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**JUNE 3, 2016**

**TO: BOARD OF DIRECTORS**

**THROUGH: PHILLIP A. WASHINGTON** *PAW*  
**CHIEF EXECUTIVE OFFICER**

**FROM: JAMES T. GALLAGHER** *JTG.*  
**CHIEF OPERATIONS OFFICER**

**SUBJECT: METRO BLUE LINE SERVICE DISRUPTION**

**ISSUE**

At 5:10 p.m. Wednesday, June 1, 2016, a power failure occurred on the southbound track between Grand and San Pedro Stations of the Metro Blue Line (MBL). Service was affected for eight hours. MBL customers were redirected to a Bus Bridge one hour after the incident occurred. All repairs took place during non-revenue hours and were completed at approximately 3:12 a.m. Normal operations resumed for service on Thursday, June 2, 2016.

**DISCUSSION**

There were two contributing factors to the power failure. First, there was a non-functioning underground traction power feeder cable and second, there was a defective electronic breaker control unit in the San Pedro substation.

In order to resolve the power failure, Operations began single-tracking from the Venice interlocking near the Pico Station to Florence. The single-tracking segment was very extensive because Maple Interlocking is within the de-energization zone; and Washington Interlocking was out-of-service due to a signaling issue unrelated to the power failure. This Blue Line single-tracking segment also caused significant delays to the Expo Line, resulting in Operations turning back trains at the 23<sup>rd</sup> Street Station in order to effectively manage the amount of train traffic through the incident area.

The repairs to the underground cables are difficult to schedule because they are in the same manhole as high voltage cables feeding the Expo Line. To work safely in the confined space of the manhole will require de-energization of the Blue and Expo lines at the junction and subsequent bus bridging of both rail lines

for 24 to 36 hour period in order to cut, remove, replace and splice new cables. The cable failed due to water damage and has been out of service since early May 2016.

The signaling issue has been resolved and the interlocking will be placed back into service. Staff identified the root-cause of the problem and is procuring additional equipment to ensure the same issue does not arise in the future at other MBL interlockings.

### **NEXT STEPS**

The repairs in this area will be a challenge because work cannot be safely performed without de-energizing all cables, thus requiring staff to shut down service to both lines.

Staff are acquiring additional vendor training for the replacement and reprogramming of the referenced and similar electronic breaker control units to provide better 24/7 coverage in the event of similar equipment failures.

Management will also review lessons learned as a result of this incident in an effort to avoid similar occurrences related to this issue.