PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102

March 28, 2017 Agenda ID# 15631

TO PARTIES TO RESOLUTION ST-203

This is the Resolution of the Safety and Enforcement Division. It will be on the April 27, 2017, Commission Meeting agenda. The Commission may act then, or it may postpone action until later.

When the Commission acts on the Resolution, it may adopt all or part of it as written, amend or modify it, or set it aside and prepare its own decision. Only when the Commission acts does the resolution become binding on the parties.

Parties may file comments on the Resolution as provided in Article 14 of the Commission's Rules of Practice and Procedure (Rules), accessible on the Commission's website at www.cpuc.ca.gov. Pursuant to Rule 14.3, opening comments shall not exceed 15 pages. Late-submitted comments or reply comments will not be considered.

An electronic copy of the comments should be submitted to Colleen Sullivan (email: colleen.sullivan@cpuc.ca.gov).

/s/ ELIZAVETA I. MALASHENKO
ELIZAVETA I. MALASHENKO, Director
Safety and Enforcement Division

SUL:vdl

Attachment

CERTIFICATE OF SERVICE

I certify that I have by mail this day served a true copy of Draft Resolution ST-203 on all identified parties in this matter as shown on the attached Service List.

Dated March 28, 2017, at San Francisco, California.

/s/ VIRGINIA D. LAYA
Virginia D. Laya

NOTICE

Parties should notify the Safety Enforcement Division, California Public Utilities Commission, 505 Van Ness Avenue, San Francisco, CA 94102, of any change of address to ensure that they continue to receive documents. You must indicate the Resolution number on which your name appears.

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PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Safety and Enforcement Division
Rail Transit Safety Branch

Resolution ST-203
April 27, 2017

R E D A C T E D

R E S O L U T I O N

RESOLUTION ST-203 GRANTING APPROVAL OF THE FINAL REPORT ON THE 2016 TRIENNIAL SECURITY REVIEW OF THE SAN FRANCISCO BAY AREA RAPID TRANSIT DISTRICT OAKLAND AIRPORT CONNECTOR

SUMMARY

This resolution approves the California Public Utilities Commission Safety and Enforcement Division's final report titled, "2016 Triennial Security Review of the San Francisco Bay Area Rapid Transit District Oakland Airport Connector," dated January 11, 2017. The report compiles the results of Commission staff review of the of the San Francisco Bay Area Rapid Transit District Oakland Airport Connector's security program. Background information and review procedures only are included in the redacted report.

BACKGROUND

Commission General Order No. 164-D, "Rules and Regulations Governing State Safety Oversight of Rail Fixed Guideway Systems" requires Commission Staff (staff) to conduct a security review of the transit agencies operating rail fixed guideway systems triennially.

From 1996 to 2008, the Commission's Rail Transit Safety Branch (RTSB) partnered with the Transportation Security Administration (TSA) in performing rail transit security reviews. However, in the latter half of 2008, RTSB took over the responsibility of security reviews from the TSA.

Staff conducted a security review of the Bay Area Rapid Transit Oakland Airport Connector (BART OAC) in October 2016. A full description of the system, along with the security review, including the scope, results, and recommendations, is contained in the final security review report identified in this resolution as Attachment A.

The security review results show that the BART OAC is in compliance with its System Security Plan. Staff found no areas of non-compliance during the review. Activities of each checklist can be found in Section D of the security report.

Staff sent the BART OAC a copy of the draft security review report for a review and comment period on February 3, 2017. There were no comments from the BART OAC on the draft security report.

DISCUSSION

The final report, "2016 Triennial Security Review of the San Francisco Bay Area Rapid Transit District Oakland Airport Connector," dated January 11, 2017, included as Attachment A, identifies staff's activities for each of the Federal Transit Administration's five security elements evaluated during the security review. Staff recommends the Commission approve the final security review report titled, "2016 Triennial Security Review of the San Francisco Bay Area Rapid Transit District Oakland Airport Connector," dated January 11, 2017.

Confidential Information
Public Utilities Code Section 583 states: "No information furnished to the commission by a public utility, or any business which is a subsidiary or affiliate of a public utility, or corporation which holds a controlling interest in a public utility, except those matters specifically required to be open to public inspection by this part, shall be open to public inspection or made public except on order of the commission, or by the commission or a commissioner in the course of a hearing or proceeding. Any present or former officer or employee of the commission who divulges any such information is guilty of a misdemeanor."

The confidential appendices, marked "[CONFIDENTIAL]" in the public copy of this resolution should remain confidential at this time.

NOTICE

On March 29, 2017, staff's proposed resolution and request for approval of the final safety review report titled, "2016 Triennial Security Review of the San Francisco Bay Area Rapid Transit District Oakland Airport Connector," dated January 11, 2017, was published on the Commission's Daily Calendar.

COMMENTS

The draft resolution of the SED in this matter was mailed in accordance with Section 311 of the Public Utilities Code and Rule 14.2(c) of the Commission's Rules of Practice and Procedure. _____ comments were received.

FINDINGS

1. The RTSB staff conducted an on-site security review of the BART OAC on October 28, 2016, concluding that same day. Staff conducted a post-review exit conference with BART OAC management on November 29, 2016.
2. Staff submitted a draft security report to the BART OAC staff on February 3, 2017 for a review and comment period. There were no comments on this draft security report from the BART OAC.
3. The safety review results show the BART OAC is in compliance with its System Security Plan.
4. No areas of non-compliance were identified.

THEREFORE, IT IS ORDERED THAT:

1. The Safety and Enforcement Division's request for approval of the final security review report titled, "2016 Triennial Security Review of the San Francisco Bay Area Rapid Transit District Oakland Airport Connector" dated January 11, 2017, is granted.

2. This Resolution is effective today.

I certify that the foregoing resolution was duly introduced, passed and adopted at a conference of the Public Utilities Commission of the State of California held on April 27, 2017; the following Commissioners voting favorably thereon:

_____

TIMOTHY J. SULLIVAN
Executive Director

ATTACHMENT A

2016
TRIENNIAL
SECURITY REVIEW OF THE
BAY AREA RAPID TRANSIT DISTRICT
OAKLAND AIRPORT CONNECTOR
(BART OAC)

RAIL TRANSIT SAFETY BRANCH
SAFETY AND ENFORCEMENT DIVISION
CALIFORNIA PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102

January 11, 2017

(REDACTED)

Elizaveta Malashenko, Director
SAFETY AND ENFORCEMENT DIVISION

2016 TRIENNIAL SECURITY REVIEW OF BAY AREA RAPID TRANSIT DISTRICT OAKLAND AIRPORT CONNECTOR

ACKNOWLEDGEMENT

The California Public Utilities Commission's Rail Transit Safety Branch (RTSB) staff conducted this system security program review. Staff members directly responsible for conducting review and inspection activities include:

Daren Gilbert – Rail Transit Safety Branch Program Manager
Stephen Artus – Project and Program Supervisor
Steve Espinal, Senior Utilities Supervisor
Colleen Sullivan – CPUC Designated Representative to BART
Howard Huie, Utilities Engineer
Rupa Shitole, Utilities Engineer
Joey Bigornia, Utilities Engineer

TABLE OF CONTENTS

1. EXECUTIVE SUMMARY

The California Public Utilities Commission's (Commission) Safety and Enforcement Division (SED), Rail Transit Safety Branch staff (Staff) conducted an on-site system security review of the Bay Area Rapid Transit District (BART) Oakland Airport Connector (OAC) in October 2016. The review is focused on verifying the effective implementation of the System Security Plan (SSP), addressing Threat & Vulnerability Assessment (TVA) and emergency response.

The on-site review was preceded by an opening conference meeting between BART personnel and Staff, on Monday, October 24, 2016. The security review took place on October 28, 2016 and focused on verifying the effective implementation of BART's SSP.

Following the on-site security review, staff held a post-review conference with the BART Manager of Security Programs, on November 29, 2016. Staff provided a preliminary summary report detailing the on-site review findings.

The security review results indicate BART has a comprehensive system security program plan and has effectively implemented the SSP. Staff made no findings of non-compliance and issued no recommendations during the review.

The report Introduction is presented in Section 2. The Background, in Section 3, contains a description of the BART rail system. Section 4 provides a description of the 2016 security review procedures. The review's findings and recommendations are listed in Section 5. A listing of the Acronyms is in Appendix A. The BART 2016 Triennial Security Review Checklist Index and the Recommendations List are included, respectively, in Appendices B and C. The Triennial Security Review Checklists are presented in Appendix D.

2. INTRODUCTION

The Commission's General Order (GO) 164-D, *Rules and Regulations Governing State Safety Oversight of Rail Fixed Guideway Systems*, and the Federal Transit Administration's (FTA) Rule, Title 49 Code of Federal Regulations (CFR) Part 659, *Rail Fixed Guideway Systems: State Safety Oversight*, require the designated State Safety Oversight Agencies to perform a review of each rail transit agency's system safety and security program(s) at a minimum of once every three years. The purpose of the triennial review is to evaluate the effectiveness of each rail transit agency's System Security Plan (SSP) and to assess the level of compliance with GO 164-D as well as other Commission safety and security requirements. Staff conducted the previous BART on-site security review in January 2014.

Staff first notified BART's General Manager by letter, dated September 23, 2016, of the scheduling of the Commission's Security Review to begin on October 24, 2016. The notification provided BART with the opportunity to review the Triennial Safety and Security checklists as well as to provide comments.

The Review began with an opening conference meeting on October 24, 2016, attended by CPUC Staff and BART's Manager of Security Programs.

Staff performed the triennial security review on October 28, 2016, at the BART offices. Staff developed five (5) checklists for the inspection of the System Security Program. Staff derived the checklist review questions from CPUC's GO 164-D, FTA's 49 CFR659, Transportation Security Administration's (TSA) Baseline Security Review, and BART's SSPP. At the conclusion of each review activity, staff provided BART personnel a verbal summary of the preliminary findings and discussed preliminary recommendations for corrective actions.

On November 29, 2016, staff conducted a post-review exit meeting with the BART Manager of Security Programs and Superintendent eBART/OAC Systems. Staff provided a finding synopsis from the 5 checklists but did not issue any recommendations.

3. BACKGROUND

The Bay Area Rapid Transit District (BART) began operation on September 11, 1972 with 28 miles of track in Alameda County, servicing Oakland to Fremont. The second segment opened on January 29, 1973, with 12 miles of track extending the service from Fremont to Richmond. The third segment opened on May 21, 1973, with 17 additional miles of track marking the opening of the Concord Line. On November 5, 1973, service began between the Montgomery Street Station in downtown San Francisco and the Daly City Station, adding another 7.5 miles of track to the system. Transbay service began on September 16, 1974, bringing the full 71.5 miles of track into service. On May 27, 1976, the Embarcadero Station officially opened for revenue service, bringing the total station count to 34. The Embarcadero Station added no additional track miles.

Additional Extensions

The extension to North Concord/Martinez Station opened on December 16, 1995, adding 2.25 miles of track north of the Station. On February 24, 1996, Colma Station opened for revenue service, adding 1.6 miles of track south of the Daly City Station. The Pittsburg/Bay Point Station was the next to be opened for revenue service on December 7, 1996, completing a 7.8-mile segment of the Pittsburg/Antioch Extension from the Concord Station. The Dublin/Pleasanton extension opening followed on May 10, 1997, adding 14 miles of track and two stations to the system. The San Francisco Airport extension opened on June 22, 2003 adding four stations and 8.7 miles of track. Currently, the system operates six lines on 107.2 miles of track with 44 stations.

The BART system operates six lines. These are:

- Fremont – Daly City Line
- Dublin/Pleasanton – Daly City Line
- Pittsburg/Bay Point – SFO Line/Millbrae Line
- Richmond – Millbrae Line
- Richmond – Fremont Line
- Oakland Air Connector

Oakland Airport Connector (OAC)

BART's Oakland Airport Connector (OAC), also known as BART to OAK, began revenue operation on November 22, 2014. The system was designed and constructed by Flatiron Construction and Parsons Transportation along with Doppelmayr Cable Car (DCC) who designed, manufactured, and supplied the Automated People Mover (APM) system and guideway. DCC now operates and maintains the system as part of a 20 year BART Operations and Maintenance Contract.

The OAC is a fully automated driverless transportation system operating along a 3.2 mile partially elevated, partially at-grade, partially below-grade, dual guideway, providing a comfortable and reliable link between the Airport Station and Coliseum Station. The APM system operates with up to four cable propelled 3-car trains. Each station consists of a single-sided passenger boarding platform with a barrier wall and automatic platform door system separating the passenger platform from the guideway tracks. Near the mid-point of the end stations is the maintenance and storage facility (or Wheelhouse). The Wheelhouse houses administrative offices, the Central Control Room, the ropeway drive machinery, and provisions for trains to be stored off of the mainline for maintenance. Two Tow/Maintenance Vehicles allow personnel to perform guideway inspections and maintenance activities, including towing revenue vehicles in and out of service.

The initial system consists of four 3-car trains operating in a pinched loop configuration on two separate lanes. The system is expandable, when built to ultimate capacity (4-car trains), to provide a peak period line capacity of 1900 passengers per hour per direction (pphpd).

Planned Extensions

BART has several system extensions currently in the construction phase.

Warm Springs Extension Project

The Warm Springs Extension Project will add 5.4 miles of track, extending from the Fremont Station to the new Warm Springs Station in South Fremont. Staff has been monitoring the engineering design and construction phases of this project through its Safety Certification process, and the Commission approved BART's Safety Certification Plan with Resolution ST-80.

Santa Clara Valley Transportation Authority/Silicon Valley Rapid Transit (VTA/SVRT) Project

The Santa Clara Valley Transportation Authority/Silicon Valley Rapid Transit (VTA/SVRT) Project is a 16.3 mile extension from the planned Warm Springs Station to Milpitas alongside Union Pacific Railroad tracks, continuing to 28th Street and Santa Clara Street in San Jose, then proceeding underground through downtown San Jose to the Diridon Caltrain Station and finally terminating at the Santa Clara Station. Staff has been monitoring the engineering design and construction phases of this project through the Safety Certification process, and the Commission approved BART's Safety Certification Plan with Resolution ST-83.

East Contra Costa BART Extension (eBART) Project

The East Contra Costa BART Extension (eBART) Project will provide passenger service along 10 miles of the California State Route 4 corridor connecting east of the Pittsburg/Bay Point Station. The extension will use unique Diesel Multiple Unit (DMU) vehicles instead of standard BART's heavy rail trains, and includes two new stations and a transfer platform to provide timed transfers between eBART and traditional BART trains. Staff has been monitoring the engineering design and construction phases of this project through the Safety Certification process, and the Commission approved BART's Safety Certification Plan with Resolution ST-112.

New Vehicle Procurement Project

BART has a new vehicle procurement project underway to add up to 1000 new rail cars to its existing fleet. The new cars will be rolled out between 2017 and 2021. Staff has been monitoring the procurement project through the Safety Certification process, and the Commission approved BART's Safety Certification Plan with Resolution ST-150.

4. REVIEW PROCEDURE

BART's Oakland Airport Connector has been in service since November of 2014, which was just less than 2 years at the time the review was conducted. After internal discussions and external discussions with BART, RTSB determined it would be advantageous for both BART and its contractor operator of the OAC for staff to conduct its first triennial review within the first two years of operation. That would allow staff to identify any deficiencies or gaps in the safety and security programs to address them early in the operations of OAC, as well as use the process as an educational tool for the contract operator of OAC.

Staff conducted the 2016 Triennial Security Review in accordance with Rail Transit Safety Section Procedure Four (4), *Procedure for Performing Triennial Safety & Security Reviews of Rail Transit Systems*. Staff developed five (5) checklists to evaluate the adequacy of BART's system security plan and the efficacy of its implementation.

The security evaluation includes the BART security department, programs and processes which have system security functions and responsibilities. The review is based on Commission and FTA requirements, BART's SSP, TSA baseline review list, TSA security related documents, and the staff's knowledge of the BART transit system. The five (5) checklists are listed in Appendix D.

Staff's checklist identifies the core security-related elements and characteristics reviewed. Each checklist references Commission, BART, and other documents that establish the security program requirements. The methods used to perform the review include:

- Discussions and interviews with BART Police and DCC Management
- Reviews of rules, procedures, policies, and records

Immediately following the security review, staff summarized the findings and the preliminary recommendations (if appropriate) with BART's Manager of Security. The post-review summary is beneficial for clarifying findings or best-practices and provided BART an opportunity to promptly address any necessary security improvements.

5. FINDINGS AND RECOMMENDATIONS

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APPENDICES

APPENDIX A
ACRONYMS LIST

Abbreviation / Acronym	Description
APM	Automated People Mover
BART	Bay Area Rapid Transit District
CAP	Corrective Action Plan
CFR	Code of Federal Regulations
Commission	California Public Utilities Commission
CPTED	Crime Prevention Through Environmental Design
CPUC	California Public Utilities Commission
DCC	Doppelmayr Cable Car
DMU	Diesel Multiple Unit
eBART	East Contra Costa BART Extension
FTA	Federal Transit Administration
GO	General Order
ICS	Incident Command System
ISA	Internal Security Audit
OAC	Oakland Airport Connector
OCC	Operations Control Center
RTCB	Rail Transit and Crossing Branch
RTSS	Rail Transit Safety Section
SARA	Scanning Analysis Response Assessment
SSPP	System Security Program Plan
Staff	Safety and Enforcement Division personnel
SVRT	Silicon Valley Rapid Transit
TSA	Transportation Security Administration
TVA	Threat and Vulnerability Assessment
VTA	Santa Clara Valley Transportation Authority

APPENDIX B
BART 2016 TRIENNIAL SYSTEM SECURITY REVIEW CHECKLISTS INDEX

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APPENDIX C
BART 2016 TRIENNIAL SYSTEM SECURITY REVIEW
RECOMMENDATION LIST

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APPENDIX D

BART 2016 TRIENNIAL SYSTEM SECURITY REVIEW CHECKLISTS

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