ADDENDUM #1
RFP 21-07-407
Bus Rapid Transit (BRT) Battery Electrical (60') Buses

October 22, 2021

TO: All Interested Parties

RE: Addendum #1

All vendors are to accept the information contained herein as the official response of IPTC.

TO ALL BIDDERS OF RECORD AND TO WHOM IT MAY CONCERN:

This Addendum is being issued prior to the due date for receiving proposals.

This Addendum forms a part of the Contract Documents and modifies the original Request of Information as noted below and shall be incorporated into the IFB Documents. All other provisions of the RFP released October 4, 2021 with the exception of changes below, shall remain unchanged.

This Addendum is issued in accordance with the provisions of Procurement Instructions of the Request for Information document. All Proposals shall be based upon work as modified by this Addendum.

This addendum addresses written questions received before the due date and time, concerning RFP1-07-407 Bus Rapid Transit (BRT) Battery Electrical (60') Buses.

Addendum 1 Narrative / Questions 1-12 (Pages 2-4)
BYD RFA's (Pages 5-11)
New Flyer RFA's (Pages 12-26)

Acknowledged receipt of this Addendum on the Acknowledgement of Addenda Form is required. Failure to do so may result in disqualification of the Bidder.

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1) Has IndyGo established a delivery date? If so, what is the estimated date?

IndyGo Response: Indygo will not take delivery prior to 2024.

2) Is there a standard form you would like us to use for the delivery schedule?

IndyGo Response: No.

3) Section TS 3.1 states that we need to submit on a separate form, a listing of all available optional equipment with unit prices for the buses offered in the proposal. Is there a specific form you would like us to use to present this information?

IndyGo Response: No.

4) What is the base quantity of buses for year #1 of the contract?

IndyGo Response: Zero at this time, please see Question 1 response.

5) Attached are our forms for Approved Equal Request for passenger seat and fire suppression. Let us know if we need anything?

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Indygo Response: The fogmaker fire suppression is an acceptable option, Gemini Seats are an acceptable seating option.

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6) In reviewing the destination sign specification, we have a question and would request a change to the specification.

Appendix A: Technical Specifications(TS): Page 34, Section TS23 Exterior/Interior Electronic Displays
In the interest of standardization with the Red Line BEB bus fleet, please advise if INDYGO would prefer, and amend the specification with the destination sign system configuration that was provided for the Red Line BEB fleet. This sign configuration consisted of:

- 24 rows by 200 column Full Color LED Front Destination sign.
- 14 row by 112 column Amber LED Right Side Destination sign.
- 8 row by 96 column Amber LED Left Side Destination sign.
- 16 row by 48 column Amber LED Rear Route Destination sign.
- 12 row by 40 column Amber LED Dash mounted Run Number sign

The above configuration change would also affect Section TS23.8.
TS23.8 Run Number Sign
To provide consistency with the current Red Line BEB bus fleet, Luminator recommends revising this section and replace with the following language:
The run Number Sign display shall have no less than 480 LEDs, 12 rows by 40 columns, with a message display area of not less than 4.1 inches high by not less than 15.1 inches wide. The run number shall have 5 characters. Run numbers to be displayed shall be input into the destination sign system's ODK Unit and shall be independent of any destination sign message code.

IndyGo Response: Approved.

7) Would like to know if another Powertrain system would be acceptable with this solicitation, such as a HYBRID or HYDRIGEN source, if not, why?

IndyGo Response: No, not at this time, it could be a possibility with future solicitations.

8) Section TS21.3 "Internal Bike Rack" states: "Two additional bike racks (one on each side) shall be installed on the turn table /center joint inside the vehicle."

1. Shall the two additional racks be vertical hanging bicycle racks?
2. If yes, does IPTC have a desired connection point in which the racks should be attached within the turn table / center joint area?
3. If no, please confirm desired rack type (i.e. floor mount).
4. Is a passenger ingress/egress path through the center joint area to be maintained when two bicycles are located in this area?

IndyGo Response: Indygo is requesting to have two vertical floor mounted double bike racks (one on each side) on the center turn table. The design shall hold the rear wheels from blocking the passengers egress path and or touching bellows at the turn table, while the bus is turning.)

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9) I saw that IndyGo has an RFP, and I was reading through the doc and was wondering if there are any further requirements for the Driver barrier, Driver slider glass, passenger glass, and door glass?

IndyGo Response: No need to include the driver barriers-IndyGo team will install the driver barriers after Delivery.

10) What is the delivery date for the buses?

IndyGo Response: See response to Question 1.

11) Will there be a requirement to deliver all the buses within a specified time frame from the time of awarding the contract?

IndyGo Response: No later than 2027.

12) Please advise of any time intervals that we should be aware of when creating the delivery schedule, such as the delivery schedule requirement of pilot bus, production start date of buses after pilot bus delivered, post-delivery inspection lead time/etc.?

IndyGo Response: Tentative schedule, date Pilot Bus by 2024 (1), production start-up 2024/2025, balance no later than 2027.

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BYD Questions and Request for Approved Equals

Project Name:	RFP #21-07-407 Bus Rapid Transit (BRT) Battery Electrical (60') Buses
Due Date	10/22/2021
Questions Due	10/15/2021

#	Page #	RFP Section	RFP Requirement	BYD Questions		IndyGo Response
1	4	Warranty	Specific subsystems and components of the coaches furnished under this Contract will be warranted and guaranteed to be free from defects in design, material and workmanship for the period of time beyond the basic warranty. These include: • Propulsion System/Drive Axle: 12 years • HVAC with Diesel floor heaters: 5 years • Leaks (water leaks from bus washer or rain: Body sealing -Water leaks/Intrusion required): 8 years • Non-Drive Axles 5 years	BYD proposes and requests approval for our standard warranty. See below. • Propulsion System/Drive Axle: 5 years or 250,000 miles • HVAC: 3 years or 150,000 miles • Diesel floor heaters: 2 years or 100,000 miles • Leaks (water leaks from bus washer or rain:Body sealing -Water leaks/Intrusion required): 3 years or 150,000 miles • Non-Drive Axles: 3 years or 150,000 miles		**Approved-However, the best warranty will be scored higher.**
2	5	Warranty	Fleet defect repairs and modifications shall also be applied to units that are no longer covered under warranty, but only if they are still within three years or 36,000 miles from the in-service date.	BYD proposes that all components be covered under one warranty, regardless if it is a fleet defect or normal defect. BYD requests approval.		**Approved**
3	23	Proposal Cost Offer Form	**Proposal Cost Offer Form** Vendor Offer Cost Form On-Route Charger (Cost/EA or N/A)	On the Cost Offer Form, are you asking for the price for both of the Charging Pads on Vehicle (MD Vehicle Equipment Assembly) *and* the Charging Pads in Ground (MD Ground Equipment Assembly)? Or do we provide the price for Vehicle Equipment Assembly only?		**Cost form shall include the base ground equipment (for MD) or the overhead Panthograph conductive system to perform the on-route charging operation and the charge equipment on the bus side priced separately.**
4	39	Battery System Sizing and Description	Vehicle shall have a battery system capable of a range of 250 or more miles in fully burdened conditions	With the auxiliary diesel heater, BYD bus is able to achieve a range of more than 250 miles during the first year. Please refer to the Vehicle Operating Range attachment. BYD requests approval.	Vehicle Operating Range Analysis	The Range Requirement of 250 miles will be for the duration of the battery warranty period not just the first year. .
5	41	TS 26.3	**On Route Charging Stations (Optional)** Offeror shall provide charging equipment for one Charging Stations for each selected route, as well as the charger interface on each vehicle. Each charging station will be limited to charging one electric bus at a time.	Does IndyGo know the number of charging stations needed? If so, please provide.		**IPTC is expecting two charging stations-one on each end of the BRT route.**

6	41	TS 26.3	**On Route Charging Stations (Optional)** Momentum Dynamics of 300Kw or more wireless charging system or other inductive opportunity charging feature/charger interface shall be installed on every bus from the factory before being delivered	Please clarify that there is one MD Vehicle Assembly per bus. Also, please specify the quantity of Ground Assembly so we can provide an precise quote.		**A vendor utilizing MD charging solution, each bus shall be equiped with four pads. The Ground assembly shall have four pads with all required harware for the MD charging station**
7	48	Electric Drive System	Proposers shall submit in their technical proposal, details of their electric drive system, as offered.	BYD requests approval of the BYD electric drive system. It is same with Indygo current BYD bus fleet.	BYD Electric Drive System	**Approved-any update shall be provided**
8	56	Corrosion	Representative samples shall withstand a 2000+ hour salt spray test in accordance with ASTM procedure B-117 with no visual or structural detrimental effects to normally visible surfaces, and any significant structural degradation or weight loss over 1 percent for other members or components.	BYD requests approval of attached 2000h salt spray test according to ASTM B117.	BYD High Strength Steel (Carbon Steel) 2000h Salt Spray Test Report	**Approved**
9	56	Corrosion	They must also comply with ASDM Procedure D2247 for a period of 1000+ hours, humidity resistance.	BYD would like to clarify that the D2247 1000+ hour test resutls can be provided to IPTC during a PPM.		**Approved**
10	57	Towing	Each towing device shall accommodate a crane hook with a 2-inch throat.	BYD requests approval of front towing performed via flat tow with towing adaptors instead of towing hooks. It is same with Indygo current BYD bus fleet.	BYD Standard Towing	**Approved**
11	59	Flooring	Plywood, if used, shall be no less than ¾-inch thick, seven-ply (7) American Plywood Association marine grade, resin coated.	BYD requests approval of composite flooring which is waterproof, non-hydroscopic, resistant to wet and dry rot, resistant to mold growth, and impervious to insects. It is same as Indygo's current BYD bus fleet.	The Coosa Composites Fiberglass Floor	**Approved**
12	59	Floor Height	Height of the floor above the street shall be 15 inches +/- 0.25 inches, measured at the centerline of each door.	BYD requests approval of a door height to be 15.35 in. which is the same as the current Indygo BYD bus fleet. BYD will also provide a kneeling function which will allow the bus to kneel and the knelt door height can be 12.59 in. It is same as Indygo's current BYD bus fleet.		**Approved**
13	60	Flooring	It needs RCA Rubber flooring or approved equal having a Fire Safety: ASTM E648, FMVSS302 rating and Slip Resistance >.80, ASTM D2047 and meeting all ADA requirements.	BYD requests approval of Altro floor covering. It is the same as Indygo's current BYD bus fleet.	Altro Floor Covering	**Approved**
14	62	Door Placement	The vehicle shall have 5 passenger doors, each no less than 40 inches in width	BYD requests approval of the Vapor door dimensions. They are the same as the current Indygo BYD bus fleet.	Vapor Door Dimension	**Approved**

15	62	Passenger Doors	The middle and rear doors shall be electrically operated and use a sliding-plug mechanism to avoid impacting passengers waiting inside or outside of the bus.	BYD requests approval of Vapor slide-glide type passenger doors. It is same as Indygo's current BYD bus fleet.	Vapor Slide Glide Door	**Approved**
16	62	Front Door Mechanism	The front door shall be operated by an electric operator, having integral controls for the adjustment of door closing speed, cushioning upon door opening to prevent slamming, and door closing speed, a CLASS series with proximity switches manufactured by Bode Corporation or approved equal	BYD requests approval of the Vapor CLASS which has been used on IndyGo's current BYD bus fleet.	Vapor Slide Glide Door	**Approved**
17	63	Door Controls	The driver shall control the passenger doors through a five-position control device with a removable handle, as manufactured by Bode Corporation or approved equal	BYD requests approval of the Vapor Digital Door Controllers which have been used on IndyGo's current BYD bus fleet.	BYD Vapor Door Control	**Approved**
18	64	Exterior Lighting	A description and diagram of a contractor' s exterior lighting configuration(s) shall be submitted with the approved equal process. All brake turn signal and run lights shall be light emitting diode (LED).	BYD requests approval of BYD's standard exterior lighting system. It is same as Indygo's current BYD bus fleet.	BYD Exterior Lighting	**Approved**
19	66	Pedals	Driver adjustable floor mounted accelerator and brake pedals shall be designed for ankle motion.	BYD requests approval of a non-adjustable brake pedal which is part of BYD's standard design and has been used on IndyGo's current BYD bus fleet.	Knorr Brake Pedal and Williams Accelerator Pedal	**Approved**
20	67	Instrumentation	All systems need to be capable to integrate with the Dines G-3 systems or equivalent for centralized reporting, error trapping, documentation, and capable of wireless communication	BYD requests approval of using I/O Controls G4 multiplex system which is the next generation of G3. It is same as Indygo's current BYD bus fleet.	Dinex G4 Multiplex System	**Approved-The G4 Multiplex system is in conformity with our current fleet.**
21	67	Driver' s Switches and Controls	Driver' s Switches and Controls	BYD requests approval of the attached driver switches and controls layout. It is same as Indygo's current BYD bus fleet.	BYD Driver Switches and Controls	**Approved**
22	70	Passenger Seating	European style seating similar to Kiel IDEO or approved equal shall be used for passenger seating.	BYD requests approval of Gemini passenger seating. It is same as Indygo's current BYD bus fleet.	BYD USSC Gemini Seating	**Gemini seating is approved**

23	70	Seating Layout	A minimum of forty (40) seats shall be provided for a sixty foot (60') bus.	BYD would like to provide two seating layout proposals. As diesel auxiliary heater is provided, there is no room in the articulated area for a bike rack. As a result, the maximum passenger seating may not meet 40 seats. Below is BYD's new proposal: Option A: The maximum passenger seating is 40. Two (2) inside bike racks are mounted in front of the curbside rear door. Option B: The maximum passenger seating is 38. One (1) inside bike rack is mounted in front of the curbside rear door. Another is mounted in front of the streetside rear door. BYD would like to know which one is preferred bythe agency.	BYD Seating Layout Option A and BYD Seating Layout Option B	**IPTC-request to have drawing/Diagram of the seating layout on both options**
24	71	Wheelchair Ramp	A loading ramp system, latest model Lift-U Dual Mode LU18 (6:1 Slope) or approved equal shall provide ingress and egress quickly, safely, and comfortably for a passenger in a mobility air from the street level or curb via the front door.	BYD requests approval of the Ricon SSR wheelchair ramp which has a clearance width of 30 in. to satisfy the requirements of IndyGo. It is same as Indygo's current BYD bus fleet.	Ricon SSR Ramp	**Indygo would prefer Lift U system as being found robust on our diesel fleet.**
25	73	Exterior Mirrors	To avoid striking waiting passengers, both mirrors shall be a high mount and forward located configuration, similar to the Rosco Performa Style or approved equal.	BYD requests approval of SafeFleet exterior mirrors. The current Indygo BYD bus fleet exterior mirrors are provided by Hadley. Safefleet has since bought the Hadley Transit Mirrors division so the exterior mirrors will be same as Indygo's current BYD bus fleet.	SafeFleet Exterior Mirror	**Approved**
26	73	Inside Mirrors	These shall consist of minimum: 8.25" x 16" on destination sign compartment lower closeout, 6" round flat mirror on header door for review of bike rack deployment, 12" convex at exit door step, and a 7" x 7" convex mirror located at right hand side of 8.25" x 16" mirror.	BYD requests approval to use the 6.5″ x 9.5″ rectangular Hadley mirror which is employed on the current Indygo bus fleet instead of a 7″ x 7″ mirror.	Hadley Mirror	**Approved**

27	77	Propulsion System Controller (PSC)	Storage of the bus data file generated on a day to day basis, to include: duty cycle information (time stamp, vehicle speed, elevation, location, ambient temperature, etc.), energy profile information (i.e., voltage and current from the traction motor, auxiliary systems, Energy Storage System (ESS), power electronics, onboard charging system) at 1 sec intervals. History of charging sessions, energy in, time stamp, State of Charge (SOC), incidents and alarms, system health monitoring and diagnostics information.	BYD's current PSC is not able to store all data on a day to day basis. It can record the historic self fault information for future analysis. However, BYD provides an on-board data logger that can record all controller data at 50ms to 1sec intervals with time stamps, depending on the CAN message priority. It is same configuration as Indygo's current BYD bus fleet. BYD requests approval of the design.		**The Data Logger option is approved**
28	78	Energy Storage System	The ESS design, including containers, module bracing systems, thermal-management systems, battery-management systems, watering/venting systems, interconnections, fusing, and traction-controller and charger interfaces shall be completely described in the proposal.	BYD requests approval of BYD's ESS which has been used on IndyGo's current BYD bus fleet.	BYD Energy Storage System	**Approved-But needs description for any update to the ESS**
29	78	Energy Storage System	The charge cycle and cycle life shall be stated in the proposal and a life-cycle cost analysis of the proposed battery system in the specified application shall be provided.	BYD requests approval of the BYD Battery Life Cycle Report.	BYD Battery Life Cycle Report	**Approved**
30	78	Energy Storage System	Proposals shall include complete descriptions of all life-cycle testing procedures used to validate the life of batteries used this application at the proposed charging rates, charge durations, expected ambient temperatures and operating profiles. Offeror shall include documented results of life cycle testing. Offeror shall include certification of battery life cycle testing by independent testing agency.	BYD requests approval of the BYD Battery Life Cycle Report.	BYD Battery Life Cycle Report	**Approved**
31	79	BTMS	Battery thermal management must be powered from an onboard source at all times. Thermal management must be continuously monitored at all times with appropriate safety interlocks installed to react to adverse conditions as stated in SAE J1772.	BYD would like to clarify that the battery thermal management will operate when the master switch is on. It will not be activated unless the battery temperature is between 68 - 86 °F. It is the same design as Indygo's current BYD bus fleet. BYD requests approval of the design.		**IPTC understands the thermal mangement system would be on only when the master switch is turned ON. However, we wanted to ensure the management system is still monitoring batteries at all time including when charging batteries overnight at the depot.**
32	80	Charging Infrastructure	The chargers shall be UL Classified for the intended purpose location and environment	For AC chargers, BYD would like to request approval for TUV certification		**IPTC-would need more clarification on this request**

33	81	Depot Charging	The depot chargers shall be capable of discharging the on-board energy storage system to facilitate making repairs the preferred means of discharge shall be to return the power to the utility grid.	BYD requests that IndyGo deletes this requirement as the ability to discharge the ESS to the utility grid is a very uncommon feature for AC chargers and more common for DC chargers.		**Correct-This request will be removed**
34	82	CHARGING STATIONS	40. The bid package shall contain a complete description of the Charging System including principle of operation, equipment components, component specifications, IP/UL protection classes, industry standard testing protocols and results, environmental requirements, general installation requirements, etc.——	BYD requests approval of the attached BYD Charging System. BYD would like to provide AC charging which has been used on IndyGo's current BYD bus fleet as the default configuration. DC charging is optional.	BYD Charging System	**Approved**
35	83	Bus Management System (BMS)	The Bus Management System (BMS) shall manage the propulsion system controller (PSC) on board each bus and store data records representing the propulsion system activity at 1 second intervals, such as duty cycle information (time, location, altitude, speed), voltage and current input and output for major electrical components (ESS, power converters, HVAC), traction motor input voltage and current, traction motor output torque and rotational speed, system health, BMS information, and faults.	BYD's current BMS does not have the ability to store all data on a day to day basis. It can record the historic self fault information for future analysis. However, BYD provides an on-board data logger that can record all controller data at 50ms to 1sec intervals with time stamps, depending on the CAN message priority. It is the same configuration employed on Indygo's current BYD bus fleet. BYD requests approval of the design.		**The onboard Data logger is Approved**
36	84	Power Plant and Battery System Cooling Systems	A complete description of the battery thermal management systems shall accompany the bid package.	BYD requests approval of BYD Battery Thermal Management System which has been used on IndyGo's current BYD bus fleet.	BYD Battery Thermal Management System	**Approved but prividing the description of the thermal management system with bid package is required**
37	84	Retarder	The powertrain shall be equipped with a retarder designed to extend brake lining service life	BYD requests approval of a regenerative braking system instead of a retarder, which has the same benefits and functions of the retarder. It is also the same as Indygo's current BYD bus fleet.	BYD Regenerative Braking	**Approved-IPTC understands the Regenerative braking provides the Retarder functions**
38	85	Front Axle	Front axle shall be a fixed solid beam axle as manufactured by Arvin Meritor or approved equal.	BYD requests approval of BYD's standard ZF steering axle which has been used on IndyGo's current BYD bus fleet.	ZF Front Axle	**ZF Front Axle is approved**
39	85	Shock Absorber	The suspension system shall permit a minimum wheel travel of 3.5 inches in jounce and 3 inches in rebound KONI or equivalent.	BYD requests approval of ZF SACHS shock absorbers which have been used on IndyGo's current BYD bus fleet.	ZF Air Shock Absorber	**Approved**
40	87	Air Compressor	The air compressor shall be a Wabco or approved equal.	BYD requests approval of the Knorr air compressor which has been used on IndyGo's current BYD bus fleet.	Knorr Air Compressor	**Approved**

41	87	Nylon Tubing	• Green: Indicates primary brakes and supply • Red: Indicated secondary brakes • Brown: Indicated parking brakes • Black: Indicated accessories.	BYD would like to clarify that below is BYD default air lines configuration: • Green: Indicates primary brakes and supply. • Red: Indicates secondary brakes. • Brown: Indicates parking brake. • Yellow: Indicates compressor governor signal. • Black: Indicates accessories. The configuration is the same as Indygo's current BYD bus fleet. BYD requests approval.		**Approved**
42	88	Air Dryer	A Wabco or approved equal desiccant dryer with heater, with silencer, or approved equal, shall be installed and protected against road dirt and wheel splash.	BYD requests approval of Bendix air dryer which has been used on IndyGo's current BYD bus fleet.	BYD Bendix Air Dryer	**Approved**
43	88	Data Logger	Each bus shall be supplied with a FLEETWATCH Model JX55 Data Logger as manufactured by S & A Systems, Inc., Rockwall, Texas, Phone 972/722-1009.	BYD requests approval of the I/O Controls data logger which has been used on IndyGo's current BYD bus fleet.	I/O Controls Data Logger	**Approved**
44	90	Interior Climate Control	Technician can adjust temperature in garage. Preferably, Sutrak system or Thermo King HVAC units are recommended. Thermo King unit would be uniform with the rest of the fleet	BYD requests approval of using BYD HVAC which has been used on IndyGo's current BYD bus fleet.	BYD HVAC	**Approved**
45	/	/	/	BYD requests approval of a auxiliary diesel heater.	BYD Auxiliary Diesel Floor Heating System	**Approved**
46		Forms	1. Affidavit of Non-Collusion Form 2. Compliance with Buy America & FMVSS Rolling Stock Form 3. TVM Certification Form	Please confirm that these 3 forms need to be notarized.		**Yes, all three must be Notarized.**
47		Submission Requirements	Page 12 specifies "All proposals and copies must be submitted via electronic email" but page 16 (Checklist) states "One (1) Original and (1) Digital Copy on Thumb Drive"	Please confirm if this proposal is an email submission or if hard copies are required.		**Emailed**

New Flyer Request For Approvals RFP #21-07-407 October 15, 2021

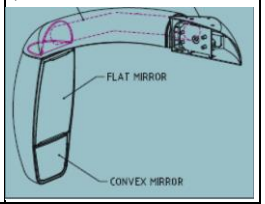
AE #	Page #	Section #	Section Title	Spec Language	Approved Equal	IPTC Response
1	16	9.0	Body and Chassis Structure	Body and windows shall be sealed to prevent rattling, leaking of air, dust, road salts, or water under normal operating conditions and during cleaning in automatic bus washers for the service life of the bus. Accumulation on any window of the bus of spray and splash generated by the bus wheels on a wet road shall be minimized.	New Flyer requests approval to provide Arow Global Storm-Tite bus window series that are hidden frame (flush) windows. All windows are built and tested in accordance with FMVSS 217 guidelines with materials that conform to the applicable requirements of ANSI Z26.1 and the recommended practices defined in SAE J673. This option will increase the cost of the bus but will give the bus a more sleek look similar to a European style bus. This is a common upgrade on BRT style buses.	Approved- IndyGo is more interested with sealed windows to prevent rattling, leaking air, roads salt and or water under normal conditions and during cleaning into the bus wash bay.
2	16	9.0	Body and Chassis Structure	Body and windows shall be sealed to prevent rattling, leaking of air, dust, road salts, or water under normal operating conditions and during cleaning in automatic bus washers for the service life of the bus. Accumulation on any window of the bus of spray and splash generated by the bus wheels on a wet road shall be minimized.	New Flyer requests approval to provide Arow Global Evolution Framed Bus Windows. All windows in the Evolution Framed Bus Window Series are built and tested in accordance with FMVSS 217 guidelines with materials that conform to the applicable requirements of ANSI Z26.1 and the Recommended Practices defined in SAE J673. This option is a more traditional style of window and is more economic. The window style is aesthetically pleasing and is a common configuration for many different transit agencies.	Approved-
3	16	9.1	Special Provisions for Level Boarding	The body sides of the bus should be on the same plane and be free of any protrusions greater than 0.5". This includes items such as fender skirts.	New Flyer requests approval to provide our standard fender skirt which is required to minimize water spray however this protrudes 1.24". New Flyer does have an option to provide a stainless steel trim which protrudes 0.5" but does not provide protection for water spray.	In this situation, the protrusion requirement is a higher priority than the water spray requirement. The stainless steel trim should be used.
4	16	9.1	Special Provisions for Level Boarding	The outer wall of each tire on each side shall be on the same plane and each shall be the same distance from the side plane of the body.	New Flyer requests approval to provide a bus that does not have all the outer wall of each tire on the same plane. New Flyer's has dual tires on the rear drive axle and dual tires on the center drive axle and single tires of the front axle. There is a difference of 1 inch from the front outside walls to the center and rear outside walls. New Flyer's proposed bus will have a tire plane variance of 1.45 inches from the front tires to the center tires to the rear tires. This is utilizing aluminum wheels. The variance would be better if steel rims could be utilized, but with the amount of batteries required to meet the specification range requirement, steel rims would be in an overload state. This is inherent to the design of New Flyer's bus.	The tolerance for this plane should be considered +/- 1.5 inch. If Vendor can meet the plane requirement within one and half inch, that is allowable, but it is critical to not exceed 1.5 inch-Therfore the 1.45 inches variance is acceptable.
5	16	9.2	Corrosion	IPTC requires a vehicle constructed of materials that are highly resistant to corrosion. Whenever dissimilar materials are jointed or connected, they must be treated to prevent galvanic corrosion.	New Flyer requests approval to provide 41003 ferritic stainless steel structure. Unlike traditional austenitic stainless steel, 41003 ferritic stainless steel is easily weldable, and retains its corrosion resistant properties even after welding. 41003 is also known for its good toughness and weld joints when exposed to cold temperatures. Please note this option is our basic structure and has been used in many different	Approved
6	16	9.2	Corrosion	IPTC requires a vehicle constructed of materials that are highly resistant to corrosion. Whenever dissimilar materials are jointed or connected, they must be treated to prevent galvanic corrosion.	New Flyer requests approval to provide a basic frame structure that is a semi-monocoque design, using high-strength low-alloy (HSLA) steel sheet and plate (ASTM A242, A588, A606, A568, CSA G40.21 44W, 50A, 50W) and structural tube and channel (ASTM A500, CSA G40.21 50A, 50W) for structural strength and durability. Stainless steel(41003) is employed as an extra line of defense against corrosion to maximize the service life of the structure. Stainless steel is used in areas exposed to extreme salt, chemicals & temperature gradients. Unlike traditional austenitic stainless steel, ferritic stainless steel is easily weldable to HSLA steel, and retains its corrosion resistant properties even after welding. 41003 is also known for its good toughness and weld joints when exposed to cold temperatures.	Approve- As the vendor shall provide the warranty required in this RFP
7	16	9.2	Corrosion	Apply Dichromat anti-corrosion to undercarriage and secure HV wiring and air lines from road debris.	New Flyer requests approval to provide the New Flyer Standard Corrosion Protection Procedures. Corashield 7947 will be applied to the underbody. Cora Tube will be applied to the inside structural tubing from the window-line down and a moisture-cure Urethane Zinc Rich Primer protects the entire exterior structure and is also sprayed under the plywood floor providing an additional protection seal to the floor. New Flyer uses primer which is a low VOC organic zinc rich coating, and provides cathodic protection when applied to prepared structural steel substrates. It is an excellent undercoat for the transportation industry, providing galvanic protection similar to galvanizing when applied to correctly prepare hot or cold rolled, sand blasted steel. Ferrous parts requiring zinc rich primer include: bus frames, fuel tank cradles, suspension bunks, and all structural steel components. New Flyer does not use chromates in its manufacturing facilities.	Approved
8	17	9.3	Water Test	A complete water test will be conducted over the entire exterior surface of each coach before it is shipped to IPTC. Each nozzle that delivers water must eject a total volume of water not less than eight gallons per minute at a pressure not less than forty pounds per square inch measured at point of impact. The nozzle tip will deliver a narrow 20-degree pattern that does not overlap. The nozzle will be located no more than 12 inches from the surface of the coach. The test will be conducted so that each area of the coach is subject to water spray for a minimum of fifteen (15) minutes. If water leaks are evident, it will be repaired, and the vehicle will undergo another complete water test to ensure the leak has been completely repaired. Double lip latch sealing or equivalent shall be around windshield.	New Flyer requests approval of our standard ten (10) minute water test. The current New Flyer water test booth facility has the following facts, parameters and supporting data: 1) The booth area is ~1073 sq. ft. with 90 nozzles flowing at 2.0-2.4 gal/min. This equates to a rainfall of ~16 inches per hour in the booth. -We have measured the flow rate from the nozzles used and consistently found them to exceed 2.0 gal/min, but with a 30-40 psi	Approved- However, Indygo would perform a water leak/intrusion test through its regular wash bay to ensure the intergrity the vehicle sealing prior to completion of the vehicle reception documents
9	17	9.4	Finish and Color	All exterior surfaces shall be smooth and free of visible fasteners, wrinkles, and dents. Exterior surfaces to be painted shall be properly cleaned and primed as appropriate for the paint used, prior to application of paint to assure a proper bond between the basic surface and successive coats. Paint, if used, shall be applied smoothly and evenly with the finished surface free of dirt, runs, orange peel and other imperfections. All exterior finished surfaces shall be impervious to diesel fuel, gasoline, and commercial cleaning agents.	New Flyer requests approval to propose a single color paint scheme. If chosen for award, New Flyer can work with IPTC to provide a paint scheme layout suitable for the fleet. Can New Flyer obtain paint color and decal information from IPTA if its required in the cost of the RFP?	Indygo will provide the paint color and decal to the awarded Vendor
10	17	9.5	Branding, Decals and Signage	Proposer will furnish with the technical proposal a list of all available decals/signs, which can be installed in or on the bus. This list should include a general description of each decal and its location. IPTC will advise the successful proposer/contractor of the decals/signs to be installed and their locations. After the successful bidder has been selected, a complete schematic of IPTC colors, logo's and decal placement will be furnished.	New Flyer requests approval to obtain paint color and decal information from IPTA if its required in the cost of the RFP. Decal packages and paint layouts are often custom to the property.	Approved

11	17	9.6	Material Quality	The electrical connections exposed to water, salt, brine, or any other corrosive material exposed to water or air must be encapsulated or protected.	New Flyer requests approval to protect the exposed electrical connections from corrosion by applying dielectric grease.	Approved
12	18	9.10	Fire Protection	Preferably the Battery/HV fire suppression system shall be Amerex fire suppression system along with training and troubleshooting software.	New Flyer would like to clarify that during a battery thermal event a fire suppression system will extinguish the fire until the suppressant runs out, but it will not prevent a thermal runaway of a battery. The only way to permanently extinguish a battery fire is with a large volume of the appropriate fire suppressant that would be sprayed onto the bus by firefighters for as long as required to dissipate the energy from the batteries. New Flyer is unaware of any fire suppressant system on the market with the volume of suppressant that would permanently extinguish the thermal runaway of a battery. New Flyer's current electric bus design and major component layout is based on standardized, modular battery enclosures that are inherent to the design of the bus. The battery enclosures have undergone rigorous environmental and robustness testing and are rated to IP67. The ESS enclosures are designed to optimize packaging of the ESS modules and battery management components, they have not been designed and tested to accommodate the sensors and nozzles in the ESS enclosures. Given all the details above we request approval to utilize the existing onboard temperature sensors and provide a fire suppression nozzle outside of the ESS enclosures in the rear propulsion compartment only, and utilize a temperature monitoring solution that prevents fires for the roof top and propulsion compartment batteries.	Denied- Indygo is aware that the fire Suppression system wouldn't prevent the thermal runaway of Lithium Battery fire, but it is required to have fire suppression system that would slow the rapid expension of the fire to allow the first responders to arrive. Indygo will be open to any proposal that includes the fire suppression system into each ESS compartment.
13	18	10.2	Modesty Panels	Modesty panels shall extend no higher than the lower daylight opening of the side window and those forward of transverse seats shall extend downward to a level between 1-1/2 and 1 inches above the floor.	New Flyer requests approval to provide rear exit modesty panels that are approx. 3.83" above the lower daylight opening of the side window and the rear exit modesty panel is approx. 3.39" above the floor. This is inherent to the bus design.	Approved
14	19	10.4	Construction	Interior panels may be integral, color impregnated, graffiti resistant or applied to the basic bus structure.	New Flyer requests approval to provide ceiling panels made of thermoplastic which meet FMVSS regulation but is not graffiti resistant. Pier panel, Ceiling panels are color impregnated. Melamine panels (sidewall panels) are not color impregnated. Another option is providing a docket 90 compliant material made of Kydex which is graffiti resistant.	Approved-But IndyGo would like to see sample of the Material for final approval
15	19	11.1	Height	Height of the floor above the street shall be 15 inches +/- 0.25 inches, measured at the centerline of each door.	New Flyer requests approval to provide a bus with a floor height of 14 inches at the doorway. New Flyer will meet the 15 inch platform requirement by raising the bus with the air system when it has arrived at the loading platforms. This is inherent to New Flyer's bus design.	IndyGo-has some platforms on its BRT line with 15" height and requires to have its BRT fleet to dock safely at all the platforms-Vendor shall equip the vehicle with automatic Geo location to raise the vehicle on every platform with 15" height. IPTC will work with vendor to get such locations Data.The other option would be to raise the bus to a ride height of 15".
16	19	11.3	Edges	The floor shall be essentially a continuous flat plane. The floor will run up the sidewall for minimum of 3". All edges must be sealed as a waterproof protection.	New Flyer requests approval to provide a floor covering in the lower area that extends slightly up the sidewall and is locked in place by the seat track. Flooring on the upper level does not extend up the wall, however, a stainless steel molding is provided which encloses and seals the edge between the floor and the wall. The flooring runs up the sidewall, but the plywood floor does not.	Approved -Correct. The floor covering shall run up the sidewall a minimum of 3 inches, not the floor itself.
17	19	11.4	Floor Protection	□ Aisle: Textured Ribbed – Color to be supplied to winning bidder □ Under seat: Smooth – Color to be supplied to winning bidder □ Step Nosing: Yellow □ Standee Line: Yellow □ Driver Platform: 1/8" Smooth Black □ Wheelchair Position: Smooth – Color to be supplied to winning bidder □ Rear Settee Riser: Smooth – Color to be supplied to winning bidder	New Flyer requests approval to provide Tarabus &/or Altro flooring. These types are not ribbed.	Approved. However, Vendor must supply samples for approval
18	20	11.4	Floor Protection	Flooring is to be a continuous run material with one or less joints. It needs RCA Rubber flooring or approved equal having a Fire Safety: ASTM E648, FMVSS302 rating and Slip Resistance >.80, ASTM D2047 and meeting all ADA requirements. Thickness of 0.10inch or more with a weight of 5.6lbs/yd. squared or more.	New Flyer requests approval to provide **Altro** Flooring, which will have welded seams in most areas and caulking in areas that are not weldable. The floor type meets EN 12845 & ASTM F1303. The slip resistance is > 0.6 and passes ASTM D2047 and meets ADA requirements. The thickness is 2.7 mm / 0.11" thick. Colors can be discussed at the PPM if awarded.	Approved
19	20	11.4	Floor Protection	Flooring is to be a continuous run material with one or less joints. It needs RCA Rubber flooring or approved equal having a Fire Safety: ASTM E648, FMVSS302 rating and Slip Resistance >.80, ASTM D2047 and meeting all ADA requirements. Thickness of 0.10inch or more with a weight of 5.6lbs/yd. squared or more.	New Flyer requests approval to provide **Tarabus** Flooring, which will have welded seams in most areas and caulking in areas that are not weldable. Slip Resistance is <0.6 and passes ASTM D2047 and meets ADA requirements. The thickness is 2.2 mm / 0.086". Colors can be discussed at the PPM if awarded.	Approved
20	20	11.4	Floor Protection	Flooring is to be a continuous run material with one or less joints.	New Flyer requests approval to provide multiple seams/joints. Required due to the size and design of our bus, along with production restrictions.	Approved
21	20	12.1	Steps	Treads shall be covered with a minimum of 0.100" RCA Safety flooring, or approved equal, a vinyl base product incorporating aluminum oxide, quartz, and silicon-carbon pigments which is extremely skid resistant, durable and grooved/ribbed design.	New Flyer requests approval to provide yellow powdercoated stainless steel trim on the driver's platform, not ribbed. New Flyer also requests approval to provide yellow FMJ on the vertical sides and as a nosing on the rear step. The exit doors shall have yellow ribbed nosing.	Approved-But the flooring Must be skid resistant
22	20	12.1	Steps	The step at each doorway shall conform to the floor height requirements in the previous section.	New Flyer requests approval to provide a bus with a floor height of 14 inches at the doorway. New Flyer will meet the 15 inch platform requirement by raising the bus with the air system when it has arrived at the loading platforms. This is inherent to New Flyer's bus design.	Refer to answer of question#15
23	20	13.1	Construction	Wheel housings shall be constructed of corrosion-resistant, fire resistant 14 gauge 304-type stainless steel.	New Flyer requests approval to provide the front, center and rear wheelhouse tubs constructed of 18-gauge 201 -type stainless steel per ASTM A240. The vertical panels on the front tubs are 16ga. stainless steel. The vertical panels on the center tubs are 7ga. stainless steel. The vertical panels on the rear tubs 11ga. stainless steel. The different gauge material is used to accommodate the welding process and to avoid "oil canning".	Approved
24	20	13.3	Fender Skirts	Features to minimize water spray from the bus in wet conditions shall be included in the wheel housing design, but subject to the side plane requirements in the previous section.	Please refer to RFA #3. If IPTC approved the New Flyer's option for stainless steel trim which protrudes 0.5", we request to remove the requirement for minimizing water spray as this option does not provide such feature.	RFA#3 Was approved
25	21	13.4	Splash Aprons	Splash aprons, composed of ¼-inch minimum composition of rubberized fabric, shall be installed behind each wheel and shall extend downward to within 3-inches of the road surface.	New Flyer requests approval to provide a splash apron installed fore of front wheel is 3.67 inch, the rear is 4.73 inch of the road surface. New Flyer requests approval to provide splash aprons that extend downward to within six (6) inches of the road surface	The main IndyGo concern is about the water spray onto the bottom battery compartment and into other Electrical components.However, IndyGo will Approve any splash design that prevent water or mud intrusion into battery and electrical compartments.

26	21	14.1	Interior	Access doors shall be hinged with gas-powered springs to hold the doors out of the mechanic's way.	New Flyer requests approval to provide a bus that has smaller access doors that are not hinged or have gas props. These doors such as the wheel chair access door, artic joint closeouts and HVAC ceiling closeouts are retained with lanyards. This is inherent to the bus design.	Denied. Doors must be hinged and have a gas mechanism to keep them open
27	21	14.1	Interior	Access doors for the door actuator compartments shall be secured with hand screws, latches, or crossrecessed, head screws, and shall prevent entry of mechanism lubricant into the bus interior.	New Flyer requests approval to provide access to the exit door actuator compartment from behind the light panels which are retained by clips. This is done to provide a seamless feature of the light panels for a esthetically pleasing interior bus design.	Approved
28	21	14.2	Exterior	The inside surface of the battery compartment's access door shall be electrically insulated as required to prevent the battery terminals shorting on the door if the door is damaged in an accident or if a battery comes loose.	New Flyer requests approval to provide a battery compartment and a battery access door that is not electrically insulated. However, please note that we provide a rubber pad mounted on the inside of the battery access door and a polyethylene enclosure which creates an electrically resistant barrier between the batteries and the access door.	Approved
29	21	14.2	Exterior	The rear compartment door will have another access door incorporated into it for battery charging plug in access.	New Flyer request approval to provide an access door (for the plug-in charge port) located on the rear curbside of the bus (right beside the rear compartment). Please note that the Xcelsior's plug-in receptacle is accessed on either curb side or street side of the propulsion compartment but cannot be accessed through the rear compartment door.	The external charging unit may be located on either side of the vehicle, and the charge port on the vehicle should be located to facilitate charger connection. Vendor may install a single port (or set of ports) on the rear of the vehicle, or install duplicate ports on both sides. Installing ports only on one side of the vehicle is not approved.
30	21	14.2	Exterior	Doors with top hinges shall have safety props stored behind the door or on the doorframe. All access doors shall be retained in the open position by counterbalancing with over-center or gas-filled springs.	New Flyer requests approval to provide doors with top hinges that use gas struts on large doors and over-center springs on small doors.	Approved
31	21	14.2	Exterior	A counterbalance or spring system should operate large doors but, if not practicable, a powered-assist device may be used, provided it is equipped with an emergency system to open the doors manually in less than 30 seconds.	New Flyer requests approval to provide large access doors that have gas struts which do not require a counterbalance to remain open	Approved
32	21	14.2	Exterior	Large access door shall hinge up and out of the way or fold flatly against the bus body and shall be easily operable by one person. These doors, when opened, shall not restrict access for servicing other components or systems	New Flyer requests approval to provide a battery access door that is hinged on the forward edge of the door. At it's maximum open position it sits approximately 19" from the bus body. However, full access to the battery tray is provided. Also, the upper A/C door would be unreachable by any person if it were to flip up and out of the way or lay against the bus body.	Approved
33	22	15.2	Middle and Rear Door Mechanism	The middle and rear doors shall be electrically operated and use a sliding-plug mechanism to avoid impacting passengers waiting inside or outside of the bus.	New Flyer requests approval to provide Vapor Wide Slide Glide Doors. These doors will not interfere with passenger ingress or egress from inside the bus as well as on the loading platform. This style of door is used on 1000's of New Flyer buses in major metropolitan areas with no issue of passenger interference.	Approved-
34	22	15.3	Front Door Mechanism	The front door shall be operated by an electric operator, having integral controls for the adjustment of door closing speed, cushioning upon door opening to prevent slamming, and door closing speed, a CLASS series with proximity switches manufactured by Bode Corporation or approved equal. The front door shall be a slide-glide type.	New Flyer requests approval to provide proximity switches that are supplied from Vapor.	Approved
35	23	15.5	Operator's Door Control Devices	The driver shall control the passenger doors through a five-position control device with a removable handle, as manufactured by Bode Corporation or approved equal.	New Flyer requests approval to provide a removable five-position door control handle that is manufactured by Vapor. This is the same door controller we provide to most of our customers.	Approved
36	23	15.5	Operator's Door Control Devices	With the master run switch set to the "RUN" position, and with the door in the open or unlocked position, a light shall be illuminated on the front dash reading "Open Door", so that the operator will know that the rear door is open or unlocked.	New Flyer requests approval to illuminate the touchscreen instrument panel with "REAR DOOR OPEN" to alert the driver that the rear is open or unlocked.	Approved
37	23	15.6	Passenger's Door Control Devices	Each of the middle and rear doors shall come equipped with a lighted passenger activated button on both the inside and outside surfaces of the doors for passengers to open the doors when allowed by the lockout system and the vehicle operator. The button shall illuminate when the vehicle operator and the lockout system has enabled the door to be opened. This will allow doors to only open upon request during times of adverse weather, such as extreme heat or cold, to maintain battery capacity.	New Flyer wishes to point out that a location of an exterior activation button will be require to be a set distance away from the outer edge of the opened plug door to ensure the passenger boarding the bus does not get struck with the door opening. Another option for IPTC would to require the exit doors to be a Slide Glide style which would open to the interior of the bus which will allow the passenger activation button to be locate closer to the exit door frames. Please confirm if the slide glide exit door would be better suited for IPTC's configuration while using the activation button.	IPTC wishes to use a sliding-plug mechanism.This door should not protrude more than 6 inches when open, minimizing the potential to impact any passengers waiting on the platform. A slide-glide door will be approved if it's not impacting passengers boarding- IndyGo will work with Vendor to confirm this approval
38	24	15.7	Lockout & Door Warning System	The door system shall include a GPS-based lockout that prevents the opening of doors on the side of the bus not adjacent to a station. This is intended to prevent a door opening into active traffic. The vehicle operator should not be able to override this lockout without taking additional steps. It shall also prevent the opening of doors while the vehicle is in motion. In addition, once the vehicle operator activates the switch to close the doors, there shall be an audible voice warning to passengers and a two second delay prior to the closure of the doors. This warning shall say "Doors Closing".	New Flyer's proposal is based on providing a door system with a lockout feature that is not GPS-based. Please note this is not an available feature we provide. However, we are willing to discuss things further at the pre-production meeting to come up with solution that suits Indy Go's needs.	IndyGo Requires Geo Location Door Safety to prevent the opening of doors into active traffic.
39	25	16.1	Lighting Specifications	Turn signal lights shall be provided on both sides of the bus recessed to provide no protrusion from the side of the body.	New Flyer advises that recessed turn signal lights are not an available option. New Flyer has a concern that recessed lights would be a detriment to the visibility of said lights. New Flyer requests to removal of the "no protrusion" requirement. In addition, New Flyer requests approval to provide lights that protrude 1.5 inches from the body. This is inherent to the bus design.	Approved, with limitation. No portion of turn signal lights should be less than 15 inches from the ground and lights should protrude no more than 1.5 inch from the body.
40	25	16.1	Lighting Specifications	Lamps at the rear of the bus shall be visible from behind when the service doors are opened.	New Flyer requests approval to provide 18" lights on the A/C door, the lights would be covered up when the propulsion door is open, but the corner pillar lights will still be visible.	Approved
41	25	16.2	Service Area Lighting	A switch located near the rear start controls in the engine compartment shall control the lights.	New Flyer requests approval to activated the propulsion compartment service lights via a switch located in the rear ESS service compartment (on the streetside). Please note that the electric bus does not have "rear start controls" in the propulsion compartment in electric buses. Instead, we provide a rear panel located inside the bus for gauge checks, propulsion battery checks and primary diagnostics.	Our Current Electric Fleet do have rear start Control-The rear compartment Light Control switch local is Approved
42	25	16.2	Service Area Lighting	Necessary lights, located in the other service compartments, shall be provided with momentary contact switches on the light fixture or convenient to the light.	New Flyer requests approval to provide maintained switches for the service lights as opposed to momentary switches. This allows maintenance staff to repair the bus for more than 30-minutes without having to turn the switch back on (whenever the 30-minute window has lapsed). Please note that power to the lights will automatically discontinue 30 minutes after the PLC system has been turned off. This is to ensure the lights will still turn off if the lights were accidentally left on after repairs are made.	Approved-

43	25	16.3	Passenger Interior Lighting	An overhead Dinex IO Controls LED lighting system or approved equal shall provide general illumination in the passenger compartment and shall be controlled independent of the run switch.	New Flyer requests approval to provide New Flyer Genuine (TCB) interior lighting that has quick access easily removable panels which are held in place by filler strips and snap into the light panel extrusion.	Approved-
44	25	16.3	Passenger Interior Lighting	An overhead Dinex IO Controls LED lighting system or approved equal shall provide general illumination in the passenger compartment and shall be controlled independent of the run switch.	New Flyer requests approval to provide a distributed multiplex system by Vansco (as opposed to Dinex). We provide a distributed multiplex system due to the following benefits: - The Vansco modules are auto-programming making it very easy to replace or add multiplexing modules - The Vansco Multiplexing system uses a single type of module minimizing required inventory - The outputs on our system can drive loads up to 10 amps and are electronically self protected. This reduces the number of fuses or breakers required. - The Vanso Multiplexing module has an IP rating of 66 - The Vanso Multiplexing module has a operating temperature range of -40F to 185F. See SIB-284+286-001-Multiplexing System-NFA for more information.	Approved-Diagnostic equipment and Training must be provided
45	26	17.2	Hand Controls	Turn signal controls shall be floor mounted, foot controlled, waterproof, heavy duty, momentary contact switches.	New Flyer requests approval to provide a momentary-maintained switch for the headlight low/high beam control that is water-resistant.	Approved
46	26	17.3	Instrumentation	Speedometer, air pressure gauge(s), battery temperature, voltmeter, and certain indicator lights shall be located on the front cowl immediately ahead of the steering wheel.	New Flyer provides a high battery temperature indicator that's amber in color, We don't provide a gauge for the High Voltage battery temperature. The High Battery Temperature message will appear on the LCD screen on the instrument panel if any high voltage battery string exceeds safe operating temperature for more than one minute.	Approved-
47	26	17.3	Instrumentation	Instruments and indicators immediately in front of the driver shall include but not limited to: - Headlight high beam on - Right turn signal - Left turn signal - Hazard warning (may be common with turn signal indicators) - Exit door open or unlocked - Parking brake applied - Service brakes applied (may be common with parking brake) - Error messages or flashing lights required for driver awareness. - Onboard Diagnostics	New Flyer requests approval to locate instrumentation on the driver's side console panel where applicable. Details would be provided in a driver control approval drawing prior to finalization of design and commencement of build.	Approved
48	27	17.3	Instrumentation	All systems need to be capable to integrate with the Dines G-3 systems or equivalent for centralized reporting, error trapping, documentation, and capable of wireless communication.	New Flyer requests approval to provide a distributed multiplex system by Vansco (as opposed to Dinex). We provide a distributed multiplex system due to the following benefits: - The Vansco modules are auto-programming making it very easy to replace or add multiplexing modules - The Vansco Multiplexing system uses a single type of module minimizing required inventory - The outputs on our system can drive loads up to 10 amps and are electronically self protected. This reduces the number of fuses or breakers required. - The Vanso Multiplexing module has an IP rating of 66 - The Vanso Multiplexing module has a operating temperature range of -40F to 185F.	Approved-
49	27	17.3	Instrumentation	The onboard monitoring system will be configurable and able to communicate too virtually any interface that can be adopted by the customer.	New Flyer requests clarification to further understand what is meant by onboard monitoring system to "communicate too virtually any interface that can be adopted by the customer"?	Approved-
50	27	17.4	Driver's Switches and Controls	Turn Signal Switches – foot controlled, waterproof (no identifier required)	New Flyer requests approval to provide a momentary-maintained switch for the headlight low/high beam control that is water-resistant.	Approved
51	27	17.4	Driver's Switches and Controls	Foot Controlled Headlight Dimmer Switch – waterproof (no identifier required)	New Flyer requests approval to provide a momentary-maintained switch for the headlight low/high beam control that is water-resistant.	Duplicate
52	27	17.4	Driver's Switches and Controls	Diagnostic Light Panel Switch (es)	New Flyer requests approval to activate the diagnostic light test using the touchscreen instrument panel (as opposed to a separate push-button switch).	Approved
53	27	17.4	Driver's Switches and Controls	Brake & Throttle Pedal Locating Controls	New Flyer requests clarification on what is meant by a locating control. Is this in fact referring to an adjustable pedal switch? If this is the case, please note that our standard pedal assembly is such that only the throttle position is adjustable in this manner.	Correct-This section is refering to an adjustable Throttle position/output
54	27	17.4	Driver's Switches and Controls	Rear Exit Doors Master Switch (standard L door handle for door controls)	New Flyer requests approval to provide a toggle switch for the Door Master Switch. This switch is located inside the destination sign compartment.	Approved
55	27	17.4	Driver's Switches and Controls	Wheelchair Ramp Control Panel Actuation Switches (2-position toggle switch to control is preferred)	New Flyer requests approval to provide a 3-position momentary-maintained toggle switch to control the wheelchair ramp. This switch activates the ramp to either DEPLOY, FLOAT, or STOW.	Approved
56	27	17.4	Driver's Switches and Controls	Wheelchair Ramp Controls (2-position toggle switch to control is preferred)	New Flyer requests approval to provide a 3-position momentary-maintained toggle switch to control the wheelchair ramp. This switch activates the ramp to either DEPLOY, FLOAT, or STOW.	Approved
57	28	18	Interior Trim	All plastic and synthetic materials used inside the bus shall be fire resistant	New Flyer request clarification on whether the interior of the coach needs to meet Docket 90 standards or FMVSS 302 regulation. New Flyer advises there is a significant upcharge for Docket 90 interiors.	The Docket 90 standards is prefered by IPTC
58	28	18.1	Interior Trim - Trim Panels	Interior side-trim panels and driver's barrier shall be melamine material.	New Flyer requests approval to provide a driver's barrier that is formed by the forward face of the SDS enclosure which extends from the top of the wheelhouse to the ceiling, and from the aisle to the window. The lower portion is formed by the streeside wheelhouse which extends fully to the floor. The SDS enclosure and wheelhouse are matte black fiberglass. This is inherent to the Xcelsior bus design.	Approved
59	29	18.2	Interior Trim - Headlining	Ceiling panels shall be 1/10-inch thick melamine.	New Flyer requests approval to provide ceiling panels that are made from thermoplastic which are . New Flyer requests approval to provide ceiling panels in the passenger area that are fabricated out of ABS plastic (thermoplastic). New Flyer utilizes ABS plastic because it can be thermoformed into a shape that will fit into the contours of the ceiling, minimizing noise and deflection. The mechanical properties of the material also make it suitable for the application.	Approved
61		18.3	Front End	Paneling across the front of the bus and any trim around the driver's compartment shall be formed metal or fiberglass material.	New Flyer requests approval to provide black color-impregnated ABS plastic dash panels.	Approved-
62	29	18.5	Articulation Joint Insulating Materials	The vehicle shall be equipped with insulating materials lining the articulation joint. This insulation is intended to reduce the heat and sound transfer between the interior and exterior of the vehicle.	New Flyer's proposed bus does not have insulation blankets in the articulating joint area. Our articulating joint bellow manufacturer does not currently provide this as an option. New Flyer requests approval to discuss at a Pre-Production Meeting should New Flyer be the successful bidder.	Approved-for later discussion

63	30	19.2	Signage (To be installed from Factory)	Insurance document holder shall be mounted directly behind driver's seat on barrier.	New Flyer requests approval to provide a 9.5 x 6 registration holder (clear polycarbonate) that is mounted on the forward location of the SDS enclosure.	Holder should be 8.5 inches wide by at least 4 inches tall
64	30	20.1	Configuration	Foot room, measured at the floor from a point vertically below the front of the seat cushion, shall be no less than 12 inches.	New Flyer requests approval to provide reduced foot room for seats located behind modesty panels. (approx. 11.49"-11.60")	Approved-
65	30	20.1	Configuration	The area between the longitudinal seat backs and attachment to the bus sidewalls shall be designed to prevent debris accumulation.	New Flyer requests approval to not provide trash deflectors for any of the longitudinal seats. Only rear cross seat will have a trash deflector. This is inherent to the bus design.	Approved-
66	30	20.2	Structure and Design	The underside of the seat and sidewall shall be configured to prevent debris accumulation and the transition from the seat underside to the bus sidewall to the floor cove radius shall be smooth.	New Flyer would like to clarify that transverse seats do not have trash deflectors.	Approved-
67	30	20.3	Seat Construction and Materials	All visually exposed metal of the standard seat structure including mounting brackets and other components shall be aluminum or stainless steel.	New Flyer requests approval to provide a carbon steel powder coated seat frame structure/mounting.	Approved-
68	30	20.3	Seat Construction and Materials	European style seating similar to Kiel IDEO or approved equal shall be used for passenger seating.	New Flyer requests approval to provide USSC/4ONE passenger seats. The Gemini passenger seat was designed with ultra-light weight materials. The seat shell has advanced ergonomics that balance both comfort and hip to knee requirements.	Approved
69	30	20.3	Seat Construction and Materials	European style seating similar to Kiel IDEO or approved equal shall be used for passenger seating.	New Flyer requests approval to provide American Seating passenger seats. Insight seats are a lightweight seat, designed with superior strength and durability. Insight Prime is composed of advanced technology vandal and corrosion-resistant composite resin.	Approved
70	31	21.1	Exit Signal	The "Stop Requested" sign shall be installed in the front ceiling of the center aisle of the bus.	New Flyer requests clarification if IPTC requires a sign after the articulating joint?	Yes, signs should be placed in two locations, one behind the operator and one behind the articulation joint.
71	31	21.2	Overhead Support	The assist shall be no less than 70 inches above the floor.	New Flyer requests approval to provide a height just forward of rear cross seat is 69.4", due to slope in floor.	Approved
72	31	21.4	Loading Ramp System & Mobility Aid Securement	A loading ramp system, latest model Lift-U Dual Mode LU18 (6:1 Slope) or approved equal shall provide ingress and egress quickly, safely, and comfortably for a passenger in a mobility air from the street level or curb via the front door. An accessible path must, however, also be provided to the front door in the event of necessary access to a non-level boarding platform, using the loading ramp. Maneuvering room inside the bus shall accommodate a passenger in a mobility aid, from both the loading device and from the middle door through the bus to the designated parking area, and back out. (To allow loading ramps to level with the station's platform when deployed, the vehicle should automatically rise to 1" more to level 16" ride high, when any ramp is activated.	New Flyer requests clarification that only one wheelchair ramp is required at the front entrance door? Are any other doors requiring flip out type ramps?	The Front Door is required to have a flip out ramp and also each rear door shall have a bridge plate elctric flip out plate to allow wheel chairs to board from the BRT platforms.
73	31	21.4	Loading Ramp System	A loading ramp system, latest model Lift-U Dual Mode LU18 (6:1 Slope) or approved equal shall provide ingress and egress quickly, safely, and comfortably for a passenger in a mobility air from the street level or curb via the front door.	New Flyer requests approval to provide New Flyer's patented self contained, modular flip type ramp that is stored in a stainless steel box mounted into the floor of the bus. The non-skid, 3/16 inch thick aluminum ramp platform has a clear width of 32.25 inches, a length of 47.6 inches and is rated at 660 lbs. (approx. 660 lbs.) with a deployment angle ratio of 1:7. The ramp exceeds ADA requirements..	Approved-IndyGo has a preference of Lift U technology to match it fleet but New Flyer's patented Modular flip type Ramp is acceptable
74	31	21.4	Loading Ramp System	A loading ramp system, latest model Lift-U Dual Mode LU18 (6:1 Slope) or approved equal shall provide ingress and egress quickly, safely, and comfortably for a passenger in a mobility air from the street level or curb via the front door.	New Flyer requests approval to provide our new all-electric SmartRider wheelchair ramp which has an inline electric motor providing both quiet and smooth operation. Features include a single slope, a higher load carrying capability (up to 1000 lbs./450 Kg) and an optimized undercarriage with a stainless steel construction and a dual chain with an easy access tensioner. The SmartRider ramp, when fully integrated with New Flyer's SmartRider electronic control suspension system, can provide single step ramp deployment with automated kneeling (kneeling occurs automatically when ramp is deployed) providing best in class control and accessibility.	Approved-
75	32	21.4	Loading Ramp System	Deployment or storage of the ramp shall require no more than 5 seconds.	New Flyer requests approval to provide a New Flyer ramp with a deployment or storage time that is 10 seconds. New Flyer would like to clarify that the LIFT-U LU18 ramp deployment or storage time is 8-10 seconds.	Approved- for a Deployement and storage 10 seconds
76	32	21.5	Mobility Aid Securement	This is a BRT vehicle, so most passengers will be boarding via a level platform at the middle door	New Flyer requests clarification on whether bridge plates will be required so that passengers with mobility aids such as wheelchairs can enter on the doors without the wheel chair ramp. New Flyer wishes to clarify that a bus cannot pull up to a platform without creating a gap at the door way. New Flyer would also like to clarify that the requirement of the station rub surface will create a gap at the doorway.	Approved-
77	33	22.3	Outside Rearview Mirrors	To avoid striking waiting passengers, both mirrors shall be a high mount and forward located configuration, similar to the Rosco Performa Style or approved equal. No portion shall be less than 87.5 inches from the roadway surface.	New Flyer requests approval to provide 80-inch clearance from the ground on the curb side and 77-inch clearance from the ground on the street side. Please note that placing the mirror at 87.5-inches from the ground is too high and it will not be visible through the driver's windshield or side window.	Approved-
78	33	22.3	Outside Rearview Mirrors	Street side mirror shall be a low mount and curb side mirror shall be a high mount.	New Flyer requests approval to provide a high mount curbside mirror and a high mount streetside mirror. This meets the following spec requirement: "To avoid striking waiting passengers, both mirrors shall be a high mount and forward located configuration, similar to the Rosco Performa Style or approved equal."	Approved-
79	33	22.3	Outside Rearview Mirrors	Total width of bus including outside mirror shall not exceed (10') ten feet.	New Flyer requests approval to provide a bus that is 10 feet 2 inches in width including mirrors. Having the mirrors inset more than the current mount would reduce the amount of effective viewing. New Flyer's proposed bus will have Hadley mirror's that will have a measurement of 80.10 inches from the bottom of the mirror to the roadway. Even with Indygo's proposed mirror the platform clearance will be 6 feet to the bottom of the mirror. New Flyer is not understanding how a mirror can be inside the front width of the bus and still be an effective mirror. New Flyer is willing to work with Indygo in coming up with a solution to this concern.	Approve- IndyGo would work with awarded vendor for detail and concerns.

80	33	22.4	Gap Mirrors	The vehicle shall be equipped with two small mirrors to provide the driver a clear view of the gap between the vehicle and the platform. The mirrors shall be positioned to provide an enlarged view of the platform/bus interface, assuming a 15-inch platform height. Mirrors shall be located on both the left and right sides of the vehicle.	New Flyer requests approval to provide Hadley mirrors that measure 80.10 inches from the bottom of the mirror to the roadway. Even with Indygo's proposed mirror the platform clearance will be 6 feet to the bottom of the mirror. The mirrors will be 9 x 13 2/1 split, heated and will have remote control. New Flyer wishes IPTC to clarify the effectiveness of using "two small mirrors" to align a 60 foot coach to a level platform. New Flyer is not understanding how a mirror can be inside the front width of the bus and still be an effective mirror. New Flyer is willing to work with Indygo in coming up with a solution to this concern.	IPTC agrees that this requirement is not clear. IPTC desires that both outside rearview mirrors include both a flat mirror for rear views AND a convex mirror which offers views of the platform/bus gap, similar to shown below. The convex mirror should be adjustable to allow improved visibility of the gap distance that may not be visible from the operator's seat. 
81	33	22.5	Inside Mirrors	These shall consist of minimum: 8.25" x 16" on destination sign compartment lower closeout, 6" round flat mirror on header door for review of bike rack deployment, 12" convex at exit door step, and a 7" x 7" convex mirror located at right hand side of 8.25" x 16" mirror.	New Flyer requests clarification on why a mirror is required for a front mounted bike rack or is there a requirement for a front mount bike rack as well as interior bike rack?	The Front Mounted Bike racks aren't requested-Indygo required all bikes racks for its BRT fleet to be inside the bus.
82	33	22.5	Inside Mirrors	These shall consist of minimum: 8.25" x 16" on destination sign compartment lower closeout, 6" round flat mirror on header door for review of bike rack deployment, 12" convex at exit door step, and a **7" x 7"** convex mirror located at right hand side of 8.25" x 16" mirror.	New Flyer requests approval to provide a 6" round convex mirror as opposed to a 7" x 7" mirror. We do not provide 7" x 7" mirror.	Approve
83	34	23.1	Electronic Destination and Interior signs	Destination signs shall be "Luminator Horizon Gen 4 Spectrum Full Color system with LED illumination", or approved equal and in interest of standardization, shall utilize the following components. 16 rows by 160 columns full matrix formatted Front Destination sign 16 rows by 48 columns full matrix Run Number	New Flyer wishes to clarify that the Luminator Horizon system comes in either amber or white, not full color. If full color signs are required, New Flyer can provide the Luminator -Spectrum Gen 4 full color LED sign which is 24 rows x 200 columns. If amber signs are required, New Flyer can provide the Luminator Horizon Gen 4 Amber LED sign which is 16 rows x 160 columns. New Flyer requests approval to provide the Luminator front run number (route) sign which is 12 rows X 40 columns in white or amber .	Indygo require full color signs on its BRT buses-Luminator -Spectrum Gen4 shall meet the requirement.The number route sign 12 rows x 40 columns will be acceptable-additional detail will be provided after award.
84	34	23.2	Interior Information Monitors	Four (4) programmable interior information monitors with audio will be installed in approved areas. All monitors will work with CAD/AvI systems. Monitors shall be Luminator INFO transit series or approved equal.	Please note that depending on the interior layout of the proposed bus, we may not be able to fit 4 monitors on the interior. We will quote 4 but will have to work with IPTC to determine locations and quantity after award	Approved-
85	34	23.3	Destination Sign System Display	The displays shall consist of amber colored LEDs.	New Flyer requests IPTC to clarify whether a "full color system" as specified in section TS 23.1 or amber colored LEDS as specified in section 23.4.	Full color system system shall be used
86	35	23.4	Front Destination Signs	The front destination sign display shall have no less than 2560 LEDs 16 rows by 160 columns, with a message display area of not less than 8.0 inches high by not less than 64.6 inches wide.	If full color signs are required, Luminator's Spectrum front destination sign size is 24 rows x 200 columns New Flyer can provide the Luminator Horizon Gen 4 amber LED which is 16 rows x 160 columns. Please confirm if amber or full colored signs are required.	Approved-
87	35	23.7	Driver Control Console	The system control console shall utilize a 28-key conductive rubber pad keyboard with tactile feel, designed especially for the harsh transit environment. The system control console shall contain a 16 X 128 pixel vacuum florescent display.	New Flyer requests approval to provide a Luminator ODK/MCU unit that is 7.70" x 3.94". The unit includes a touchscreen with diagnostic capabilities for destination sign system, USB port for message listing download, LED lighting control capabilities with multi-discrete inputs.	Approved-
88	36	24	Power Plant	Maximizing battery life and extending driving range is of the highest priority and therefore to maximize efficiency and eliminate drive line efficiency losses the propulsion motors shall be configured as in-wheel or in-axle motors.	New Flyer would like to clarify that the center axle motors are integral to the axle/wheel. The rear motor is a direct drive motor with a drive shaft that drives the rear axle. This is inherent to the bus design.	Approved- Direct drive motor design is acceptable
89	36	24.1	Propulsion System Controller (PSC)	The overall propulsion system and PSC shall include management of support systems such as, steering, HVAC, defrosters, and cooling systems.	New Flyer requests approval to provide a PSC that is in control of the propulsion system only and does not control the steering, HVAC, defrosters, and cooling systems. The PSC interacts with the bus PLC and the other controllers on the bus so that the systems listed can change function or state as needed. The PSC only controls the HV power and the power provided to these systems or to the systems that provide power for the items listed. This is inherent to the bus design.	Approved-
90	36	24.1	Propulsion System Controller (PSC)	This PSC is the hub for all propulsion system device to device communication, to include all traction motors, energy storage, charging equipment, power switching electronics, and interface to other vehicle systems via J1708, J1939.	New Flyer requests approval to provide J1939 only. J1708 is not used by the propulsion system on the New Flyer vehicle. This is inherent to the bus design.	Approved-
91	37	24.1	Propulsion System Controller (PSC)	Software capable of "adaptive learning" such that the bus is optimized per duty cycle on the fly to consider, route, day of week and time of day.	New Flyer does not currently have the ability to offer adaptive learning and programming, however will we work with the operator to tune and optimize the programming for the operator's needs.	Approved-
92	37	24.1	Propulsion System Controller (PSC)	The ability to execute a "limp home" instruction so that the bus is able to return to the depot from the furthest point on the route without charge assistance or towing.	New Flyer requests approval to provide a propulsion controller that works with the Bus PLC and the battery system to begin reducing available power at 5% SOC to help extend range. There is also the ability though the bus PLC to do other load shedding at an earlier SOC, including limiting speed if needed. The propulsion controller does not offer a limp home mode.	Approved-
93	37	24.1	Propulsion System Controller (PSC)	A wireless means of communication with the charging stations.	New Flyer requests clarification on this request. The bus does use wireless communication if connected to an overhead pantograph charger, but wireless communication is not used with depot plug in chargers.	Accepted-IPTC will integrate a Charge management system for the Depot chargers
94	37	24.1	Propulsion System Controller (PSC)	The PSC shall have an interlock that prevents engagement when the charger is connected to the traction battery.	New Flyer requests approval to provide a charger connection that is monitored by the bus PLC and the charge control module that is installed on the bus. The PSC is not in control of this interlock.	Approved- IndyGo Just requires an interlock system to disable the E-drive mode when the bus is charging.
95	38	25.2	Battery Containers	Connector and cabling design shall be such that inappropriate or unsafe connections are not physically possible.	New Flyer requests a deviation to this requirement. The modular nature of our battery packs is such that it is not possible to separate all terminals in a manner that would eliminate any potential safety risk. However, please note that fully installed battery pack modules have protective caps installed over the HV connections that would prevent a shock as long as they cable attachments are not removed.	Approved-IPTC is ensuring the safety of its employees-However, with insulated caps covering the HV connections, the design will be acceptable.

96	38	25.2	Battery Containers	The system shall be designed to allow a single mechanic using a 2-ton capacity forklift to remove and replace batteries from a container within 15 minutes.	New Flyer requests approval to provide a ESS design that is such that a full tub with a string of 7 batteries can be removed and replaced so that the individual module can be worked on and replaced while not on the vehicle. If the batteries are worked on while on the bus, a two ton forklift is more than adequate to remove a single battery module.	Approved-
97	39	25.2	Battery Containers	Battery containers shall be supplied by the battery manufacturer. Battery containers supplied by the Offeror are also acceptable provided that such containers are certified by battery manufacturer	New Flyer requests approval to provide battery containers that are supplied by New Flyer and are part of the scope of work as defined by the battery manufacturer.	Approved-
98	39	25.2	Battery Management System	The battery cooling system shall be easily accessible by techs for maintenance -standard square key latch or any equivalent simple latch shall be used to secure the compartment.	New Flyer requests approval to provide a Main battery thermal management unit is mounted to bus rooftop however the maintenance cooling system pressure fill quick disconnect fitting and electronic coolant level gauge are located at rear curbside and accessed through the propulsion compartment.	Approved-
99	39	25.2	Battery Management System	The BMS must be able to read and store individual battery or block voltages at a frequency of 1 data point per block every 15 seconds.	New Flyer requests approval to use NF Connect to meet this requirement because it has logging capability that can be broadcasted on the J1939 network. Please note the BMS controllers used in our propulsion battery system are capable of providing all of the data-points listed at a sufficient sample rate but are not capable of long-term self-storage of said data beyond typical fault code storage requirements.	Approved-
100	39	25.5	Battery System Sizing and Description	Vehicle shall have a battery system capable of a range of 250 or more miles in fully burdened conditions	New Flyer would like to clarify, even with no load and no HVAC the best we can do using Altoona test conditions is 179 miles with 615kWh. New Flyer requests approval to provide a Valeo Thermo plus 350 (35 kW) diesel & Thermo DC 200 (20 kw) @ 690V electric heater, with 55 kW total heat output to improve the range. New Flyer shall provide a more detailed range review, based on spec information, but NF would like emphasize that 250 miles can not be met under the conditions listed in the spec.	Indygo requires a minimum range of 250 miles at a single full charge.However, an option of on-route charging to reach the requirement is available-See section25.5 of the RFP.
101	41	26.1	Charging Infrastructure	The battery charger shall be configured to automatically initiate and sustain charging at any battery state of- charge if properly connected when so signaled by an external timing circuit or control input. The battery charger shall be configured to automatically terminate the charge on attainment of a full state-of charge or in the event of hazardous or anomalous conditions.	For safety considerations, New Flyer strongly recommends against implementing an automatic restart of the charger after interruption to minimize the risk of harm to maintenance personnel and electrical equipment. This would also be in conflict with many of the already existing charging standards and protocols that are already available within the industry.	IPTC requires an ability for chargers to when hook up correctly to be started/turned On through a charge management system.
102	41	26.2	Depot Charging Stations	Offeror's charging equipment (A/C charging system required) shall be installed at the Agency bus depot	New Flyer requests approval to provide DC charging based on J1772 using a CCS1 plug, it is assumed the A/C charging note is related to the connection to the bus. This is inherent to the bus design.	Considering IndyGo's facilty is pre-wired to run on A/C charging, the use of DC charging will require additional cost that would be on vendor responsibilty for the power conversion for A/C to DC.
103	42	26.3	On Route Charging Stations (Optional)	Momentum Dynamics of 300Kw or more wireless charging system or other inductive opportunity charging feature/charger interface shall be installed on every bus from the factory before being delivered	New Flyer requests to delete this requirement. New Flyer does not have inductive charging as an available option.	The use of on-route inductive and or Panthograph conductive charging isn't a requirement but just an option for vendors whom electric buses won't meet the range requirement of 250 Miles on a single charge.
104	42	26.3	On Route Charging Stations (Optional)	It is assumed that buses will start daily duty cycle at 100% SOC	New Flyer would like to clarify that the Xcelsior Charge uses true SOC and therefore the max SOC is 95% not 100%.	Approved-Shall it meets the range requirement
105	44	28.0	Retarder	The powertrain shall be equipped with a retarder designed to extend brake lining service life. The application of the retarder shall cause a smooth blending of both retarder and service brake function and shall activate the brake lights.	Please note an electric vehicle does not have a retarder, only regen capability to act as a retarder equivalent.	Approved-IPTC understands the regen system would fulfill the retarder function.
106	44	28.2	Regenerative Braking Management	The system shall include a means of maintaining dynamic braking (braking retardation) as the energy storage system approaches 100% SOC	New Flyer requests approval to provide a bus that is designed so that there is some energy storage available at the top of charge for the bus to accept regen energy. There is no other system to maintain dynamic braking if this added storage is filled.	Approved
107	45	30.1	Axle Requirements	Front axle shall be a fixed solid beam axle as manufactured by Arvin Meritor or approved equal.	New Flyer requests approval to provide a cast iron dropped beam with hollow section; steered, non-driven front axle design. The proposed model is the M.A.N. VOK-07F with a maximum front axle load of 15,873lbs. This is inherent to the bus design.	Approved-
108	45	30.1	Axle Requirements	Load tubes shall be replaceable and the lubricant drain plug shall be magnetic type, external hex head of a standard size.	New Flyer requests approval to provide tubes that are welded. ZF center motorized axle and MAN rear drive axle load tubes are not replaceable. This is inherent to the bus design.	Approved-
109	46	33.1	Service Brakes	IPTC requires (S) Cam actuated brakes with automatic Haldex slack adjusters or approved equal.	New Flyer requests approval to provide front and rear disc brake systems includes the brake caliper, brake carrier, disc pads, brake disc, and brake chamber. Disc brakes provide an efficient, reliable and cost-effective system for slowing and stopping a bus. This feature provides a simple and fast maintenance; as lining replacement is significantly faster than on drum brakes, they provide fade-free performance and they are lighter and quieter in comparison to drum brakes. This is inherent to the bus design. The required Haldex slack adjusters are for drum brakes and are not applicable to the Xcelsior Charge.	Disc Brake system is Approved by IPTC
110	47	33.2	Actuation	Force to activate the brake pedal control shall be an essentially linear function of the bus deceleration rate and shall not exceed 50 pounds at a point 7 inches above the heel point of the pedal to achieve maximum emergency braking.	New Flyer requests approval to provide a maximum brake pedal force that is measured at 65.9 lbs. This is inherent to the bus design.	Approved-
111	47	33.4	Air System	The air compressor shall be a Wabco or approved equal.	New Flyer requests approval to provide a direct coupled scroll compressor from Powerex. The electric air compressor has a capacity of 13.3 CFM at 145 PSIG. The compressor is a Baldor, 208-230 V with a capacity of 5 HP or 3.7 kW). The filter is a polyester, 5 micron. This is inherent to the bus design where an electric air compressor is required.	Approved
112	47	33.4	Air System	Nylon tubing shall be installed in accordance with the following color-coding standard. □ Green: Indicates primary brakes and supply □ Red: Indicated secondary brakes □ Brown: Indicated parking brakes □ Black: Indicated accessories.	New Flyer requests approval to provide nylon tubing with the following color-coding standards: • Green: rear service brakes & supplies • Red: front service brakes • Brown: Parking brake • Black: Accessories & brake hose • Yellow: Compressor & governor • Blue: Suspension This is inherent to the bus design.	Approved-IPTC request a detailed instruction of this color coding to be included on the bus manual

113	47	33.4	Air System	The engine driven air compressor shall be sized to charge the air system from 40 psi to the governor cutoff pressure in less than 3 minutes while not exceeding the engine's rated speed.	New Flyer requests approval to provide a direct coupled scroll compressor from Powerex. The electric air compressor has a capacity of 13.3 CFM at 145 PSIG. The compressor is a Baldor, 208-230 V with a capacity of 5 HP or 3.7 kW). The filter is a polyester, 5 micron. This is inherent to the bus design where an electric air compressor is required.	Approved-
114	47	33.4	Air System	Copper lines shall be incased in loom to prevent the lines from touching one another or any component of the bus.	New Flyer requests approval to provide copper lines that are not loomed as no other lines are routed or installed in the area. The lines are supported by STAUFF clamps. This is inherent to the bus design	IPTC will prefer loomed or protected or covered for copper lines located under the bus.
115	48	33.4	Air System	Air for the compressor shall be filtered through the main engine, air cleaner system.	New Flyer requests approval to provide air for electric air compressor that is filtered through the compressor's own filter, not through the main engine air cleaner system. This is inherent to the electric bus design.	Approved-
116	48	33.4	Air System	A Wabco or approved equal desiccant dryer with heater, with silencer, or approved equal, shall be installed and protected against road dirt and wheel splash.	New Flyer requests approval to provide a Haldex Gemini MDxTM that is composed of dual Haldex DRYest® air dryers working in parallel, packaged with a single Consep® Contaminant separator to create a single superior air treatment system. The Consep® separator provides a pre-treatment step that condense and separate 90% of contaminants and then expels them via a heated automatic drain valve. This occurs prior to air entering the dryers, reducing the amount of contaminants exposed to the dryer, thereby extending desiccant and purge and check valve life. Next, the air flows through dual Haldex DRYest® dryers plumbed in parallel to handle the increased flow of the standard boosted twin cylinder air compressor. The DRYest® dryers feature 5 stage MTC+® desiccant technology, which removes the remainder of the contaminants and the vast majority of the moisture content, resulting in very low dew point air exiting the dryer package. Each dryer is also equipped with a purge valve to automatically expel the moisture and contaminants collected and to regenerate the desiccant at each governor unload cycle, as well as a heater to ensure proper operation in sub-freezing temperatures.	Approved-
117	48	34.1	Wheels	Lug nuts must be of a low-profile design and shall not extend beyond the side plane of the vehicle body.	New Flyer requests approval to provide lug nuts that are low-profile but they protrude slightly beyond the chassis, but not beyond the rubber wheel lips.	Approved-
118	48	34.2	General Chassis - Tires	The exterior surface of each outer tire on each side must be on the same plane as each other, and must be a consistent distance from the side plane of the body. The tires will be used to position the vehicle against the station platform.	New Flyer requests approval to remove this specification requirement. The tires are not on the same plane from the front to the center and to the rear. This is inherent to the design of the coach. New Flyer does not recommend this type of alignment to the platform as this will cause undue damage to the tires. New Flyer's proposed bus will have a tire plane variance of 1.45 inches from the front tires to the center tires to the rear tires. This is utilizing aluminum wheels. The variance would be better if steel rims could be utilized, but with the amount of batteries required to meet the specification range requirement, steel rims would be in an overload state. This is inherent to the bus design.	Approved-
119	48	34.3	Data Logger	Each bus shall be supplied with a FLEETWATCH Model JX55 Data Logger as manufactured by S & A Systems, Inc., Rockwall, Texas, Phone 972/722-1009.	New Flyer requests approval to provide Fleetwatch JX555 as opposed to the JX55 data recorder system. Please note The JX555 is the next evolution of the JX55 Datalogger. It is backward compatible with older JX55 installations, and with Series 55 readers (FR55 - Fixed Reader & MR55 – Mobile Receiver/Programmer, as well as the MR55LT Mobile Receiver).	Approved-
120	49	35.4	Bumper System - Station Rub Surface	The vehicle shall have a strip of material highly resistant to wear along the length. This material may be either a wear-resistant paint or a thin mechanically fastened strip of material. This strip should extend the length of the vehicle from the 15-inch floor height down to roughly 13-inches from the ground.	New Flyer requests approval to provide 3M Protective Decal Tape that will have the ability to protect the paint from wearing when coming into contact with "rubber fingers" that are located on the loading platforms. New Flyer advises that under no conditions will it warrant any type of damage to the side panels of the bus from rubbing up against the loading platform.	Approved
121	49	36.1	Electrical Supply Wiring and Terminals	A multiplex electrical system, provided by Dinex I/O Controls is required, or it's approved equal.	New Flyer requests approval to provide a distributed multiplex system by Vansco (as opposed to Dinex). We provide a distributed multiplex system due to the following benefits: - The Vansco modules are auto-programming making it very easy to replace or add multiplexing modules - The Vansco Multiplexing system uses a single type of module minimizing required inventory - The outputs on our system can drive loads up to 10 amps and are electronically self protected. This reduces the number of fuses or breakers required. - The Vanso Multiplexing module has an IP rating of 66 - The Vanso Multiplexing module has a operating temperature range of -40F to 185F.	Approved-But Troubleshoot software and training of Vansco shall be included
122	49	36.1	Electrical Supply Wiring and Terminals	Please specify a UPS for the on board radio, video, and GPS systems to be installed in the cabinet behind the driver.	New Flyer requests approval to provide an electric bus without a UPS system for the on board radio and GPS systems. We can provide a UPS but only for the camera system.	Approved-for UPS only for the camera system
123	49	36.1	Electrical Supply Wiring and Terminals	All wiring between major electrical components and terminations, except battery wiring, shall have double electrical insulation, shall be waterproof, and shall meet specification requirements of SAE recommended Practice J555 and J878 – Type SXL.	New Flyer requests approval to provide type GXL wiring in our harnesses. Described below are the benefits of this wiring: - GXL wiring is built to meet the requirements of SAE J1128 - The insulation is fabricated out of cross linked polyethylene which is a durable thermoset capable of withstanding the harsh environments present on heavy duty vehicles - GXL wiring is intended for use in engine compartments where higher heat resistance is required according to SAE J-1128, this allows the wiring to be used throughout the coach - The operating temperature range for this wiring is -60F to 257F - GXL wiring works with most standard electrical connectors	Approved-

124	50	36.1	Electrical Supply Wiring and Terminals	Double insulation shall be maintained and close to the terminals as practicable.	New Flyer requests approval to provide double insulation on all wiring except for wiring that is within an electrical panel. These panels would be the side console, rear panel, fuse box, switch box, exit door panels and SDS panel. Listed below is why New Flyer does not provide double insulation for wiring within the electrical panels: - Clamps and tie wraps are strategically positioned which minimizes harness movement and the opportunity for harness chaffing - All sharp edges near the harness routing is covered with a protective rubber channel eliminating the possibility of the wiring insulation getting damaged	Approved
125	50	36.1	Electrical Supply Wiring and Terminals	Except as interrupted by the master battery disconnect switch, battery and starter wiring shall be continuous cables with connection secured by bolted terminals and shall conform to specification requirements of SAE Standard J1127 – Type SGT or SGX and SAE Recommended Practice J541, grouped, numbered, and/or color coded full length.	New Flyer requests approval to provide a bus without an engine starter because it is not applicable to electric bus.	IPTC-agree-this section was just about Electrical Supply Wiring and Terminals
126	50	36.1	Electrical Supply Wiring and Terminals	All wiring harnesses over 5 feet long and containing at least 5 wires shall include 10 percent excess wires for spares that are the same size as the largest wire in the harness excluding the battery cables.	New Flyer requests approval to provide spare wires but they are not going to be the same size as the largest wire in the harness. The size of wiring we provide as spares will be dependent on: - The max wire gauge that a Specific component at the location where these spares are routed will accept. - The max wire gauge that the component connector(s) will accept at the final destination of the routed spares. Please note that spare wires are installed only between major electrical distribution panel's ibn the vehicle. Installation of spare wires in all harness locations can lead to wire chaffing and kinking.	Approved-
127	50	36.1	Electrical Supply Wiring and Terminals	Wiring harnesses shall not contain wires of different voltages unless all wires within the harness are sized to carry the current and insulated for the highest voltage in the harness.	New Flyer requests approval to provide harnesses which are separated based on their functionality as opposed to their voltages. Each wire color provided will identify the Voltage it carries such as RED wire for 24V and Blue wire for 12V. Doing this will eliminate the creation of unnecessary addition of harnesses that will stress the wire duct and possibly, affect the air flow. Please note that our harnesses are wire coded every 3-inches throughout the whole length and we provide labels on both ends of the connector. This design is the same as what was provided for all our customers.	Approved-
128	50	36.2	Master Battery Switch	Opening the master switch with the power plant operating shall not damage any component of the electrical system.	New Flyer would like to clarify that while steps are taken to minimize the impact of shutting off the vehicle using the master battery switch, it is impossible to guarantee that there would be no impact to vehicle if this were to be done on a regular basis. Proper procedure in normal operation is to apply an orderly shutdown through the standard ignition switches (i.e. the master run switch on the side console panel or equivalent). The master battery disconnect switch is meant for emergency and maintenance applications and should only be used in such instances.	Approved-
129	50	37.1	Capacity and Performance	The heating, ventilating, and cooling systems shall maintain an average passenger compartment temperature between **65** and **80** degrees F with a relative humidity of 70 percent or less. The system shall maintain these conditions in ambient temperatures of –10 to 110 degrees F with ambient humilities of 5 to 50 percent while the bus is running on the design operating profile with a full-seated load of passengers with door openings for 30 seconds or more every 3 minutes. In ambient temperatures of 10 to –10 degrees F, the average temperature shall not fall below 65 degrees F while the bus is running on design operating profile..."	New Flyer requests approval to provide a HVAC system that will maintain an average passenger compartment temperature between 55F to 90F at a ambient temperatures -10 to 110 degrees F.	Approved
130	50	37.1	Interior Climate Control	In ambient temperatures of 10 to –10 degrees F, the average temperature shall not fall below 65 degrees F while the bus is running on design operating profile with no passengers.	New Flyer requests approval to provide APTA specification TS 54: When the bus is operated in outside ambient temperatures in the range of -10 to 10 °F, the interior temperature of the bus shall not fall below 55 °F while the bus is running on the design operating profile. New Flyer exceeds this requirement and can provide 58 °F.	Approved-
131	50	37.1	Interior Climate Control	The cooling mode shall be capable of reducing the passenger compartment temperature from 100 degrees F to 80 degrees F in less than 30 minutes after the engine start up under the following conditions.	New Flyer requests approval to provide APTA default for HVAC pull-down specification where passenger compartment temperature shall be reduced from 115°F to 95°F in less than 20 minutes. With battery buses that are plugged into chargers when at the depot, there is a unique opportunity to pre-condition the cabin with the buses connected to shore power in a more gradual way to minimize peak demand but still maintain a maximum possible HV battery State of Charge upon pull-out. Since these buses are zero-emissions, there is no need to limit the "idle time" during pull-down prior to pull-out thus no need for exceptional pull down capacity or speed. Sizing a system for the APTA alternative Pull-Down specifications for hotter ambient conditions, causes the system to be oversized for the actual required demand in revenue service which increases the system cost and reduces system efficiency which in turn negatively affects range. The default pull down specification ensures sufficient cooling capacity to perform necessary duties when in service.	Approved-
132	51	37.1	Interior Climate Control	engine speed shall be limited to fast idle that may be activated by a driver controlled device.	New Flyer requests approval to remove the requirement for a fast idle switch is not applicable to our battery bus design.	Approved-
133	51	37.1	Interior Climate Control	The door opening average is every 2 minutes; the A/C must be capable of handling the heat load by maintaining a temperature of 20 degrees less than ambient and humidity level less than 40% at any point or time with 40 plus passengers at 100 degrees in direct sun light.	New Flyer can not confirm or deny that we meet this section as we do not currently have testing for the bus design which will be proposed. New Flyer is committed to working with IPTC if awarded to determine our ability to meet the intent of the specification. New Flyer advises that since this is a new configuration for heating a coach, we do not have useful calculations to suggest an expected performance. New Flyer will be testing a similar configuration in the near future and will be able to provide confirmed /calculated results based on that testing."	Note-Indygo spec's to have the a/c system capable of keeping the interior of the bus to a minimum of 20 degrees cooler than the outside embient temperature at any specified condition in Section 37.1 of the RFP#21-07-407 IPTC
134	51	38.1	Vehicle Electronics Cabinet	Cabinet shall come equipped with sliding shelves on ball bearing tracks that lock in place when either extended for serviceability or when in their stowed position	New Flyer requests approval to provide slide-out trays but not on ball bearing tracks. These trays are durable enough to carry the equipment specified in the spec.	Approved
135	52	38.3	Ancillary Vehicle Fuse Block	The vehicle shall come equipped with an ancillary vehicle fuse block, provided by Blue Sea Systems, or comparable hardware, to provide 12-14 VDC constant, 12-14 VDC switched, and chassis ground for supplying power to the intelligent transportation system and slave electronics located in the vehicle electronics and technology cabinet.	New Flyer requests approval to use dedicated busbars for 12V/24V constant and switched power as opposed to a fuseblock by Blue Sea Systems. Please note these busbars include dedicated circuit breakers for each power source going to the Intelligent Transportation System equipment.	Approved

136	52	38.7	Cellular Data Communications Device	The vehicle shall come equipped with an LTE, dual-SIM capable, cellular communications device, provided by Waav, Inc., or comparable hardware, to be used for IPTC ITS data communication needs and as public wi-fi for passengers.	New Flyer requests approval to provide Sierra MG90 or Cradlepoint IBR1700 as opposed to a router by Waav, Inc.	Approved-
137	53	38.11	Transit Signal Priority Equipment	Vehicle shall come equipped with a fully functional transit signal priority system. OEM to work with IPTC to determine current system and/or vendor for acquisition and installation of equipment.	New Flyer requests approval to provide a Transit Signal Priority system provided by Global Traffic Technologies (GTT) or by EMTRAC.	Approved-
138	56	TS 39.3	Training	A comprehensive hands-on training program for IPTC Operations and Maintenance staff shall be provided by the Contractor and Original Equipment Manufacturers (OEM) for major components provided on the buses. The Training Program schedule will be discussed with Contractor after contract award to establish a training schedule that is properly coordinated with the delivery and acceptance of the buses. The minimum training program requirements are described below.	New Flyer requests approval that all training be priced separately from the bus price. This will ensure proper costing regardless of the number of buses in the base order, and each subsequent delivery.	Indygo is seeking to procure the bus and the training package with the same purchase order.
139	56	TS 39.3	Training	A comprehensive hands-on training program for IPTC Operations and Maintenance staff shall be provided by the Contractor and Original Equipment Manufacturers (OEM) for major components provided on the buses. The Training Program schedule will be discussed with Contractor after contract award to establish a training schedule that is properly coordinated with the delivery and acceptance of the buses. The minimum training program requirements are described below.	New Flyer requests approval to provide a training proposal showing pricing and number of hours for individual courses. This will provide the Procuring Agency the flexibility to select which courses and in what quantities are required based on their operation.	Approved with condition- the total cost shall be included in the RFP and any adjustment can be done thereafter.
140	48	TS 34.3 / TS 36.1 / TS 29	Data Logger / Electrical Supply Wiring and Terminals / Mounting	Programming software and hardware shall be provided to allow the owner to program or re-program the bus-mounted data recorder units at any time / Three (3) sets of programming / diagnostic equipment shall be provided. / Offeror shall provide all specialty tools and diagnostic equipment required for maintaining the Propulsion System in accordance with Special Tools List.	New Flyer requests approval that all recommended specialized tools and diagnostic software/interface equipment be priced separately from the bus price. This will ensure proper costing regardless of the number of buses in the base order, and each subsequent delivery.	Indygo is seeking to procure the bus and the maintenance tools and diagnostic software/interface equipment package with the same purchase order.
141	48	TS 34.3 / TS 36.1 / TS 29	Data Logger / Electrical Supply Wiring and Terminals / Mounting	Programming software and hardware shall be provided to allow the owner to program or re-program the bus-mounted data recorder units at any time / Three (3) sets of programming / diagnostic equipment shall be provided. / Offeror shall provide all specialty tools and diagnostic equipment required for maintaining the Propulsion System in accordance with Special Tools List.	New Flyer requests approval to provide a comprehensive list of recommended specialized tools and diagnostic software/interface equipment. This will also provide the Procuring Agency the flexibility to order only those tools and quantities necessary for their operation.	Indygo is seeking to procure the bus and the maintenance tools and diagnostic software/interface equipment package with the same purchase order.
142	54	TS 39	Technical Assistance - Manual Updates	The Contractor shall keep all maintenance manuals, parts manuals, and related technical documentation up-to-date and available to Connect at no charge for a minimum period of twelve (12) years after the date of acceptance of the buses furnished under this contract. All updated information shall be sent with a cover letter explaining the changes.	New Flyer supplies manual updates to New Flyer published Bus Manuals only. It is the responsibility of each OEM component supplier to perform updates to their documentation. New Flyer Bus Parts manuals are maintained for a period of 12 years, all other New Flyer manuals are maintained for 6 years.	Approved
143	55	TS 39.2	Manuals - Bus Manuals with plastic pages	Manuals shall have all pages laminated in clear plastic;	All bus manuals can be supplied with pages printed on plastic paper. The plastic paper is very durable, waterproof, lighter, less expensive and not as bulky as clear plastic laminated pages.	Shall be durable, waterproof--- Approved
144	55	TS 39.2	Manuals - OEM component supplier manuals with plastic pages	Four (4) manuals shall have all pages laminated in clear plastic;	Some OEM component supplier published manuals such as OEM HVAC are not available with plastic pages. New Flyer will purchase and supply the available regular paper manuals for these systems.	Any Electronic form of the manual is Approved
145	55	TS 39.2	Manuals - Bus Parts Manuals	Eight (8) current bus part manuals applicable to the coaches provided under this contract, including all subsystems and components, whether manufactured by the Contractor or purchased ready made from an outside source.	New Flyer published Bus Parts Manuals contain information on all components however, they do not contain detailed sub-assembly breakdown information on major components such as the Siemens ELFA2 Electric Drive, XALT ESS, HV ESS etc. New Flyer will purchase and supply available Parts Manuals for those components from the OEM supplier.	Approved-
146	55	TS 39.2	Manuals - Manuals in PDF format	All Service and Parts Manuals furnished for the buses shall also be supplied in a PDF format on CD-ROM disks to allow the information to be loaded into the Connect's Maintenance Software System. A total of six (6) CD ROM sets will be supplied upon the delivery of the first bus.	All New Flyer published Bus Parts Manuals will be supplied in PDF format on USB. Only OEM component supplier manuals available in PDF will be supplied. All PDF manuals supplied are copyright protected. New Flyer can allow the bus manuals to be used in a maintenance system however a limited copyright agreement letter must first be signed. OEM component supplied manual PDFs can only be used as supplied. Manual PDF files on USB will be supplied with the manual paper copies within 60 days of delivery and acceptance of first bus.	Approved
147	23	Proposal Cost Offer Form	Standard Warranty Included with Vehicle	**<u>Warranty Table</u>** Propulsion System/Drive Axle	New Flyer requests approval for the IPTC to revise the Proposal Cost Offer Form so that the Drive Axle be a separate line item due to this component does not have the same warranty period as the propulsion system.	An Electric Bus with drive motor(s) mounted on the drive axle, the warranty shall be considered as the same component- However,If the drive motor is installed separetely, they would be two different items and so their warranty considerations. IndyGo will however score higher the manufacturer with better warranty provision.

148	10/14	1.10 Liquidated Damages / TS 7.11 Repair by Contractor	1.10.2 Inoperable Coach / 1.10.3 Warranty Repairs / TS 7.16 Repair by Contractor	Coaches removed from service due to a warranty failure for periods exceeding fifteen (15) calendar days shall result in assessment of liquidated damages calculated at the rate of $100 per day for each day the bus is out of service. The Contractor, at IPTC's option and in lieu of the application of liquidated damages, may provide a replacement bus to be used by IPTC while the primary bus is out of service. Any warranty work performed under this Contract shall be completed within fifteen (15) calendar days after the Contractor has begun repairs on the coach that has been removed from revenue service due to a warranty defect. Coaches removed from service due to warranty failure for periods exceeding seven (7) calendar days shall result in assessment of liquidated damages calculated at the rate of $100 per day for each day the bus is out of service. The Contractor, at IPTC's option and in lieu of the application of liquidated damages, may provide a replacement bus to be used by IPTC while the primary bus is out of service. Any warranty work performed under this Contract shall be completed within seven (7) calendar days after the Contractor has begun repairs on the coach that has been removed from revenue service due to a warranty defect. If repairs are not completed within the specified time periods, IPTC may assess liquidated damages.	New Flyer will work with the IPTC perform warranty repairs in an efficient and timely manner and will make every attempt to get the bus repaired and back into service to meet the specified timeframes, however, due to the possible degree warranty repair complexity (part lead times, delays in acquiring OEM technicians), New Flyer requests approval that we cannot pay liquidated damages. New Flyer asks for the liquidated damages to be removed from the specification due to being is a non-recoverable expense. In addition, New Flyer cannot provide a replacement bus due to this not being available.	IPTC is open for a proposal of Vehicle OEM performance standard
149	12	Warranty Pro	TS 7 Warranties	A basic bus "bumper-to-bumper" warranty shall commence on the date the bus is placed into service by IPTC and shall continue in effect thereafter for a period of two years or 100,000 miles whichever occurs first.	New Flyer requests approval that the basic "bumper-to-bumper" warranty shall commence on the date of acceptance of each bus. In addition, the warranty shall not apply to normal consumables items such as tires, belts, bulbs/tubes or items with progressive wear characteristics (bushings, wiper blades, friction surfaces). Please refer to the attached consumables excluded doc.	Indygo is seeking for a bumper to bumper of 2 years and or 100,000 miles wichever occurs first.however, the best warranty will be scored higher.
150	12	Warranty Pro	TS 7.1 Propulsion Systems and Major Sub Systems	Specific subsystems and components of the coaches furnished under this Contract will be warranted and guaranteed to be free from defects in design, material and workmanship for the period of time beyond the basic warranty. These include: **Drive Axle** - 12 years **HVAC with Diesel Floor Heaters** - 5 years **Leaks (water leaks from bus washer or rain) - Body sealing and Structural Integrity-Water leaks/Intrusion required** - 8 years **All Electronic Power Converters** - 5 years	New Flyer requests approval to provide the standard warranties on the following components (whichever occurs first): **Drive Axles** - 5 years/unlimited mile limited ZF Axle Warranty. Please refer to the attached ZF warranty document for coverage and exclusions. A 12 year warranty is not available. **HVAC with Diesel Floor Heaters** - 3 years **Leaks (water leaks from bus washer or rain) - Body sealing and Structural Integrity-Water leaks/Intrusion required** - 3 years **All Electronic Power Converters** - 3 years/150,000 miles	Indygo requested a warranty as Follow:Drive Axle - 12 years HVAC with Diesel Floor Heaters - 5 years Leaks (water leaks from bus washer or rain) - Body sealing and Structural Integrity-Water leaks/Intrusion required - 8 years All Electronic Power Converters - 5 years IPTC will score higher vendors who privides a better warranty offer.
151	12	Warranty Pro	TS 7.2 Coaches Removed from Service Due to Warranty Failure	Coaches which have been removed from service due to a warranty failure for periods exceeding seven (7) days shall have the warranty time extended for the time the coach was not in service.	New Flyer will work with the IPTC perform warranty repairs in an efficient and timely manner and will make every attempt to get the bus repaired and back into service to meet the seven (7) day timeframe, however, due to the possible degree warranty repair complexity (part lead times, delays in acquiring OEM technicians), New Flyer requests approval that we cannot extend the warranty on components due to suppliers will not extend warranties to New Flyer.	IndyGo is open to a proposal of vendor performance standard for its suppliers and or OEM.
152	13	Warranty Pro	TS 7.7 Fleet Defects	A fleet defect is defined as the failure of or a deficiency in identical systems or components of the coach caused by defective design, material, or workmanship in twenty percent (20%) of the base quantity of coaches delivered under this Contract. In the event of a fleet defect during the warranty period, the Contractor will furnish promptly all necessary labor and material to affect such repairs and modifications for every vehicle delivered under the Contract pursuant to the terms and conditions of this warranty and at Contractor's sole cost and expense.	New Flyer is committed to ensuring that you get the most value from your vehicles and is requesting your approval to provide fleet defect coverage for the limited base bus warranty period as specified in section TS 7 Warranties and the following: Does not apply major components (Propulsion System after 2 years/HV Batteries after 6 years/HVAC). Major component manufacturers will not recognize and/or participate in fleet defect clauses, however, if the fleet defect percentage is reached in a major component, New Flyer will fully support and assist you with obtaining a remedy from the major component manufacturer.	This section refers to a major component failure over 20% of the current procured fleet during the full warranty time period provided on the RFP.
153	13	Warranty Pro	9 Single Represents	The Contractor shall designate a single representative through which warranties shall be handled. The representatives shall meet as needed with the IPTC's representative or project manager for review of repairs and claims. The representative shall handle all facets of warranty processing and warranty material handling.	New Flyer requests approval that IPTC submit warranty claims and return parts to New Flyer so reimbursement for valid claims can take place. New Flyer's Regional Product Support Manager will work with the IPTC representative or project manager for review of repairs and claims.	Approved
154	13	Warranty Pro	TS 7.10 Repair Performance	IPTC will require the Contractor or its designated representative to perform warranty-covered repairs on-site for up to one year or more. Some warranty work may be done by IPTC's personnel with reimbursement by the Contractor at a rate of $75.00 per hour. IPTC shall determine who performs repairs at its sole option.	It is New Flyer's priority to ensure that all warranty-covered repairs are completed by the appropriate party for you to receive the highest quality, least expensive and most efficient outcome possible. With this goal in mind, New Flyer proposes the following solutions: 1.Minor/Major Warranty-covered repairs should be carried out by IPTC and reimbursed by New Flyer through our on-line warranty system. New Flyer is available to assist in completing these warranty-covered repairs if needed or if the repair is beyond the scope of capability of IPTC. New Flyer will have a contractor or its designated representative perform warranty-covered repairs on-site for the warranty period specified in section TS 7 Warranties. Whenever feasible and mutually beneficial, New Flyer asks IPTC is they can provide a work space for our contractor or designated representative accomplish the repair onsite. This allows us to work with IPTC to return the bus to revenue service as quickly as possible. If shop space is unavailable, New Flyer will utilize one of its three subcontractors (Top Tempo, Tri-State, Coach Retrofit) with their own service facilities in IPTC area to perform the repairs and get the buses back into revenue service as soon as possible. 2. Major Component Warranty repairs should be carried out by the equipment suppliers (HVAC and destination sign suppliers) in order to adhere to their mandate that all warranty repairs be performed by an authorized dealer unless IPTC is an authorized warranty center. If the IPTC elects to perform these repairs, without the written permission of the original equipment manufacturer, the remaining warranty coverage may be voided.	The warranty repair by IPTC techs is just optional for the quick turn around of defective buses but it would be done only through approval of the bus OEM.
155	14	Warranty Pro	11 Repair by Contra	The Contractor shall bear total responsibility for costs and expenses for furnishings all labor, parts, tools, materials and space as required to complete the repairs and/or replacements.	The New Flyer Service team will always strive to solve your problems and get your bus up and running as fast as possible. When available, using the IPTC space to complete repairs is the best location to getting the repairs done quickly. This is why New Flyer requests your approval to provide the IPTC with spare parts and tools required to complete warranty repairs, and whenever possible, to complete these repairs in the IPTC shop space.	Approved-

156	14	Warranty Pro	7.12 Repair by the M	Defective Components Return - The Contractor may request that parts covered by the warranty be returned to the manufacturing plant. Request for return of defective parts/components must be made within thirty (30) calendar days after submittal of Warranty Claim.	New Flyer requests your approval to have all failed components returned to the Contractor within 45 days from the date of failure in order for warranty reimbursement. Contractor has added an additional 15 days to the standard 30-day warranty claim period to allow for time expended in locating and shipping replacement parts and for the convenience of returning multiple failed parts to the Contractor in one shipment.	Approved
157	14	Warranty Pro	7.13 Reimbursemer	Labor - IPTC shall be reimbursed by the Contractor for labor. The reimbursement amount shall be determined by multiplying the number of work hours actually required to diagnose and correct the defect by the current labor rate (inclusive of benefits) in effect at the time of repair, plus forty percent (40%) overhead and administrative charges.	New Flyer's requests your approval to reimburse you for labor hours incurred for repairing your vehicles using New Flyer's Standard Repair Time Manual (attached) to determine the reimbursement amount. Using our manual to calculate repair times helps to keep the claims process consistent and efficient so that you can get your vehicles back in revenue service as soon as possible. In situations where the labor hours for a particular repair are not listed in the manual the labor hours will be negotiated between the IPTC and New Flyer Regional Product Support Manager. New Flyer would like to clarify that reimbursement time shall not include diagnostic time & administrative charges.	Approved-but any shipping shall be covered by vendor
158	15	Warranty Pro	7.13 Reimbursemer	Parts - IPTC shall be reimbursed by the Contractor for defective parts and for parts that must be replaced to correct the defect. The reimbursement amount shall be the actual IPTC cost of the part(s) at the time of repair calculated from IPTC's purchase order or inventory charge-out ledger and shall include taxes where applicable plus fifteen percent (15%) handling costs.	Here at New Flyer we want you to get the best value and service out of your buses. With this goal in mind, New Flyer requests your approval to reimburse IPTC for defective parts and for parts that must be replaced to correct the defect for the duration of the base bus warranty period as specified in section TS 7 Warranties. Parts will be reimbursed at the current published price plus applicable taxes. Handling costs will be reimbursed up to a maximum of $100 per claim.	Approve the reimbursement method but the shipping cost will be on vendor's charge
159	15	Warranty Pro	7.13 Reimbursemer	Other - The cost of towing the coach, if such action is necessary, shall also be reimbursable, whether done by IPTC employees or by an outside contractor. Towing reimbursement shall remain in effect throughout the warranty period.	New Flyer requests approval to provide towing coverage for the base bus warranty period as specified in section TS 7 Warranties. New Flyer asks for this limitation due to towing is a non-recoverable expense.	Denied-The towing reimbursement shall remain effective throughout the warranty period
160	15	Warranty Pro	7.13 Reimbursemer	Method - Warranty reimbursement shall be made through a warranty claim form. IPTC will provide the following information on such form: • IPTC coach number affected IPTC repair code • Date defect detected Total claim value • Mileage • IPTC work order number • Labor hours and labor costs • Defect • Description of parts used and price Repair • IPTC part number All other information requested by the Contractor shall be Contractor's responsibility.	New Flyer requests approval for IPTC to use New Flyer's easy to use the New Flyer On-Line Warranty System. With New Flyers easy to use warranty system, IPTC can submit warranty claims online. When required, IPTC can process bus down parts through the Warranty System and coordinate shipments of parts to the requested location. New Flyer will reimburse IPTC for parts and labor within 60 sixty days of receipt of an approved warranty claim. Other additional benefits of New Flyer's On-Line Warranty System includes: - Instant access to an electronic copy of your warranty - Self-service reporting capabilities, run standard reports or build your own custom reports - Tracking of warranty claims on a bus-by-bus basis - Visibility into the date your claims were paid along with the check number - Status updates on parts requests - Online maintenance of your warranty account information	Approved
161	16	Technical Specificatio n	TS 9 Body and Chassis Structure	The structural integrity of any bus furnished under this Contract shall be warranted for a full one hundred percent (100%) on both parts and labor to be free from material, design and workmanship for a period of up to twelve (12) years, after the vehicle is placed into revenue operation with no proration. A defect in the structural integrity of the basic body is defined as defects in the chassis, body and/or frame, suspension and axles, which results in any premature fatigue.	New Flyer is committed to ensuring that you get the most value from your vehicles and is requesting your approval on the following warranty coverage and periods for chassis and body structure: - The body and body structure are warranted to be free from defects, related defects, and to maintain structural integrity for three years or 150,000 miles, whichever comes first. The body and body structure includes the components that are mechanically fastened or adhesively bonded or glued as part of the structure. - The chassis structure is warranted against corrosion failure and/or fatigue failure sufficient to cause a Class 1 failure for a period of 12 years or 500,000 miles, whichever comes first. The chassis structure includes all components that are welded together to form the main frame (skeleton) and body construction.	A defect in the structural integrity of the basic body is defined as defects in the chassis, body and/or frame, suspension and axles, which results in any premature fatigue. IPTC-IndyGo requires 12 years warranty for structural failure as defined above.
162	41 & 9	TS 26.3 and TS 3.1	TS 26.3 On Route Charging Stations (Optional) TS 3.1 Cost Proposal - Available Options	TS 26.3: On Route Charging Stations (Optional) TS 3.1: Cost Proposal - Available Options - The Proposer will submit in its proposal on a separate form, a listing of all available optional equipment with unit prices for the buses offered in the proposal. Such optional equipment costs will not be used in the Cost Proposal Evaluation. A Cost/Price analysis will be performed as appropriate. The final contract award and pricing for the buses may be negotiated by IPTC to include available optional equipment as it deems necessary.	TS26.3 identifies On-route Chargers as "Optional". The 'Proposal Cost Offer Form" has a space for an On-Route Charger and TS3.1 requests that optional items get priced separately. So, how are we to handle in the proposal?	The On-route chargers are optional for vendor that couldn't meet IPTC requirement of 250 miles on a single full charge. Any cost of such will be added to the total cost of the bus for evaluation. The cost shall be separated on the cost offer form.
163	41	TS 26.1	TS 26.1 Charging Infrastructure	These general requirements apply to all charging stations that may be delivered under the Contract. The Offeror shall provide Charging Equipment, Charger Interface and the control and data systems needed to recharge the bus propulsion system batteries. ***The subject equipment deliverables shall begin downstream of the electric service meter, and shall include the main service panel, sub-panels, step/down transformers, all circuit breakers and disconnect switches .*** The Offeror shall provide all Charging Equipment and Charger Interface design requirements, specifications and engineering drawings to IPTC to enable Charging Station site design, permitting, and construction. Warranty on Chargers and Charging system components should be 6 years minimum.	New Flyer requests clarification for the sentence "The Offeror shall provide Charging Equipment, Charger Interface and the control and data systems needed to recharge the bus propulsion system batteries. The subject equipment deliverables shall begin downstream of the electric service meter, and shall include the main service panel, sub-panels, step/down transformers, all circuit breakers and disconnect switches." is IPTC asking for charging equipment prices to include service panels, Sub-panels, Transformers, circuit breakers and disconnect switches or are those to be provided by others?	IPTC will just need charging equipment prices from where it connects to the facility 3~ a/c feeds lacation.
164	41	TS 26.1	TS 26.1 Charging Infrastructure	These general requirements apply to all charging stations that may be delivered under the Contract. The Offeror shall provide Charging Equipment, Charger Interface and the control and data systems needed to recharge the bus propulsion system batteries. The subject equipment deliverables shall begin downstream of the electric service meter, and shall include the main service panel, sub-panels, step/down transformers, all circuit breakers and disconnect switches. ***The Offeror shall provide all Charging Equipment and Charger Interface design requirements, specifications and engineering drawings to IPTC to enable Charging Station site design, permitting, and construction.*** Warranty on Chargers and Charging system components should be 6 years minimum.	New Flyer requests clarification for the sentence "The Offeror shall provide all Charging Equipment and Charger Interface design requirements, specifications and engineering drawings to IPTC to enable Charging Station site design, permitting, and construction", is IPTC performing the "design (Engineering), permitting, and construction" under separate contract?	Yes-IPTC will supply to the power to each charger and requires vendors to provide all technical specifications for their charging equipment and all requirements and Drawings. However, vendors shall provide the depot charger equipment and interface needed for each bus.

165	41	TS 26.1	TS 26.1 Charging Infrastructure	The chargers shall be UL Classified for the intended purpose location and environment. The charging systems shall be capable of delivering the optimal battery charge profile as specified by the battery manufacturer and charging the installed traction battery to a fully charged state from the minimum recommended state-of-charge including any necessary cool-down time as specified by the battery manufacturer. The chargers shall be capable of connection to a 480-volt, 3-phase, 60 Hz electrical supply. The chargers shall be equipped with an E-Mon Class 3200 sub meter (or approved equal) that: measures and displays kWh consumed and real time load in KW within 1% accuracy, is capable of RS-485 communications and, records kWh and kVARh delivered, kWh and kVARh received. Data shall be stored in 15-minute intervals for up to 72 days or 5-minute intervals for up to 24 days. The system will maintain interval data storage in a first-in, first-out format.	New Flyer requests clarification for the E-Mon 3200 class Submeter, who provides power and communications to the submeter?	IPTC has is implementing a charge Management system; therfore, a Submetter is no longer needed.
166	41	TS 26.1	TS 26.1 Charging Infrastructure	The buses must be immobilized during all charging operations. Upon successful engagement of the charging interface, the bus shall be interlocked such that propulsion is rendered non-tractive and the brakes applied. Conductive cabling connecting depot and convenience chargers to the bus shall be of fifteen-foot (max) length and shall connect to a receptacle at the rear of the bus, along the right (non-driver) side. Duplicate charging ports on the left (driver) side are preferred, to add charging flexibility. The connectors shall be industry standard and of simple design and heavy-duty construction and shall not be energized except when mated with the bus mounted	New Flyer requests clarification on TS 26.1 that specifies that a single mounted receptacle shall serve both the depot and on-route charging stations. Please clarify if this language is meant only for the plug-in charging.	The description is for the conductive Plug in depot charging only.
167	41	TS 26.1	TS 26.1 Charging Infrastructure	The buses must be immobilized during all charging operations. Upon successful engagement of the charging interface, the bus shall be interlocked such that propulsion is rendered non-tractive and the brakes applied. Conductive cabling connecting depot and convenience chargers to the bus shall be of fifteen-foot (max) length and shall connect to a receptacle at the rear of the bus, along the right (non-driver) side. Duplicate charging ports on the left (driver) side are preferred, to add charging flexibility. The connectors shall be industry standard and of simple	New Flyer requests approval to provide charge rails on the top of the bus and an overhead conductive charger meeting SAE J3105-1 for an on-route solution.	Approved
168	41	TS 26.2	TS 26.2 Depot Charging Stations (Preferred)	The depot chargers shall be capable of discharging the on-board energy storage system to facilitate making repairs the preferred means of discharge shall be to return the power to the utility grid.	New Flyer requests clarification of the following statement in TS 26.2, is depot charger discharging of bus ESS a requirement or a preference as long as other means of discharge are stipulated?	IPTC agree-This option is not feasible and will be removed
169	41	TS 26.3	TS 26.3 On Route Charging Stations (Optional)	On Route Charging Stations (Optional)	New Flyer requests approval to provide an overhead conductive charger meeting SAE J3105-1 in lieu of the listed inductive solution?	Approved
170	9 of 96	TS 1.9	1.9 Bonds, Insurance, and Special Requirements	1.9 Bonds, Insurance, and Special Requirements Copies of the following certificates of insurance shall be returned with the proposal: - Professional Liability	New Flyer requests approval to delete the requirement for Professional Liability. New Flyer advises that Professional Liability is not typical of APTA standards for bus procurement and will significantly increase the price of the bus with no value added benefit.	Approved-
171	23 of 96	Section 2: Vendor Instructions	Vendor Offer Cost Form	Range/Charge (Miles)	New Flyer requests clarification on the Vendor Offer Cost Form for the meaning of "Range/Charge (Miles)". Can a more precise definition of the requirement be provided.	IPTC is requesting the range of the proposed vehicle for a single full charge of the ESS-at fully burdened condition-refer to RFP.
171	23 of 96	Section 2: Vendor Instructions	Vendor Offer Cost Form	Vendor Offer Cost Form.	New Flyer requests an additional column added to the Vendor Offer Cost Form to include opportunity charging batteries. New Flyer offers long range batteries and short range batteries used with on-route charging. These short range batteries are capable of accepting high voltage rapid charge. We require two columns for pricing.	Vendors shall add columns to the cost form for any addition information they would like to provide
172				Delivery	New Flyer requests clarification on what year the base order of buses is expected to be delivered.	Please reference responses for Addendum questions #10/11/12.

173		New	Government Access to Records and Reports		New Flyer requests approval to add the following new clause for a NDA requirement. In the event that any books, documents, papers or records of Contractor are audited, examined, excerpted, or transcribed by the IPTC, the FTA Administrator, the Comptroller General of the United States or any of their authorized representatives, the IPTC and its representatives and agents agree to enter into a confidentiality agreement with the Contractor in order to protect and maintain the confidentiality of the Contractor's information. The IPTC shall also make reasonable efforts to cause any applicable Federal agencies to enter into a similar confidentiality agreement with the Contractor.	**Pursuant to the Proposal Checklist included in the solicitation, please detail any exceptions to the Federal Funding Compliance requirements with your proposal.**
174	36	18	Pre-Award and Post-Delivery Audit Requirements	The Contractor agrees to comply with 49 USC § 5323(m) and FTA's implementing regulation at 49 CFR part 663. The Contractor shall comply with the Buy America certification(s) submitted with its proposal. The Contractor agrees to participate and cooperate in any pre-award and post-delivery audits performed pursuant to 49 CFR part 663 and related FTA guidance.	New Flyer requests to add the following language to the clause; ...The Contractor agrees to participate and cooperate in any pre-award and post-delivery audits performed pursuant to 49 CFR part 663 and related FTA guidance., **in which case the IPTC and its representatives and agents agree to enter into a confidentiality agreement with the Contractor in order to protect and maintain the confidentiality of the Contractor's information. The IPTC shall also make reasonable efforts to cause any applicable Federal agencies to enter into a similar confidentiality agreement with the Contractor.**	**Pursuant to the Proposal Checklist included in the solicitation, please detail any exceptions to the Federal Funding Compliance requirements with your proposal.**
175	37	22(b)	Default and Termination	This Contract may be terminated by Owner upon at least ten (10) days written notice to Contractor in the event that the Work or any individual Task/Change Order issued to Contractor by Owner is temporarily or permanently abandoned, suspended or discontinued, whether by decision or action of governmental authority or unilateral decision by Owner. If the individual Task/Change Order or Work is resumed, Contractor shall be compensated for expenses incurred in the interruption and resumption of Contractor's services.	This Contract may be terminated by Owner upon at least ten (10) days written notice to Contractor in the event that the Work or any individual Task/Change Order issued to Contractor by Owner is temporarily or permanently abandoned, suspended or discontinued, whether by decision or action of governmental authority or unilateral decision by Owner. **In the event of any termination under this clause, the Contractor shall be paid its costs, including contract close-out costs, and profit on work performed up to the time of termination.** If the individual Task/Change Order or Work is resumed, Contractor shall be compensated for expenses incurred in the interruption and resumption of Contractor's services.	**Pursuant to the Proposal Checklist included in the solicitation, please detail any exceptions to the Federal Funding Compliance requirements with your proposal.**
176	37	22(c)	Default and Termination	This Contract may be terminated by Owner in whole or in part without cause and for its convenience upon fifteen (15) days prior written notice by Owner to Contractor. In the event of such termination for convenience, Contractor shall be compensated for all services performed to the date of such termination and any termination expense that is directly attributable to termination for which Contractor is not otherwise compensated, subject to the limitations upon compensation and expenses as provided herein. Such entitlement of Contractor shall constitute Contractor's sole and exclusive remedy and recovery and in no event shall Contractor be entitled to recover anticipated profits on unperformed services, overhead, or other additional sums or consequential damages by reason of such termination for convenience.	New Flyer requests approval to modify the Default and Termination Section 22(c) to the following; This Contract may be terminated by Owner in whole or in part without cause and for its convenience upon fifteen (15) days prior written notice by Owner to Contractor. In the event of such termination for convenience, **the Contractor shall be paid its costs, including contract close-out costs, and profit on work performed up to the time of termination.** ~~Contractor shall be compensated for all services performed to the date of such termination and any termination expense that is directly attributable to termination for which Contractor is not otherwise compensated, subject to the limitations upon compensation and expenses as provided herein. Such entitlement of Contractor shall constitute Contractor's sole and exclusive remedy and recovery and in no event shall Contractor be entitled to recover anticipated profits on unperformed services, overhead, or other additional sums or consequential damages by reason of such termination for convenience.~~	**Pursuant to the Proposal Checklist included in the solicitation, please detail any exceptions to the Federal Funding Compliance requirements with your proposal.**
177	37	22(d)	Default and Termination	If termination of this Contract is effectuated by Owner and it is subsequently found or determined in legal proceedings that Contractor was not in substantial breach of this Contract by failure to perform in accordance with its terms, or that such failure was caused through the fault of Owner, then such termination shall be deemed to be a termination for convenience and Contractor's remedy and recovery as against Owner shall, in such case, be limited to the payments due and owing for Work and materials and supplies provided up to the termination date, as detailed in this Section 19, and supporting paragraphs.	New Flyer requests to change Section 22(d) language to the following; If termination of this Contract is effectuated by Owner and it is subsequently found or determined in legal proceedings that Contractor was not in substantial breach of this Contract by failure to perform in accordance with its terms, or that such failure was caused through the fault of Owner, then such termination shall be deemed to be a termination for convenience. ~~and Contractor's remedy and recovery as against Owner shall, in such case, be limited to the payments due and owing for Work and materials and supplies provided up to the termination date, as detailed in this Section 19, and supporting paragraphs.~~	**Pursuant to the Proposal Checklist included in the solicitation, please detail any exceptions to the Federal Funding Compliance requirements with your proposal.**
178	New		Price Adjustments due to Regulatory Changes		New Flyer requests approval to add a new clause to the terms and conditions; **Notwithstanding anything else to the contrary contained herein, in the event that a price adjustment is required in respect of changes that are mandatory as a result of legislation or regulations that become effective after the date of the tender submission, such price adjustment shall be negotiated in good faith by the Owner and the Contractor.**	**Owner will consider requests for changes to contract terms and conditions from the awarded vendor.**
179	New		Licence to Use Subject Data		New Flyer requests approval to add a new clause to the terms and conditions; **All "subject data", including specifications, technical data, records and reports, engineering drawings (including shop drawings and working drawings), manuals and instruction materials and computer or microprocessor software that is delivered or specified to be delivered under the Contract shall remain the property of the Contractor; provided however, the Owner shall have a royalty-free, non-exclusive, non-transferable and irrevocable license to use such subject data only for the purposes of operating and maintaining the buses or other Contract deliverables.**	**Owner will consider requests for changes to contract terms and conditions from the awarded vendor.**

180	New		Acceptance		New Flyer requests approval to add a new clause to the terms and conditions; **Within fifteen (15) calendar days after delivery of a bus or any other Contract deliverables supplied under this Contract to the Owner, the Owner shall conduct acceptance tests on the bus or other Contract deliverables. The acceptance tests to be conducted by the Owner, and the criteria and standards in respect of such tests, shall be agreed upon by the Owner and the Contractor prior to the Contractor building the bus or other Contract deliverables. If a bus or other Contract deliverables pass these tests or if the Owner does not notify the Contractor of non-acceptance within 15 calendar days after delivery of the bus or other Contract deliverables, acceptance of the bus or other Contract deliverables by the Owner shall be deemed to have occurred on the 15th day after delivery. Acceptance shall occur earlier if the Owner notifies the Contractor of early acceptance or places the bus into revenue service.**	**Owner will consider requests for changes to contract terms and conditions from the awarded vendor.**
181	New		Title and Risk of Loss		New Flyer requests approval to add a new clause to the terms and conditions; **The Owner shall assume risk of loss of the vehicle or other Contract deliverable on delivery. Prior to delivery, the Contractor shall have risk of loss of the vehicle or other Contract deliverable. Title to the vehicle or other Contract deliverable shall pass to the Owner upon acceptance of the vehicle or Contract deliverable by the Owner.**	**Owner will consider requests for changes to contract terms and conditions from the awarded vendor.**
182	New		Force Majeure		New Flyer requests approval to add a new clause to the terms and conditions; **If the Contractor is delayed at any time during the performance of the work by the neglect or failure of the Owner or by delay or failure of the Contractor caused by an event beyond its control, including, but not limited to, natural disasters, floods, fires, epidemics, pandemics, acts of war or terrorism, labor shortages, strikes or lock-outs or shortages or loss of transportation, then the time for completion of the work and/or the delivery dates shall be extended by the Owner by a reasonable period of time after such event of delay has ended in order that the Contractor may complete the work or deliver the buses.**	**Owner will consider requests for changes to contract terms and conditions from the awarded vendor.**
183	New		Delays due to COVID-19 Pandemic		New Flyer requests approval to add a new clause to the terms and conditions; **The Contractor shall not be liable for failure to perform any of its obligations under the Agreement during any period in which the Contractor cannot perform due to the impact of the COVID-19 pandemic on its operations, provided that the Contractor promptly notifies the Owner in writing of such issues. The Contractor and Owner shall work together in a good faith and commercially reasonable manner in an attempt to modify the required obligations if necessary.**	**Owner will consider requests for changes to contract terms and conditions from the awarded vendor.**

INDIANAPOLIS PUBLIC TRANSPORTATION CORPORATION
ACKNOWLEDGMENT OF ADDENDA
(Must be returned with Submittal)

RFP 21-07-407
Bus Rapid Transit (BRT) Battery Electrical Buses

The undersigned acknowledges receipt of the following amendment(s) to the Bid and supporting documentation.

ADDENDUM NUMBER _____ DATED: _____

ADDENDUM NUMBER _____ DATED: _____

ADDENDUM NUMBER _____ DATED: _____

ADDENDUM NUMBER _____ DATED: _____

ADDENDUM NUMBER _____ DATED: _____

ADDENDUM NUMBER _____ DATED: _____

Note: Failure to acknowledge receipt of all addenda that may have been issued may cause the Proposal offer to be considered non-responsive to the solicitation. No further consideration will be given to non-responsive offers. Acknowledged receipt of each addendum must be clearly established and included with the bid response.

_____
(Proposing Company Name)

_____
(Street Address)

_____
(City, State, and Zip Code)

_____
Signature of Authorized Company Official

_____
Date

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