

ZEB Procurement Update



Fleet Maintenance Specialists, Inc.

INTRODUCTION

The Basin-Transit/CalACT Vehicle Purchasing Cooperative is a consortium of 146 California Transit bus buying agencies. Since 2010 the lead agency, Basin Transit, issues Joint Procurements and the resulting contracts for rolling stock and bus shelters for FTA and state eligible bus purchases. After award, CalACT, the state transit association, assists in administration of the purchasing process.

The latest solicitation that is awarded and in progress is for a minimum of 2671 and maximum of 7943 vehicles of varying types. (ICE and ZEB)

Contract 19-01 ZEB “Non-Federal” Solicitation

- Contracts issued in October 2019 to 3 vendors for ZEB Electrified Vans and Cutaways.
- 36 vehicles purchased by the consortium are in service.
- Base period of contract has expired and has not renewed.

ZEB Update: ZEB Cutaways

- ZEB 2 vehicles (electrified cutaways) awarded January 2023
- Joint Procurement (5-one year options) 104 minimum, 694 maximum units.
- Ford E-450 based electrified cutaways.
- Awards were made to the Endera, Coach and Equipment UES and Optimal and TurtleTop Optimal bus lines.
- Buy America and other federal requirements are confirmed, but Altoona is pending and is a contingency towards award.

20-01 ZEB Update: ZEB Vans

- Scope: Min, Max
- ZEB 1 specification: Procurement is in Progress.
- Joint Procurement (5-one year options) 143 minimum, 713 maximum units.
- Ford Transit Based. E-Transits and electrified conversions (ex.Lightning)
- Electrified Ram ProMaster Low Floors.



20-01 ZEB: Ongoing Issues

- Enhanced Financial Review. We look into financials of the dealer, body manufacturer and electrifiers. The ZEB and bus industry in general has been distressed by supply chain issues.
- QC and Buy America Inspections: We had to inspect the bus body manufacturers, electrifiers and even the battery suppliers.
- Industry is in flux especially with the battery supplier companies. EV companies are very unfamiliar with the public agency procurement process.
- Limited experience and references.
- Cost remains an issue. ZEBs are up to 2 or 3 times the cost of ICE equivalents.

“Lessons Learned” (FMS)

- More battery doesn't always equal proportionate range. Diminishing returns.
- Don't forget the battery manufacturers (not all batteries are made equal)
- Driving qualities vary widely across EVs
- Range is greatly affected by regeneration and adjustment should be considered
- Electric bus manufacturers/converters are typically not good at routing high-voltage cabling
- High-voltage DC to low-voltage DC charging needs to be considered as starting issues are a problem
- Top speed performance is limited and greatly affects range
- HVAC is often ignored in the range of OEMs
- Vet the company for customer service. In BEBs you will have issues, but will the company take care of them?

Recommendations

- Limit the term of your contracts. Both for price and the flexibility to terminate a contract earlier.
- Augment the language in your financial review requirements. You want the suppliers to be able to perform!
- Carefully consider your operating requirements for all four seasons. Evaluate the buses accordingly.
- Set defined time limits for proposers to meet requirements. Especially Buy America.
- You may get multiple proposals for identical or very similar buses from varying bidders. Have contract language to address how to handle this.

Thank you!

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