



**OPERATIONS COMMITTEE
JULY 15, 2004**

SUBJECT: 2550 RAIL VEHICLE PROGRAM

ACTION: RECEIVE AND FILE

RECOMMENDATION

Receive and file the quarterly report on the 2550 Rail Vehicle Program for the period from March 2004 through June 2004.

ISSUE

On April 24, 2003, the MTA Board awarded two key contracts to the Program:

- A five-year contract to AnsaldoBreda S.p.A. (AnsaldoBreda) for a base buy fleet of 50 light rail vehicles (LRV). These 50 LRV's will be utilized for both the current Pasadena Gold-Line and the future Metro Gold-Line Eastside Extension. These LRV's will also be designed to operate on any existing or future light rail alignment(s), which the Metro operates.
- A rail-consulting contract to LTK Engineering Services (LTK) for as-needed technical support to the Program.

In addition, the Board directed staff to provide quarterly updates on the status of the Program.

BACKGROUND

Based on lessons-learned with the P2000 LA Standard Car contract, Rail Operations created a LRV Integrated Project Team (IPT) responsible for managing the Program. An IPT is established whenever a capital project of significant importance requires a very dedicated management team with the ability to act and react quickly to Program issues.

For this Program, the IPT is organized under Rail Fleet Services and consists of the Project Manager, Deputy Project Manager, Contract Administration Manager, Senior Contract Administrator and a fully dedicated staff from other Metro departments including Engineering. The IPT also benefits from the support of as-needed specialty engineering services through the Program's contract with LTK, one of America's oldest and largest rail-transportation consulting firms. The additional engineering participation provided by LTK is an integral part of the IPT and its ability to expeditiously respond to specific engineering

issues as they arise, for example, in the areas of signaling and automatic train control expertise. The IPT's primary focus is dedicated towards on-time delivery, within program budget, and successful integration of the systems and subsystems affecting the LRV.

PROGRAM STATUS

1. Summary Status: March 2004 through June 2004:

The various activities and accomplishments of the IPT noted below are designed to maintain the 2550 Rail Vehicle Program schedule to deliver 50 LRVs to Metro by June 2007.

The IPT Activities On The 2550 LRV Contract with AnsaldoBreda	
Actions or Accomplishments	Month
	March 2004
1. The IPT conducts Braking System design review in Los Angeles with AnsaldoBreda and subcontractor, Knorr.	
2. The IPT conducts Coupler System design review in Los Angeles with AnsaldoBreda and subcontractor, Dellner.	
3. The IPT conducts Train Control System design review in Los Angeles with AnsaldoBreda and subcontractor, United Switch and Signal.	
4. The IPT conducts Passenger Door System design review in Los Angeles with AnsaldoBreda and subcontractor, Faively.	
5. AnsaldoBreda completes wheel design with subcontractor, Penn Machine	
	April 2004
1. The IPT conducts Vehicle Body Final design review in Pistoia, Italy with AnsaldoBreda.	
2. The IPT conducts Operator's Cab Configuration final design review in Pistoia, Italy with AnsaldoBreda.	
3. The IPT conducts Propulsion System final design review in Naples, Italy with AnsaldoBreda.	
4. The IPT conducts Carshell & Trucks Finite Element Analysis & Modeling review in Italy with AnsaldoBreda.	
5. The IPT conducts HVAC System final design review in Kolin, Czech Republic with AnsaldoBreda and subcontractor Thermo King.	
6. The IPT conducts Propulsion Gearbox final design review in Oostkamp, Belgium with AnsaldoBreda and subcontractor M.C. Watteuw.	
	May 2004
1. The IPT continues design review of the LRV Propulsion System with AnsaldoBreda.	
2. The IPT continues design review of the LRV Monitoring & Diagnostic System with AnsaldoBreda.	
3. The IPT continues design review of the LRV Auxiliary Power System with AnsaldoBreda.	
4. The IPT Quality Assurance representative conducted Quality surveys of the tracking and inspection processes and the AnsaldoBreda facilities at Pistoia & Naples, Italy	

5. The IPT locates its on-site inspector in Pistoia, Italy to oversee the production of the first two LRVs in Pistoia and Naples, Italy.	
	June 2004
1. The IPT conducts ATP/TWC final design review in Los Angeles with AnsaldoBreda and subcontractor, United Switch and Signal.	
2. The IPT conducts Wheels and Axles final design review in Los Angeles with AnsaldoBreda and subcontractor, Penn Machine.	
3. The IPT conducts Propulsion System final design review in Los Angeles with AnsaldoBreda and subvender, American Seating.	
4. The IPT conducts Communications final design review in Los Angeles with AnsaldoBreda and subvender, Revind.	
5. The IPT conducts LRV Interiors final design review in Los Angeles with AnsaldoBreda and subvender, Testori Interiors.	
6. The IPT conducts Lighting final design review in Los Angeles with AnsaldoBreda and subvender, Translight.	
P2550, LRV Contract Paid To Date*	
	\$34,605,243*

* As of 06/30/04

LTK Activities Through Its PS 8310-1267, Rail Consulting Contract with Metro	
Actions or Accomplishments	Month
1. Participate in all weekly IPT technical meetings. These are the in-house meetings to discuss status and Metro technical positions prior to the weekly teleconferences with AnsaldoBreda.	March 2003
2. Participate in all weekly 2550 Program technical teleconference calls with AnsaldoBreda. LTK's technical expertise in certain areas, such as systems integration and electrical systems, is a beneficial augmentation to the IPT's expertise.	Through
3. Review and provide comments and recommendations to all AnsaldoBreda Technical Submittals. LTK's technical expertise is especially valuable in the review of certain technical documentation from AnsaldoBreda.	
4. Attend and participate at meetings with AnsaldoBreda in Los Angeles. LTK's experience with previous Metro LRV procurements provides insight into lessons-learned.	
5. Attend and participate at meetings with AnsaldoBreda in Pistoia and Naples. LTK's experience with other LRV manufacturers is a valuable asset to the IPT.	June 2004
PS 8310-1267, Rail Consulting Contract Paid to Date*	
	\$602,941*

* As of 06/30/04

2. Discussion of Status

The Program now has an IPT-approved Program Schedules for all contract milestones, and submittals as well as for the LRV production and deliveries. The IPT-approved schedule maintains the contract requirement to deliver 50 LRVs to Metro by June 2007.

The Program now has the ability to transmit, review, comment and approve contract drawings and contract submittals electronically through the use of the internet-based "Project Quest."

"Project Quest" is an Internet program licensed to Metro for use as a program management tool. "Project Quest" provides the IPT and AnsaldoBreda with the ability to transmit contract documents including large drawings and letter correspondence almost instantaneously between Italy and Los Angeles.

It also provides an electronic file of all 2550 Program related documentation including the contract and many reference documents that is available to the IPT, LTK, and AnsaldoBreda. The IPT controls restricted access and security for Metro-sensitive files in "Project Quest", such as negotiation positions and internal memos.

From April 23rd through May 9th 2004, the IPT members from Rail Fleet Services and Contract Administration with LTK's project engineer conducted Final Design Reviews at AnsaldoBreda's plants in Pistoia and Naples, Italy.

Additionally, as in every trip, the IPT re-audited the design and production areas at the AnsaldoBreda Pistoia and Naples facilities and is satisfied with the circumstances and conditions.

AnsaldoBreda continues to mobilize the Pittsburg, California assembly plant to comply with the Contract's Buy America-required final-assembly in the United States. This facility allows AnsaldoBreda and the IPT to more efficiently coordinate and oversee the final assembly and shipping operation between the California locations of Pittsburg and Los Angeles.

The IPT performed a quality assurance review at the AnsaldoBreda Italian facilities regarding all design and production elements concerned with assuring quality design and workmanship.

The IPT is confident that the manufacturing portion of the contract is still on schedule to have all 50 of the LRVs delivered to Los Angeles by June 2007. The IPT directed AnsaldoBreda to provide a schedule mitigation plan that will bring the schedule into alignment in all areas of the contract work including contract documentation submittals.

NEXT STEPS

The IPT and AnsaldoBreda will be conducting First Articles Inspections on major subsystems during the next three months of July, August and September 2004. During this period the IPT will also be conducting site reviews of certain production facilities involved in constructing and supporting the 2550 rail vehicle.

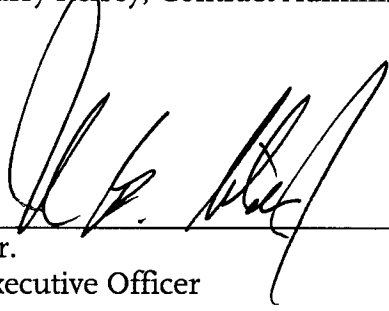
The 2550 LRV production and assembly areas continue to be structured and isolated in support of the construction of the new rail-car fleet. Presently structural floors, sidewalls, and roof designs are going through the production line using automated cutting, welding, and assembling procedures.

Present efforts are used for calibration and verification of the previous mentioned equipment. The IPT on-site inspector is in Italy to verify that the utmost quality and attention to detail is applied during all phases of the LRV fleet assembly, effective May 2004 until completion.

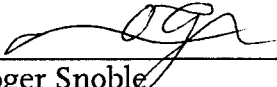
Contract Document Requirements List (CDRL) submittals from AnsaldoBreda will continue and the IPT will review and comment or approve. The IPT continues to communicate by telephone, fax, e-mail and ProjectQuest on a daily basis.

The IPT conducts team meetings at least once a week to discuss issues, schedules and milestones. Finally, weekly conference phone calls are held among the various participants at several international locations to discuss status and coordinate problem definition and render problem solutions.

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