



Metro

Los Angeles County
Metropolitan Transportation Authority

One Gateway Plaza
Los Angeles, CA 90012-2952

213.922.2000 Tel
metro.net

May 4, 2015

TO: BOARD OF DIRECTORS

THROUGH: STEPHANIE WIGGINS *SW*
INTERIM DEPUTY CHIEF EXECUTIVE OFFICER

FROM: ROBERT HOLLAND *rhollan*
INTERIM CHIEF OPERATIONS OFFICER

SUBJECT: GOLD LINE INCIDENT POST EVALUATION / UPDATE

ISSUE

The purpose of this report is to provide the Board of Directors with staff's assessment of the Gold Line Power Disruption which occurred on Wednesday, April 22, 2015 in the city of South Pasadena, the immediate actions taken to repair the disruption and address the service impacts. Staff will also outline the lessons learned from the incident and the procedures in place to avoid a similar incident and response.

BACKGROUND

On Wednesday, April 22, 2015 at approximately 9:15 pm the Gold Line service was impacted by an overhead power infrastructure defect in South Pasadena at Monterey Road and Pasadena Avenue. The defect that occurred impacted both north and southbound tracks. As such, the Rail Operations Control Center (ROC) took immediate action to protect the passengers who were on-board the train which was disabled at the incident location. The remaining Gold Line services were turned back at the north and south of the incident location and the ROC immediately contacted Bus Operations Control Center (BOC) for support in the way of bus bridges activated to accommodate passengers. All Crossing Standards/Gates were kept in active mode for safety of road traffic, the Metro passengers and staff.

Within 15 minutes, the field area staff from LASD and Rail Transportation and an Emergency Response initiated from the Downtown Los Angeles Maintenance Traction Power Crews and the Gold Line Maintenance shop. Power was de-

energized for the incident train location and passengers were safely evacuated from the main-line tracks.

The Gold Line Maintenance shop crews recovered the incident train and the Traction Power crews conducted an assessment of the defect to the power lines and support infrastructure.

Recovery

The initial defect observed was major damage to one of the 105 weight poles along the Right of Way Gold line 20 mile system, which aids in the overhead power lines integrity. "Preliminary Forensics" of the cabling systems and weight pulley tensioner appear to show signs of fatigue which caused the power line to lose the support which resulted in power loss to the incident train.

After the initial maintenance assessment, High Rail support trucks and additional Traction power personnel were dispatched to the location. Worker safety measures were put in place that night and repair work commenced through the daylight hours of Thursday, April 23rd.

As major repairs were in process at the incident location, additional Traction Power personnel conducted inspection of approximately 200' North and South. Due to the nature of the initial impacted area, other adjustments and repairs were deemed necessary north of the incident location in both the Power lines and support cable points.

Bus Bridges

Bus bridges were activated between South West Museum and Fillmore Stations within an hour of the incident. However, the Emergency Operations Center was activated about 41 hours after the initial incident.

Maintenance repairs, Bus Bridges and Single tracking with 3 car trains continued through Friday, April 24th on Track 1 from Fillmore to South West Museum Stations and the maintenance work completed at approximately Friday, April 24th around midnight. At this time all tracks were opened and normal operations resumed and Bus Bridges terminated at approximately 8pm on Friday.

A request for clarification was received by Metro in regards Metro staff identifying a defect related to the part that "broke" and the defect was scheduled to be fixed 1-3 days after the incident occurred. This information has not been substantiated by our records and do not reflect this as of this date.

Lessons Learned

Staff has done an initial assessment of the actions following the incident, the repairs, and 51 hours of service impacts and how the public notifications were published.

The incident has highlighted that Metro's internal and external communication and coordination could have been improved. For passenger notifications of disruptions to service for unplanned repairs, Operations has implemented protocols for immediate activation of the Emergency Operations Center (EOC) which will include staff from Community Relations, Media Relations, Electronic Notifications at Stations, activating staff response to affected stations to provide information for passengers and accurate communications links between Field personnel to EOC so that timely information is conveyed related to status of repairs and affected Train/Bus service.

Staff believes that if the EOC had been activated and maintained throughout the duration of the incident and the response period, this would have facilitated greater coordination internally and externally with our customers and communities we serve. It is clear that our customers did not feel that we communicated effectively. We also did not make the bus bridge easily accessible for our customers. Although we did provide bus bridges to reduce the level impact, it was not effective.

Also, as additional defects were identified extending the repair timeline, staff recognizes that we did not communicate the revised repair times effectively to the Board and our customers.

In a future incident, staff has put in place the appropriate protocols to keep the EOC activated until the incident is found to be cleared.

NEXT STEPS

The Maintenance department has proceeded with a Maintenance and Engineering review of the hardware removed in order to find the root cause of the failure. This effort will also include an outside lab that conducts Non-Destructive testing to determine strength and fatigue of the affected hardware which will be compared to a baseline life of new components. In addition, as the Metro Quality Assurance / Quality Control Unit reports directly to the Executive Director of Maintenance, an independent investigation is underway and a follow up written assessment will be produced. Maintenance has a planned maintenance program which calls for annual inspections of the Power lines and support infrastructure. Based on the initial observations the Executive Director of maintenance has ordered an inspection of the entire Gold line route from union station north and then East Side which commenced at 10 a.m. through 2 p.m. today. As a result of each inspection, any repairs required will be properly scheduled to avoid service disruptions on the mainline.

Staff will continue to evaluate the cause of this incident and address any defects and concerns. Our primary concern is the safety of our customers and staff. We

will continue to improve on our communications to ensure a safe and reliable experience for our passengers and employees.