	2009	PA Fuel Mgt	Vincent Delucia	5/23/19	JFK BUS - Hybrid #754
14755	NY	ORION	BUS	Bio-Diesel	20%	6,005.8	January 1, 2018	2,114.0	December 1, 2018	17,719.0	2.6	Orion Bus	2009	PA Fuel Mgt	Vincent Delucia	5/23/19	JFK BUS - Hybrid #755
14756	NY	ORION	BUS	Bio-Diesel	20%	6,645.1	January 1, 2018	18,716.0	December 1, 2018	37,193.0	2.8	Orion Bus	2009	PA Fuel Mgt	Vincent Delucia	5/23/19	JFK BUS - Hybrid #756

14757	NY	ORION	BUS	Bio-Diesel	20%	5,104.6	January 1, 2018	90,680.0	December 1, 2018	99,701.0	1.8	Orion Bus	2009	PA Fuel Mgt	Vincent Delucia	5/23/19	JFK BUS - Hybrid #757
14758	NY	ORION	BUS	Bio-Diesel	20%	5,103.8	January 1, 2018	120,410.0	December 1, 2018	131,290.0	2.1	Orion Bus	2009	PA Fuel Mgt	Vincent Delucia	5/23/19	JFK BUS - Hybrid #758
14759	NY	ORION	BUS	Bio-Diesel	20%	6,092.7	January 1, 2018	140,013.0	December 1, 2018	153,024.0	2.1	Orion Bus	2009	PA Fuel Mgt	Vincent Delucia	5/23/19	JFK BUS - Hybrid #759
14760	NY	ORION	BUS	Bio-Diesel	20%	6,148.0	January 1, 2018	155,701.0	December 1, 2018	173,786.0	2.9	Orion Bus	2009	PA Fuel Mgt	Vincent Delucia	5/23/19	JFK BUS - Hybrid #760
14761	NY	ORION	BUS	Bio-Diesel	20%	6,781.2	January 1, 2018	144,640.0	December 1, 2018	165,557.0	3.1	Orion Bus	2009	PA Fuel Mgt	Vincent Delucia	5/23/19	JFK BUS - Hybrid #761
14762	NY	ORION	BUS	Bio-Diesel	20%	7,932.2	January 1, 2018	147,428.0	December 1, 2018	171,992.0	3.1	Orion Bus	2009	PA Fuel Mgt	Vincent Delucia	5/23/19	JFK BUS - Hybrid #762
14763	NY	ORION	BUS	Bio-Diesel	20%	5,532.6	January 1, 2018	121,522.0	December 2, 2274	136,938.0	2.8	Orion Bus	2009	PA Fuel Mgt	Vincent Delucia	5/23/19	JFK BUS - Hybrid #763

4,824,915.0

4,217,800.0

237,071.8

-607,115.0



## Proterra Catalyst Recommended Spares

Proterra Part Number	Description	Recommended Qty	Unit Price	Ext Price
Module 30		۹۰,		
013536	ABS ECU	1	\$1,535.18	\$1,535.18
Module 50	LOW VOLTAGE ELECTRICAL POWER	-	Ψ = / 0 = 0 = 1 = 0	<del>+ 1,000.120</del>
010204	CONVERTER, DC-DC	1	\$4,490.00	\$4,490.00
021729	Contactor 350 Amp	2	\$127.40	\$254.80
016753	PLATE, VANNERS	1	\$85.66	\$85.66
000814	Vanner Battery Equalizer	1	\$698.49	\$698.49
000880	BATTERY, 12V, 100AH, GROUP 31	2	\$330.36	\$660.72
Module 60	HIGH VOLTAGE ELECTRICAL POWER		,	,
021731	CONTACTOR, 225A, 24 VDC COIL, GIGAVAC GX12CAB	2	\$134.49	\$268.98
021730	CONTACTOR, 600AMP, 24VDC COIL, GIGAVAC GX16CEB	2	\$237.90	\$475.80
006757	FUSE, 20AMP, 600VAC, FERRAZ SHAWMUT (ATMR20)	2	\$8.76	\$17.52
014391	VFD, DUAL 30KW OUTPUT	1	\$7,900.00	\$7,900.00
Module 80	DRIVERS WORK PLACE			
015156	ACTUATOR, REVERSE SELECTION SWITCH	1	\$84.77	\$84.77
015157	ACTUATOR, DRIVE SELECTION SWITCH	1	\$84.77	\$84.77
015158	ACTUATOR, NEUTRAL SELECTION SWITCH	1	\$84.77	\$84.77
015159	ACTUATOR, FRONT DOOR CONTROL SWITCH	1	\$85.56	\$85.56
015160	ACTUATOR,REAR DOOR CONTROL SWITCH	1	\$84.00	\$84.00
001137	Switch, Floor, Dimmer, Headlamp	2	\$14.32	\$28.64
001139	SWITCH, FLOOR, TURN SIGNAL	2	\$19.63	\$39.26
Module 120	Energy Storage			
016303	BMU	2	\$487.00	\$974.00
Module 140	WIPERS AND WASHERS			
014147	WIPER MOTOR, 2 SPEED	1	\$238.55	\$238.55
014148	WIPER ARM, WINDSHIELD, CS	1	\$90.05	\$90.05
014149	WIPER ARM, WINDSHIELD, SS	1	\$90.05	\$90.05
Module 150	ELECTRICAL CABINET			
014900	Relay 10A	2	\$3.36	\$6.72
016180	Relay 35A	2	\$3.38	\$6.76
Module 170	FRONT SUSPENSION AND STEERING			
004747	SPRING, AIR, FRONT, 1T19L-5 BELLOW	2	\$123.47	\$246.95
015064	SHOCK ABSORBER FRONT	2	\$351.47	\$702.94
Module 180	REAR SUSPENSION			
017729	SPRING, AIR, REAR	2	\$64.96	\$129.92
019265	SHOCK ABSORBER REAR	2	\$351.47	\$702.94
Module 200	RIDE HEIGHT			
004695	SENSOR, HEIGHT, SUSPENSION, 6" ARM	2	\$64.88	\$129.77
Module 210	EXTERIOR LIGHTING			
013831	LIGHT, TAIL LAMP, REAR	2	\$105.95	\$211.90



## Proterra Catalyst Recommended Spares

Proterra Part	Description			
Number	Description	Qty	Unit Price	Ext Price
013833	LIGHT, BACK UP LAMP, REAR	2	\$35.79	\$71.58
013832	LIGHT, TURN SIGNAL, REAR	2	\$109.56	\$219.12
013844	LIGHT, RED, SIDE MARKER	4	\$23.94	\$95.76
013843	LIGHT, YELLOW, SIDE MARKER	8	\$22.28	\$178.24
Module 240	AIR SYSTEM			
016885	MODULATOR, M-32, 24V	2	\$107.76	\$215.51
020493	VALVE, BOBTAIL RATIO, LQ-5	1	\$58.64	\$58.64
000320	VALVE, DOUBLE CHECK, DC-4	1	\$9.69	\$9.69
000321	VALVE, SINGLE CHECK, SC-3	1	\$9.46	\$9.46
000323	TRANSDUCER, PRESSURE	1	\$47.13	\$47.13
004697	SOLENOID, PNEUMATIC, EXHAUST, HIGH FLOW, SUSPENSION	2	\$346.27	\$692.54
Module 250	COOLANT SYSTEM			
018370	PUMP, WATER, CATALYST	3	\$455.00	\$1,365.00
Module 270	ENTRANCE DOORS			
017446	GLASS,EXIT DOOR	1	\$290.16	\$290.16
021624	PANEL, ASSY, LEFT, ENTRANCE DOOR, ELECTRIC	1	\$2,096.25	\$2,096.25
021625	PANEL ASSY, RIGHT, ENTRANCE DOOR, ELECTRIC	1	\$2,096.25	\$2,096.25
Module 280	EXIT DOORS			
017447	GLASS, EXIT DOOR	1	\$332.48	\$332.48
021626	PANEL ASSY, LEFT, EXIT DOOR, ELECTRIC	1	\$2,268.47	\$2,268.47
021627	PANEL ASSY, RIGHT, EXIT DOOR, ELECTRIC	1	\$2,268.47	\$2,268.47
Module 300	BUS BODY			
014662	Gas Spring, lower hatch side	3	\$10.36	\$31.08
014667	Gas Spring, clamshell	3	\$36.86	\$110.58
015452	Gas Spring, lower hatch rear	3	\$8.45	\$25.35
019480	LATCH, SCOOP	1	\$21.68	\$21.68
019652	LATCH , COMPRESSION, SQUARE KEY	1	\$19.99	\$19.99
Module 350	EXTERIOR ATTACHMENTS			
014616	WHEEL WELL FLARE, FRONT	2	\$255.45	\$305.50
014621	WHEEL WELL FLARE, REAR	2	\$255.45	\$305.50
013719	MIRROR, CS	2	\$867.15	\$1,734.30
013721	MIRROR, SS	2	\$569.78	\$1,139.56
Module 390	WINDOWS AND WINDSHIELD			
020918	WINDSHIELD, FRONT, CATALYST	1	\$1,560.00	\$1,560.00
013715	REAR WINDOW	1	\$456.96	\$456.96
014142	DRIVER WINDOW	1	\$1,403.48	\$1,403.48
015656	GASKET,WINDSHIELD,V2	1	\$222.60	\$222.60
Mult. Modules				
001275	COMPUTER, CENTRAL, MULTIPLEX, ZR32-A, 24V	1	\$514.71	\$514.71
013537	5V POWER SUPPLY	2	\$70.19	\$140.38



## Proterra Catalyst Recommended Spares

Proterra Part Number	Description	Recommended Qty	Unit Price	Ext Price
013527	CIRCUIT BREAKER, TYPE III, 5A	1	\$3.45	\$3.45
013528	CIRCUIT BREAKER, TYPE III, 10A	1	\$3.45	\$3.45
013529	CIRCUIT BREAKER, TYPE III, 15AMP	1	\$3.45	\$3.45
013530	CIRCUIT BREAKER, TYPE III, 20A	1	\$3.45	\$3.45
001273	CONTROLLER, NODE, MUX (MULYIPLEX), MUX2-B, 12V, 24	3	\$263.25	\$789.75
Mult. Modules	CONSUMABLES			
018384	OIL, COMPRESSOR, HYDROVANE HPO	3	\$205.64	\$616.92
019931	AIR FILTER, LARGE, AIR COMPRESSOR	1	\$21.90	\$21.90
019932	AIR FILTER, SMALL, AIR COMPRESSOR	1	\$19.13	\$19.13
019763	FILTER, AIR, DEFROSTER	1	\$48.17	\$48.17
019403	FILTER, AIR, FOAM , HVAC	1	\$12.61	\$12.61
	Total Recommended Spares			\$42,238.16

**WARNING:** Always be aware of the possibility of live circuits. Follow the shop maintenance high voltage safety procedures.

Unit Number:			Location	:		
PM Type:			Date:		Mileage:	
		TIRE THREA	AD DEPTH	AND AIR PRESSURE		
	Right Front			Right Rear Outer		Left Rear Outer
	Left Front			Right Rear Inner		Left Rear Inner
Use only these / = Checks OK fo X = Needs repair O = If repaired		R A	PMI Frequer Repeat Ever A – 6000 mil NT – Specif	y: es		
N/A = Not applic	able		nterval			
= Line it	em must be completed at th	ne scheduled interv	al			
= Line it	em not required to be comp	leted at scheduled	interval			

Inspect the following items per the indicated interval, unless your location follows a more frequent inspection interval. Check the appropriate boxes to indicate completion.

	Check fire suppression system panel (if applicable)	
	Check registration and insurance documents	
	Condition of operator's area (seat, floor, overhead area, sliding window, etc.)	
	Check bulb operation on Drivers Workplace	
	Check reverse warning system	
	Check windshield and mirror condition	
	Check instruments and horn	
	Check operation of all accessories	
	Check operation of defroster	
	Check operation of ADA ramp	
	Check operation of bike rack	
	Check front and rear passenger door operation	
	Check kneel system	
	Check fare box mounting	
	Check destination sign operation and mounting	
	Check P.A. system operation	
A IN	AIR SYSTEM INSPECTION	NOTES
	Check spring brake override for low air psi warning ON at ~70 psi	- 1101-2
	(Note: The emergency brake sets at ~25-45 psi.)	
	Main switch OFF	
	Interior lights ON	
	Check air compressor setting (cut in ~110 psi / cut out ~130 psi)	
	Check air pressure leakage	
	Check air pressure build up time is per location standard	
	Check air compressor general condition and fluid level	
48		
48	Replace air compressor filters	
	Drain moisture from all air tanks. Change desiccant cartridge if water found in tank.	
A IN	INTERIOR CIRCLE INCREATION	NOTES
A IN	INTERIOR CIRCLE INSPECTION  Check HVAC system operation (AC/Heat)	NOTES
	Check seats and floor covering	
	Check safety equipment	
	Check stop request system	
	Check interior lighting	
	Check glass condition	
	Check emergency exit hatch	
	Check physical damage, water leaks, graffiti	
24		
	Clean A/C filter	
24		
48	Check rear door brake interlock override switch operation by confirming an audible alarm sounds and an icon appears on the driver's dash when activated	
	Check shutdown override switch operation by confirming an audible alarm sounds when activated	

Α			
	INT	EXTERIOR CIRCLE INSPECTION	NOTES
		Check destination sign and run box display	
		Check mirrors and mounting	
		Check lights and reflectors	
	48K	Check and lubricate plug slide entrance and exit passenger fittings and actuator	
		Check door speed	
		Check exterior compartment doors	
		Check for physical damage	
		Check license plate, permits and state inspection	
		Check wiper blade and arm condition. Change blades as needed.	
Α	INT	TIRE AND WHEEL INSPECTION	NOTES
-	IIN I	Check tires for irregular or alignment wear. Change tires as needed.	NOTES
		Check/record tread depth and air pressure (record above)	
		Check sidewall wear	
		Check for cuts and tears	
		Check valve stems and caps	
		Check wheels for cracks and loose lugs	
		Check outer hubs for leaks	
		Check front axle for loose or noisy wheel bearings	
	300K	Change compact bearings (hub unit) in the wheel heads at the front and rear axles	
		, , , , ,	
Α	INT	MOTOR COMPARTMENT INSPECTION	NOTES
		Check rear access hatch and lube trunk hinge	
		Check motor compartment lights	
		Use shop air to clean around traction motor and around electrical connections	
		Use pressure washer with a 40 or 65 degree nozzle to clean all areas. Low pressure hose	
		wash also accepted.	
		Check coolant hose and clamp condition	
	7016	Check coolant filters	
	78K	Replace coolant filter	
		Visually check traction motor data cable connector torque mark intact	
		Check fire suppression or alert system wiring (if applicable)  Check for oil leaks	
		Check for on leaks	
Α	INT	LOW VOLTAGE (12/24) BATTERY INSPECTION	NOTES
	24K	Check state of charge (voltage) (1) (2)	NOTES
	2	Check hold downs, tray, corrosion, cables, etc. Lubricate slides.	
		Clean battery posts and cable ends	
		Clean battery posts and cable ends	
Α	INT	UNDER VEHICLE INSPECTION	NOTES
, i	48K	Visually inspect torque mark intact on motor and transmission mounts	
	48K	Visually inspect general condition of motor and transmission electrical and pneumatic	
		connections for damage or leaks	
		Check transmission for oil leaks	
		Check transmission for oil leaks  Visually inspect transmission oil cooler and lines for leaks. Clean if necessary for	
		Check transmission for oil leaks  Visually inspect transmission oil cooler and lines for leaks. Clean if necessary for inspection.	
	48K	Check transmission for oil leaks Visually inspect transmission oil cooler and lines for leaks. Clean if necessary for inspection. Check transmission fluid level	
	48K	Check transmission for oil leaks Visually inspect transmission oil cooler and lines for leaks. Clean if necessary for inspection. Check transmission fluid level Lubricate ride height sensors/linkages with dry lubricant (Liquid Wrench L512 or	
	48K	Check transmission for oil leaks Visually inspect transmission oil cooler and lines for leaks. Clean if necessary for inspection. Check transmission fluid level Lubricate ride height sensors/linkages with dry lubricant (Liquid Wrench L512 or equivalent)	
	48K	Check transmission for oil leaks Visually inspect transmission oil cooler and lines for leaks. Clean if necessary for inspection. Check transmission fluid level Lubricate ride height sensors/linkages with dry lubricant (Liquid Wrench L512 or equivalent) Check driveline boots are intact	
	48K	Check transmission for oil leaks Visually inspect transmission oil cooler and lines for leaks. Clean if necessary for inspection. Check transmission fluid level Lubricate ride height sensors/linkages with dry lubricant (Liquid Wrench L512 or equivalent) Check driveline boots are intact Check suspension components	
	48K	Check transmission for oil leaks Visually inspect transmission oil cooler and lines for leaks. Clean if necessary for inspection. Check transmission fluid level Lubricate ride height sensors/linkages with dry lubricant (Liquid Wrench L512 or equivalent) Check driveline boots are intact Check suspension components Check brake pad thickness and record below	
	48K	Check transmission for oil leaks  Visually inspect transmission oil cooler and lines for leaks. Clean if necessary for inspection.  Check transmission fluid level  Lubricate ride height sensors/linkages with dry lubricant (Liquid Wrench L512 or equivalent)  Check driveline boots are intact  Check suspension components  Check brake pad thickness and record below  R/F R/R L/F L/R	
	48K	Check transmission for oil leaks Visually inspect transmission oil cooler and lines for leaks. Clean if necessary for inspection.  Check transmission fluid level Lubricate ride height sensors/linkages with dry lubricant (Liquid Wrench L512 or equivalent) Check driveline boots are intact Check suspension components Check brake pad thickness and record below R/F R/R L/F L/R Check inner wheel seal for leaks	
	48K	Check transmission for oil leaks Visually inspect transmission oil cooler and lines for leaks. Clean if necessary for inspection. Check transmission fluid level Lubricate ride height sensors/linkages with dry lubricant (Liquid Wrench L512 or equivalent) Check driveline boots are intact Check suspension components Check brake pad thickness and record below R/F L/F L/R Check inner wheel seal for leaks Check brake lines	
	48K	Check transmission for oil leaks  Visually inspect transmission oil cooler and lines for leaks. Clean if necessary for inspection.  Check transmission fluid level  Lubricate ride height sensors/linkages with dry lubricant (Liquid Wrench L512 or equivalent)  Check driveline boots are intact  Check suspension components  Check brake pad thickness and record below  R/F R/R L/F L/R  Check inner wheel seal for leaks  Check brake lines  Check entire steering system	
	48K	Check transmission for oil leaks  Visually inspect transmission oil cooler and lines for leaks. Clean if necessary for inspection.  Check transmission fluid level  Lubricate ride height sensors/linkages with dry lubricant (Liquid Wrench L512 or equivalent)  Check driveline boots are intact  Check suspension components  Check brake pad thickness and record below  R/F R/R L/F L/R  Check inner wheel seal for leaks  Check brake lines  Check entire steering system  Check kingpins/lubricate	
	48K	Check transmission for oil leaks  Visually inspect transmission oil cooler and lines for leaks. Clean if necessary for inspection.  Check transmission fluid level  Lubricate ride height sensors/linkages with dry lubricant (Liquid Wrench L512 or equivalent)  Check driveline boots are intact  Check suspension components  Check brake pad thickness and record below  R/F R/R L/F L/R  Check inner wheel seal for leaks  Check brake lines  Check entire steering system  Check kingpins/lubricate  Check power steering motor and pump	
	48K	Check transmission for oil leaks  Visually inspect transmission oil cooler and lines for leaks. Clean if necessary for inspection.  Check transmission fluid level  Lubricate ride height sensors/linkages with dry lubricant (Liquid Wrench L512 or equivalent)  Check driveline boots are intact  Check suspension components  Check brake pad thickness and record below  R/F R/R L/F L/R  Check inner wheel seal for leaks  Check brake lines  Check entire steering system  Check kingpins/lubricate	
	48K	Check transmission for oil leaks  Visually inspect transmission oil cooler and lines for leaks. Clean if necessary for inspection.  Check transmission fluid level  Lubricate ride height sensors/linkages with dry lubricant (Liquid Wrench L512 or equivalent)  Check driveline boots are intact  Check suspension components  Check brake pad thickness and record below  R/F	
	INT	Check transmission for oil leaks  Visually inspect transmission oil cooler and lines for leaks. Clean if necessary for inspection.  Check transmission fluid level  Lubricate ride height sensors/linkages with dry lubricant (Liquid Wrench L512 or equivalent)  Check driveline boots are intact  Check suspension components  Check brake pad thickness and record below  R/F R/R L/F L/R  Check inner wheel seal for leaks  Check brake lines  Check entire steering system  Check kingpins/lubricate  Check power steering motor and pump  Visually inspect body at wheel wells around airbags, and rear wall around v-rod bracket for damage or cracks deeper than the gelcoat (paint) layer	NOTES
	INT 150K	Check transmission for oil leaks  Visually inspect transmission oil cooler and lines for leaks. Clean if necessary for inspection.  Check transmission fluid level  Lubricate ride height sensors/linkages with dry lubricant (Liquid Wrench L512 or equivalent)  Check driveline boots are intact  Check suspension components  Check brake pad thickness and record below  R/F R/R L/F L/R  Check inner wheel seal for leaks  Check brake lines  Check entire steering system  Check kingpins/lubricate  Check power steering motor and pump  Visually inspect body at wheel wells around airbags, and rear wall around v-rod bracket for damage or cracks deeper than the gelcoat (paint) layer  LUBRICATIONS  Change transmission fluid	NOTES
A	INT	Check transmission for oil leaks  Visually inspect transmission oil cooler and lines for leaks. Clean if necessary for inspection.  Check transmission fluid level  Lubricate ride height sensors/linkages with dry lubricant (Liquid Wrench L512 or equivalent)  Check driveline boots are intact  Check suspension components  Check brake pad thickness and record below  R/F R/R L/F L/R  Check inner wheel seal for leaks  Check brake lines  Check entire steering system  Check kingpins/lubricate  Check power steering motor and pump  Visually inspect body at wheel wells around airbags, and rear wall around v-rod bracket for damage or cracks deeper than the gelcoat (paint) layer  LUBRICATIONS  Change transmission fluid  Change coolant. Power-electronics loop = 48 quarts; Battery loop = 52 quarts	NOTES
A	INT 150K	Check transmission for oil leaks  Visually inspect transmission oil cooler and lines for leaks. Clean if necessary for inspection.  Check transmission fluid level  Lubricate ride height sensors/linkages with dry lubricant (Liquid Wrench L512 or equivalent)  Check driveline boots are intact  Check suspension components  Check brake pad thickness and record below  R/F L/F L/F L/R  Check inner wheel seal for leaks  Check brake lines  Check entire steering system  Check kingpins/lubricate  Check power steering motor and pump  Visually inspect body at wheel wells around airbags, and rear wall around v-rod bracket for damage or cracks deeper than the gelcoat (paint) layer  LUBRICATIONS  Change transmission fluid  Change coolant. Power-electronics loop = 48 quarts; Battery loop = 52 quarts  Check and lube accelerator and brake pedal pins and rollers with dry lubricant (Liquid	NOTES
A	INT 150K 250K	Check transmission for oil leaks  Visually inspect transmission oil cooler and lines for leaks. Clean if necessary for inspection.  Check transmission fluid level  Lubricate ride height sensors/linkages with dry lubricant (Liquid Wrench L512 or equivalent)  Check driveline boots are intact  Check suspension components  Check brake pad thickness and record below  R/F L/F L/R  Check inner wheel seal for leaks  Check brake lines  Check entire steering system  Check kingpins/lubricate  Check power steering motor and pump  Visually inspect body at wheel wells around airbags, and rear wall around v-rod bracket for damage or cracks deeper than the gelcoat (paint) layer  LUBRICATIONS  Change transmission fluid  Change coolant. Power-electronics loop = 48 quarts; Battery loop = 52 quarts  Check and lube accelerator and brake pedal pins and rollers with dry lubricant (Liquid Wrench L512 or equivalent), check for free movement	NOTES
A	INT 150K	Check transmission for oil leaks  Visually inspect transmission oil cooler and lines for leaks. Clean if necessary for inspection.  Check transmission fluid level  Lubricate ride height sensors/linkages with dry lubricant (Liquid Wrench L512 or equivalent)  Check driveline boots are intact  Check suspension components  Check brake pad thickness and record below  R/F R/R L/F L/R  Check inner wheel seal for leaks  Check brake lines  Check entire steering system  Check giopsins/lubricate  Check power steering motor and pump  Visually inspect body at wheel wells around airbags, and rear wall around v-rod bracket for damage or cracks deeper than the gelcoat (paint) layer  LUBRICATIONS  Change transmission fluid  Change coolant. Power-electronics loop = 48 quarts; Battery loop = 52 quarts  Check and lube accelerator and brake pedal pins and rollers with dry lubricant (Liquid Wrench L512 or equivalent), check for free movement  Change power steering fluid	NOTES
A	INT 150K 250K	Check transmission for oil leaks  Visually inspect transmission oil cooler and lines for leaks. Clean if necessary for inspection.  Check transmission fluid level  Lubricate ride height sensors/linkages with dry lubricant (Liquid Wrench L512 or equivalent)  Check driveline boots are intact  Check suspension components  Check brake pad thickness and record below  R/F	NOTES
A	INT 150K 250K	Check transmission for oil leaks  Visually inspect transmission oil cooler and lines for leaks. Clean if necessary for inspection.  Check transmission fluid level  Lubricate ride height sensors/linkages with dry lubricant (Liquid Wrench L512 or equivalent)  Check driveline boots are intact  Check suspension components  Check brake pad thickness and record below  R/F L/F L/F L/R  Check inner wheel seal for leaks  Check brake lines  Check entire steering system  Check kingpins/lubricate  Check power steering motor and pump  Visually inspect body at wheel wells around airbags, and rear wall around v-rod bracket for damage or cracks deeper than the gelcoat (paint) layer  LUBRICATIONS  Change transmission fluid  Change coolant. Power-electronics loop = 48 quarts; Battery loop = 52 quarts  Check and lube accelerator and brake pedal pins and rollers with dry lubricant (Liquid Wrench L512 or equivalent), check for free movement  Change power steering fluid  Change differential oil level and fill if needed  Change differential oil	NOTES
A	INT 150K 250K	Check transmission for oil leaks  Visually inspect transmission oil cooler and lines for leaks. Clean if necessary for inspection.  Check transmission fluid level  Lubricate ride height sensors/linkages with dry lubricant (Liquid Wrench L512 or equivalent)  Check driveline boots are intact  Check suspension components  Check brake pad thickness and record below  R/F R/R L/F L/R  Check inner wheel seal for leaks  Check brake lines  Check hingpins/lubricate  Check kingpins/lubricate  Check power steering motor and pump  Visually inspect body at wheel wells around airbags, and rear wall around v-rod bracket for damage or cracks deeper than the gelcoat (paint) layer  LUBRICATIONS  Change transmission fluid  Change coolant. Power-electronics loop = 48 quarts; Battery loop = 52 quarts  Check and lube accelerator and brake pedal pins and rollers with dry lubricant (Liquid Wrench L512 or equivalent), check for free movement  Change power steering fluid  Check differential oil level and fill if needed  Change differential oil level and fill if needed  Change differential oil	NOTES
A	INT 150K 250K	Check transmission for oil leaks  Visually inspect transmission oil cooler and lines for leaks. Clean if necessary for inspection.  Check transmission fluid level  Lubricate ride height sensors/linkages with dry lubricant (Liquid Wrench L512 or equivalent)  Check driveline boots are intact  Check suspension components  Check brake pad thickness and record below  R/F L/F L/F L/R  Check inner wheel seal for leaks  Check brake lines  Check entire steering system  Check kingpins/lubricate  Check power steering motor and pump  Visually inspect body at wheel wells around airbags, and rear wall around v-rod bracket for damage or cracks deeper than the gelcoat (paint) layer  LUBRICATIONS  Change transmission fluid  Change coolant. Power-electronics loop = 48 quarts; Battery loop = 52 quarts  Check and lube accelerator and brake pedal pins and rollers with dry lubricant (Liquid Wrench L512 or equivalent), check for free movement  Change power steering fluid  Change differential oil level and fill if needed  Change differential oil	NOTES
	INT 150K 250K 100K	Check transmission for oil leaks  Visually inspect transmission oil cooler and lines for leaks. Clean if necessary for inspection.  Check transmission fluid level  Lubricate ride height sensors/linkages with dry lubricant (Liquid Wrench L512 or equivalent)  Check driveline boots are intact  Check suspension components  Check brake pad thickness and record below  R/F R/R L/F L/R  Check inner wheel seal for leaks  Check brake lines  Check entire steering system  Check kingpins/lubricate  Check power steering motor and pump  Visually inspect body at wheel wells around airbags, and rear wall around v-rod bracket for damage or cracks deeper than the gelcoat (paint) layer  LUBRICATIONS  Change transmission fluid  Change coolant. Power-electronics loop = 48 quarts; Battery loop = 52 quarts  Check and lube accelerator and brake pedal pins and rollers with dry lubricant (Liquid Wrench L512 or equivalent), check for free movement  Change power steering fluid  Change differential oil level and fill if needed  Change differential oil level and fill if needed  Change differential oil  Lubricate chassis  Check ADA ramp lubrication	
A	INT 150K 250K	Check transmission for oil leaks  Visually inspect transmission oil cooler and lines for leaks. Clean if necessary for inspection.  Check transmission fluid level  Lubricate ride height sensors/linkages with dry lubricant (Liquid Wrench L512 or equivalent)  Check driveline boots are intact  Check suspension components  Check brake pad thickness and record below  R/F R/R L/F L/R  Check inner wheel seal for leaks  Check brake lines  Check entire steering system  Check kingpins/lubricate  Check power steering motor and pump  Visually inspect body at wheel wells around airbags, and rear wall around v-rod bracket for damage or cracks deeper than the gelcoat (paint) layer  LUBRICATIONS  Change transmission fluid  Change coolant. Power-electronics loop = 48 quarts; Battery loop = 52 quarts  Check and lube accelerator and brake pedal pins and rollers with dry lubricant (Liquid Wrench L512 or equivalent), check for free movement  Change power steering fluid  Change differential oil level and fill if needed  Change differential oil  Lubricate chassis  Check ADA ramp lubrication	NOTES
	INT 150K 250K 100K 150K	Check transmission for oil leaks  Visually inspect transmission oil cooler and lines for leaks. Clean if necessary for inspection.  Check transmission fluid level  Lubricate ride height sensors/linkages with dry lubricant (Liquid Wrench L512 or equivalent)  Check driveline boots are intact  Check suspension components  Check brake pad thickness and record below  R/F R/R L/F L/R  Check inner wheel seal for leaks  Check brake lines  Check entire steering system  Check kingpins/lubricate  Check power steering motor and pump  Visually inspect body at wheel wells around airbags, and rear wall around v-rod bracket for damage or cracks deeper than the gelcoat (paint) layer  LUBRICATIONS  Change transmission fluid  Change coolant. Power-electronics loop = 48 quarts; Battery loop = 52 quarts  Check and lube accelerator and brake pedal pins and rollers with dry lubricant (Liquid Wrench L512 or equivalent), check for free movement  Change power steering fluid  Change differential oil level and fill if needed  Change differential oil level and fill if needed  Change differential oil  Lubricate chassis  Check ADA ramp lubrication	
	INT 150K 250K 100K 150K	Check transmission for oil leaks  Visually inspect transmission oil cooler and lines for leaks. Clean if necessary for inspection.  Check transmission fluid level  Lubricate ride height sensors/linkages with dry lubricant (Liquid Wrench L512 or equivalent)  Check driveline boots are intact  Check suspension components  Check brake pad thickness and record below  R/F R/R L/F L/R  Check inner wheel seal for leaks  Check brake lines  Check brake lines  Check gower steering system  Check kingpins/lubricate  Check power steering motor and pump  Visually inspect body at wheel wells around airbags, and rear wall around v-rod bracket for damage or cracks deeper than the gelcoat (paint) layer  LUBRICATIONS  Change transmission fluid  Change coolant. Power-electronics loop = 48 quarts; Battery loop = 52 quarts  Check and lube accelerator and brake pedal pins and rollers with dry lubricant (Liquid Wrench L512 or equivalent), check for free movement  Change power steering fluid  Check differential oil level and fill if needed  Change differential oil level and fill if needed  Change differential oil Lubricate chassis  Check ADA ramp lubrication  ROOFTOP INSPECTION  Check A/C refrigerant level and any leaks	
	INT 150K 250K 100K 150K	Check transmission for oil leaks  Visually inspect transmission oil cooler and lines for leaks. Clean if necessary for inspection.  Check transmission fluid level  Lubricate ride height sensors/linkages with dry lubricant (Liquid Wrench L512 or equivalent)  Check driveline boots are intact  Check suspension components  Check brake pad thickness and record below  R/F R/R L/F L/R  Check inner wheel seal for leaks  Check brake lines  Check entire steering system  Check kingpins/lubricate  Check power steering motor and pump  Visually inspect body at wheel wells around airbags, and rear wall around v-rod bracket for damage or cracks deeper than the gelcoat (paint) layer  LUBRICATIONS  Change transmission fluid  Change coolant. Power-electronics loop = 48 quarts; Battery loop = 52 quarts  Check and lube accelerator and brake pedal pins and rollers with dry lubricant (Liquid Wrench L512 or equivalent), check for free movement  Change power steering fluid  Check differential oil level and fill if needed  Change differential oil  Lubricate chassis  Check ADA ramp lubrication  ROOFTOP INSPECTION  Check A/C refrigerant level and any leaks  Check A/C rose condition  Inspect battery conditioner unit and pumps for coolant leaks	
	INT 150K 250K 100K 150K 150K 14 24K 24K 24K 24K 24K 48K	Check transmission for oil leaks  Visually inspect transmission oil cooler and lines for leaks. Clean if necessary for inspection.  Check transmission fluid level  Lubricate ride height sensors/linkages with dry lubricant (Liquid Wrench L512 or equivalent)  Check driveline boots are intact  Check suspension components  Check brake pad thickness and record below  R/F R/R L/F L/R  Check inner wheel seal for leaks  Check brake lines  Check brake lines  Check gower steering system  Check power steering motor and pump  Visually inspect body at wheel wells around airbags, and rear wall around v-rod bracket for damage or cracks deeper than the gelcoat (paint) layer  LUBRICATIONS  Change transmission fluid  Change coolant. Power-electronics loop = 48 quarts; Battery loop = 52 quarts  Check and lube accelerator and brake pedal pins and rollers with dry lubricant (Liquid Wrench L512 or equivalent), check for free movement  Change power steering fluid  Check differential oil level and fill if needed  Change differential oil level and fill if needed  Change differential oil Lubricate chassis  Check ADA ramp lubrication  ROOFTOP INSPECTION  Check A/C refrigerant level and any leaks  Check A/C compressor  Check A/C hose condition  Inspect battery conditioner unit and pumps for coolant leaks  Record antifreeze protection level	
	INT 150K 250K 100K 150K 150K	Check transmission for oil leaks  Visually inspect transmission oil cooler and lines for leaks. Clean if necessary for inspection.  Check transmission fluid level  Lubricate ride height sensors/linkages with dry lubricant (Liquid Wrench L512 or equivalent)  Check driveline boots are intact  Check suspension components  Check brake pad thickness and record below  R/F R/R L/F L/R  Check inner wheel seal for leaks  Check brake lines  Check entire steering system  Check kingpins/lubricate  Check power steering motor and pump  Visually inspect body at wheel wells around airbags, and rear wall around v-rod bracket for damage or cracks deeper than the gelcoat (paint) layer  LUBRICATIONS  Change transmission fluid  Change coolant. Power-electronics loop = 48 quarts; Battery loop = 52 quarts  Check and lube accelerator and brake pedal pins and rollers with dry lubricant (Liquid Wrench L512 or equivalent), check for free movement  Change power steering fluid  Check differential oil level and fill if needed  Change differential oil  Lubricate chassis  Check ADA ramp lubrication  ROOFTOP INSPECTION  Check A/C refrigerant level and any leaks  Check A/C rose condition  Inspect battery conditioner unit and pumps for coolant leaks	

## WARNING: Always be aware of the possibility of live circuits. Follow the shop maintenance high voltage safety procedures.

Α	INT	HIGH VOLTAGE SYSTEM – UNDER VEHICLE	NOTES
		Visually inspect all HV battery pack electrical connectors for proper mating and support.	
		Visually inspect all MSD and HV connector locking features are secured in locked position.	
		Visually inspect HV battery pack mounting fasteners for condition and intact torque marks	
		Visually check HV battery pack rubber mounting isolators	
		Check all low voltage harnesses for chafing and general condition	
		Check the green salt plugs on either end of the pack. Note: If the center plunger is level	
		with the top surface of the plug contact Proterra Service,	
		If the salt plugs have depressed plungers, replace the battery pack desiccant. If the	
		desiccant is replaced, record the value for DesiccantTimer_BMSX and then reset the value	
		of the timer to 0 using the service tool. <b>Note</b> : if the center plunger is level with the top	
$\vdash$		surface of the plug contact Proterra Service.	
		Visually check the desiccant window in each battery pack ancillary bay. Replace if the color for 40% saturation has changed from blue to pink or if DEM140 is asserted (reads	
		FAIL). If the desiccant is replaced, record the value for DesiccantTimer BMSX and then	
		reset the value of the timer to 0 using the service tool.	
$\vdash$		Check general exterior condition of HV battery boxes. Note any damage on image below.	
		Contact Proterra Service for any damage greater than 3" x 3" or deeper than 0.25".	
		Obstact Telefra Del Vice for any damage grown than 6 X 6 of deeper than 6.20 :	
Α	INT	HIGH VOLTAGE SYSTEM - ROOFTOP	NOTES
	24K	Inspect rooftop blade for general condition	
Α	INT	HIGH VOLTAGE SYSTEM - MOTOR COMPARTMENT	NOTES
		Check all high voltage (orange) cables for chafing and condition	
	48K	Verify function of both manual charge ports with a depot charger by connecting the bus to a charger and charging for 2 minutes. Visually confirm no debris buildup around charge	
		ports.	

PMI FO	LLOW-U	PNEEDE	D	ı		EMPLOYEE # & WORK ORDER #		
Log all issues found during inspection as a Field Incident Report (FIR).								
PRINT INSPECTOR'S NAME:								
PRINT IN	RINT INSPECTOR'S NAME:				Inspector's Signature:	Inspector's Signature:		