ADVANCED TRANSIT VEHICLE CONSORTIUM

Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza
Los Angeles, CA 90012

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NOVEMBER 6, 2006

TO: BOARD OF DIRECTORS

FROM: JOHN B. CATOE, JR.

PRESIDENT

SUBJECT: EXERCISE ONE-YEAR OPTION FOR ARIELI ASSOCIATES

CONTRACT NO. OP33201764

RECOMMENDATION:

Authorize the Chief Executive Officer to exercise the contract option and execute Modification No. 2 to Contract No. OP33201764 with Arieli Associates to provide technical consulting services in support of the Advanced Transit Vehicle Consortium (ATVC) for a period of one-year not to exceed of \$200,000 increasing the Total Contract Value from \$200,000 to \$400,000.

BACKGROUND:

Arieli Associates has supported ATVC since February 2002 through various contracts. Under Contract No. OP33201764, Arieli Associates provides ATVC with a broad array of technical advisory services related to vehicle acquisition strategies (Work Plan attached). Dr. Arieli's fully burdened hourly rate is \$230 per hour.

DELIVERABLES:

Arieli Associates provides ATVC with consultation services, written correspondence, recommendations on potential technological advances, facilitates "brainstorming" sessions, develops presentations on behalf of ATVC, participates in negotiations with vendors and industry representatives, and performs other activities arising from the regular work of the ATVC as directed by the ATVC President.

FINANCIAL IMPACT

The Advanced Transit Vehicle Consortium will provide funding for this contract.

ATTACHMENTS:

- 1. ATVC Consultant Comparison of Budgeted vs. Actual Work Hours
- 2. Procurement History Contract OP33201764 with Arieli Associates
- 3. Work Plan

Prepared by: John Drayton, Manager, Vehicle Technology

Susan Dove, Contract Administrator

John B. Catoe, Jr

President, Advanced Transit Vehicle Consortium

Attachment 1 -ATVC Consultant Comparison of Budgeted vs. Actual Work Hours for 2006 (through October 1, 2006)

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Actual Cost Jun-Dec 2006*	\$4,140	22,080	460	4,600	8,050	12,190	\$51,520
Actual Project Hours through Jun-Dec 30, 2006	18.0	96.0	2.0	20.0	35.0	53.0	224.0
Budgeted Cost Jun- Dec 2006	\$11,500	27,600	17,250	2,300	4,600	33,350	\$96,600
Budgeted Project Hours through June-Dec 30, 2006	50.0	120.0	75.0	10.0	20.0	145.0	420.0
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Actual Cost Jan- Jun 2006	\$26,910	19,780	3,450	2,060	5,520	28,520	\$89,240
Actual Project Hours through Jun-Dec 30, 2006	117.0	86.0	15.0	22.0	24.0	124.0	388.0
Budgeted Cost Jan- Jun 2006	\$37,950	43,700	5,750	13,800	5,750	14,950	\$121,900
Budgeted Project Hours through Jan-June 30, 2006	165.0	190.0	25.0	0.08	25.0	65.0	530.0
ATVC CONSULTANT CONTRACT ACTIVITIES January-December 2006	2007 Environmental Regulations (HCNG & Hybrid)	2010 Environmental Regulations (HCNG, Hybrid, Trolley Demos)	Technology Workshops (Fuel Cell & Adv. Tech. Workshop)	Neighborhood Circulators	Future Growth and Operations (Low Noise, Alternative Vehicle Designs)	Other Activities (Metro Procurement Support)	Total Work Plan

^{*} Includes expenses billed through October 1, 2006. Totals above also do not include a billing of \$11,960 for work conducted under this contract in December 2005.

BOARD REPORT ATTACHMENT -PROCUREMENT HISTORY EXERCISE THE CONTRACT OPTION AND TO EXECUTE MODIFICATION NO. 2 TO CONTRACT NO. OP33201764 WITH ARIELI ASSOCIATES TO PROVIDE TECHNICAL CONSULTING SERVICES FOR A PERIOD OF ONE-YEAR

A. Background on Contractor

Arieli Associates, Los Angeles, CA, has successfully provided the FCBC, ATVC and MTA with consultant services since February 2002. Prior to that period, Dr. Adi Arieli, President, Arieli Associates served as the program director for the Advanced Technology Transit Bus (ATTB). The services performed by Dr. Adi Arieli have consisted of several of the key elements of the current contract requirements, including expertise level advice on advanced transit vehicle technologies, national and state level experience in public transit matters, as well as a proven record of dealing with local transit and regulatory agencies and municipalities.

B. Procurement Background

On September 13, 2005, Requests for Proposals were sent to known industry experts. The RFP included a Firm Fixed Hourly Rate Contract that would be awarded to the proposer whose proposal meets the requirements of the RFP and is most advantageous to the ATVC based upon the proposal evaluation criteria. The RFP noted that ATVC shall select the lower priced consultant(s) when all other qualifications are determined to be nearly equivalent. The RFP was also advertised and was posted on the MTA's web site. On September 23, 2005, three proposals were received from Arieli Associates, Mobile Energy Solutions, and Stoney Hill Transportation LLC. Metro Staff recommended contract award to Arieli Associates for two years inclusive of a one-year option. The ATVC Board approved contract award to Arieli Associates for a period of one-year in the amount of \$200,000. On December 5, 2006, a contract was awarded to Arieli Associates.

C. Evaluation of Proposals

The ATVC Evaluation Committee found that two of the proposers were qualified to perform the services defined by the Contract. However, it was determined that Arieli associates offered the best combination of program management experience, transit industry knowledge, and education. Although Arieli Associates fully burdened rate is higher than the other competitors, the fully burdened rate is commensurate with Dr. Arieli 's education and professional experience.

In order to ensure that the option pricing was fair and reasonable, a market survey was performed on fully burdened rates for similar services. Based on the results of the market survey, the fully burdened rate proposed by Arieli Associates is fair and reasonable.

D. Cost/Price Analysis Explanation of Variances

The recommended price for the base contract has been determined to be fair and reasonable based upon adequate competition and existing historical pricing for similar services. The recommended price for the one-year option was based on a market survey performed for similar services.

Composite Structure Analysis Bus Procurement Plan Review Advanced Propulsion Systems Other Advanced Technologies	On-Going Activities Low Noise Vehicle Study Fuel Cell Workshop	Major Initiatives and Projects HCNG Demonstration Hybrid Demonstration Electric Trolley Study 45' Procurement Support	2006
Composite Structure Analysis Bus Procurement Plan Review Advanced Propulsion Systems Other Advanced Technologies	Low Noise Vehicle Study Fuel Cell Workshop	HCNG Demonstration Hybrid Demonstration ZEV Study Electric Trolley Feasibility	2007
Composite Structure Analysis Bus Procurement Plan Review Advanced Propulsion Systems Other Advanced Technologies	Low Noise Demonstration Fuel Cell Workshop	HCNG Demonstration Hybrid Demonstration ZEV Study/Demonstration Electric Trolley Feasibility	2008
Composite Structure Analysis Bus Procurement Plan Review Bus Procurement Plan Review Advanced Propulsion Systems Other Advanced Technologies Other Advanced Technologies	Fuel Cell Workshop	ZEV Demonstration Initiate Low Noise Strategies Follow-on Hybrid/HCNG Projec Electric Trolley Feasibility	2009
Composite Structure Analysis Bus Procurement Plan Review Advanced Propulsion Systems Other Advanced Technologies	Fuel Cell Workshop	ZEV Demonstration Initiation of METRO ZEV Prog Initiate Low Noise Strategies Initiate Low Noise Strategies Follow-on Hybrid/HCNG Project Follow-on Hybrid/HCNG Projects Electric Trolley Feasibility Electric Trolley Feasibility	2010

Definitions

Hybrid A propulsion system that uses a combination of mechanical and electrical motors to drive wheels. HCNG A project involving blended hydrogen/CNG fuels. In this case, this also refers to a pending demonstration with AQMD and City Engines.

Electric Trolley An electric motor driven vehicle that uses off-board energy generation typically via overhead catenary/pantograph system.

ZEV Zero Ernission Vehicle. Proposed 2010 CARB Regulations stipulate that 15% of bus purchases be ZEV after that date.

Low Noise Current buses are 83db, while the articulated buses were 78db. Low Noise Vehicle research will look at further noise reduction strategies. Fuel Cell A chemically based electical generating system.

Composite fabrics.

Other Advanced Technologies Other developing technologies not otherwise covered above, particularly energy storage technologies, possibly high voltage electrical systems. Advanced Propulsion New technologies not already listed above. May include hydraulic drive trains and/or alternative engine types such as micro-turbines.

ATVC 2007 Consultant Work Plan 10-31-06.xls Summary

Total Work Plan	Other Activites (Metro Procurement Support)	Future Growth and Operations (Low Noise, Alternative Vehicle Designs)	Neighborhood Circulators	Technology Workshops (Fuel Cell & Adv. Tech. Workshop)	2010 Environmental Regulations (HCNG, Hybrid, Trolley Demos)	2007 Environmental Regulations (HCNG & Hybrid)	9226
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