MINUTES

MEETING OF THE BOARD OF DIRECTORS

OPERATIONS & SAFETY COMMITTEE

METROPOLITAN ATLANTA RAPID TRANSIT AUTHORITY

November 29, 2016

The Board of Directors Operations & Safety Committee met on November 29, 2016 at 10:10 a.m. in the Board Room on the 6th Floor of the MARTA Headquarters Building, 2424 Piedmont Road, Atlanta, Georgia.

Board Members Present

Robert F. Dallas Frederick L. Daniels, Jr. Roderick E. Edmond, *Chair* Jerry Griffin

MARTA officials in attendance were: GM/CEO Keith T. Parker, AICP; Chief Administrative Officer LaShanda Dawkins (Acting); Chief Operating Officer Joseph Erves (Acting); Chief Financial Officer Gordon L. Hutchinson; Chief Counsel Elizabeth O'Neill; Chief of Staff Rukiya S. Thomas; AGMs Rhonda Briggins (Acting), Wanda Dunham, Ming Hsi, Benjamin Limmer and David Springstead; Executive Director Ferdinand Risco; Sr. Directors Perfidia Collier (Acting) and Amanda Rhein; Directors Onyinye Akujuo, Lisa DeGrace, Donna Jennings, Sherrie Johnson, Pat Minnucci, Remy Saintil, Richard Slaton and William Taylor; Managers Jacquelyn Bentley and Alisa Jackson; Executive Manager to the Board Rebbie Ellisor-Taylor; Sr. Executive Administrator Brenda L. Williams; Finance Administrative Analyst Tracy Kincaid. Others in attendance were Davis Allen, Ricky Chambers, Gregory Edwards, Abebe Girmay, Mark Harclerode, Manmohan Khuman, Don Lawrence, Erik Leach, LaTonya Pope and Charles Smith.

Also in attendance were Daveitta Jenkins of CH2M; Jim Schmidt of HNTB.

Consent Agenda

a) Approval of the September 29, 2016 Operations & Safety Committee Meeting Minutes

On motion by Mr. Griffin seconded by Mr. Dallas, the Consent Agenda was unanimously approved by a vote of 4 to 0, with 4 members present.

Individual Agenda

Resolution Authorizing Award of a Contract for the Procurement of Bus Wash Detergent/Degreaser, IFB B37791

Mr. Taylor presented this resolution for Board of Directors' approval authorizing the General Manager/CEO or his delegate to enter into a Contract for the Procurement of Bus Wash Detergent/Degreaser with Five Star Enterprises, Inc., in the amount of \$700,625.00.

On motion by Mr. Griffin seconded by Mr. Daniels, the resolution was unanimously approved by a vote of 4 to 0, with 4 members present.

Dr. Edmond asked why the lowest bidder was not selected.

Mr. Taylor said the firm did not submit several of the required forms and was therefore deemed non-responsive.

Resolution Authorizing Rejection of Bids Received for Removal and Disposal of Industrial Waste Water and Sludge from Various MARTA Facilities, IFB B36766

Mr. Saintil presented this resolution for Board of Directors' approval authorizing the General Manager/ CEO or his delegate to reject all bids received for the procurement of Removal and Disposal of Industrial Waste Water & Sludge from Various MARTA Facilities, IFB B36766.

Dr. Edmond asked why the incumbent was not selected.

Mr. Saintil said the incumbent was not in EPA compliance with how they handle the disposal of commercial waste, so MARTA has stopped using their services.

On motion by Mr. Daniels seconded by Mr. Griffin, the resolution was unanimously approved by a vote of 4 to 0, with 4 members present.

Briefing – Train Control & SCADA System Upgrade (TCSU) – Program Overview & Status

Mr. Springstead briefed the Committee on MARTA's Train Control & SCADA System Upgrade, including:

• Project history, justification and approach for the upgrade

- An overview of MARTA's Train Control System
- Project Implementation Status and Transition Approach
- Industry Trends, Challenges, and Mitigation Strategies
- Review Plan towards completion

MARTA at a Critical Juncture

- On July 4, 2009, MARTA experienced significant failure of RSCC communications with field Train Control System
- Train Control and Supervisory Control & Data Acquisition Systems are aging and obsolete
- Equipment is not vendor supported, spares extremely hard to find
- Last replaced before 1996 Olympics
- Need to maintain State of Good Repair for safe and reliable operations

Interdependent Systems Modernization

- Install 97 SCADA Field Units in traction power rooms
- Install Two-Way Train-Wayside Communication System
 - o 318 Rail Vehicles
 - 57 Wayside Locations
- Install 51 Train Control Field Units (TCFU) in train control rooms
- Upgrade three (3) Yards: South Yard, Armour Yard, Avondale Yard
- Install and integrate new Train Control and SCADA System at new IOC
- Update Business Processes, Manage Change, Deliver Formal Training

Project Guiding Principles

- Study the industry (NYCT, WMATA, SEPTA, BART, Toronto, Montreal)
- Replace with proven, safe, reliable technology used in North America
- Ensure a comprehensive approach People, Process, Technology
- Keep systems backwards compatible
- Leverage a blend of internal Subject Matter Experts and external talent

Peers and Industry Assessment

- Single Contract for all sub-systems
- Business Process Re-engineering (BPR) and Organizational Change Management (OCM)
- Incorporate Formal Training
- Maximize use of commercial-off-the-shelf products (COTS)
 - o No science projects
- Experienced Staff
- Schedule Impacts (Active Transit System)
- System Reliability Demonstration Test period

Project Costs

- Pre-Award Baseline \$269.39M
- Baseline at Award Alstom \$236.61M
- Forecast \$245.55M
- Difference (Forecast Baseline at Award) \$8.94M

Rebaselined Project Schedule

- NTP: February 2011
- Original Contract Completion: February 2016
- Forecast EW Completion: August 2016
- Forecast Final Completion: December 2019

MARTA's Train Control Functionality

- Rail Services Control Center (RSCC \rightarrow IOC):
 - o Monitoring and alarm functions
- Automatic Train Operations (ATO):
 - Regulates train start/stop and speeds
- Automatic Line Supervision (ALS):
 - Regulates dispatch, routes, and communication

- Automatic Train Protection (ATP):
 - Enforces safe operation through speed control and train separation
- Car Borne Equipment and Cab Signaling:
 - Communicates with the field and controls train operation

Transition Approach

- Opportunity to leverage lessons from EW Construction
- Formal and timely training to fully utilize new system
- Build appropriate organization to support and sustain IOC
- Structured approach to business process and change management
- System in warranty for one year after completion

Major Challenges and Mitigation Plans

- Resetting of the Project
 - Challenge: Alstom restructuring and GE Signaling acquisition in 2014
 - Mitigation: In concert with MARTA Legal, MOU developed to facilitate a comprehensive reset of the project
- Staffing
 - Challenge: "Understaffed" industry shortage of signaling personnel
 - Mitigation: Alstom to utilize newly acquired GE talent (August 2016)
- Active Transit / Limited Track Access
 - Challenge: Competing track time revenue and demands from other capital programs; work must be done safely but in narrow windows
 - Mitigation: Work on a 24x7 basis, utilize multiple shifts

Financial Status and Risks

- Contract value has not changed
- No Change Orders executed to date
- First Change Order (\$0 value) in progress to extend the Period of Performance
- MARTA has not overpaid

- MARTA is holding 10% retention from every payment
- MARTA holds an additional 20% until final system integration is complete
- Warranty does not begin until the project is complete
- No contingency has been exercised
- There are no claims against MARTA

Action Items

- Continue Executive level partnering meetings with Alstom
- Focus on IOC operations by August 2017
- Continue local oversight at Alstom Rochester Facility
- Enhance existing monthly reporting to the MARTA Executive Management Team
- Begin quarterly reporting to the MARTA Board
- Conduct independent reviews of project performance

Conclusion

- New Train Control & SCADA technology is proven, safe and reliable
- MARTA is already getting beneficial use from the installed systems
- Key Alstom sub-contractors are local firms and performing well
- Alstom acknowledges resource challenges; committed at the highest level

Mr. Parker said this briefing is a result of feedback that he has received from the Board since his tenure. Staff wants to provide total transparency to the Board. The most significant issue for this project is the time it is taking to complete. Staff will ensure that the Board is fully informed going forward.

Mr. Griffin thanked Mr. Springstead for an informative presentation. He added that technology changes so rapidly. He asked if technological changes were incorporated into the project.

Mr. Springstead said yes. In fact, the project was delayed in some instances due to incorporating new technological advances.

Mr. Daniels said the Board knew this was a long project. He said that he was also concerned about compatibility as it relates to technology. He asked where does MARTA stand with its speaker system.

Mr. Springstead said MARTA is in active procurement; both PA and visual system will integrate with this project. MARTA CIO's will oversee that portion and ensure that everything is fully integrated.

Mr. Daniels asked if there are any outstanding components that may alter costs.

Mr. Springstead said that is doubtful. Hardware and equipment is complete. The primary item that remains is integration.

Mr. Daniels said thank you for bringing the Committee up to speed.

Other Matters

No other matters came before the Committee.

Adjournment

The meeting of the Operations & Safety Committee adjourned at 10:55 a.m.