# **Safety and Enforcement Division**



# **Monthly Performance Report**

November 2017

# **CONTENTS**

COMPLIANCE WITH ORDERING PARAGRAPHS (COPS)	
NATURAL GAS SAFETY PROGRAM	4
Staff Citation Program	4
INSPECTIONS	4
Incident Investigations	4
UTILITY SELF-IDENTIFIED VIOLATION (SIV) INVESTIGATIONS	4
NATURAL GAS RELATED PROCEEDINGS	5
ELECTRIC SAFETY AND RELIABILITY PROGRAMS	6
ELECTRIC AND COMMUNICATIONS FACILITY PROGRAM	6
ELECTRIC AND COMMUNICATIONS FACILITY SAFETY: PROCEEDI	NGS7
REPORTS AND OTHER ACTIVITIES	9
ELECTRIC GENERATION SAFETY AND RELIABILITY PROGRAM	9
UTILITY RISK ASSESSMENT AND SAFETY ADVISORY	
REVIEWING SAFETY & RISK IN GENERAL RATE CASES	
PROCEEDINGS	
MONITORING THE WHISTLEBLOWER WEBSITE	
OFFICE OF RAIL SAFETY	
RAILROAD SAFETY – ROSB	
ROSB INSPECTION, INVESTIGATION & FIELD ACTIVITIES	
RAIL CROSSINGS AND ENGINEERING BRANCH – RCEB	
Rail Crossing Incident Investigations	
Informal Complaints	
Safety Assessments, Quiet Zones and Reviews	
Proceedings, Resolutions and G.O. 88B Reviews	
Operation LifeSaver Inc	
Rail Transit - RTSB	
Corrective Actions Plans	
Incident Investigations	
Major Audits	
<b>1</b>   Page	November Report - 12/18/2017

Administrative Accomplishments	25
Proceedings / Resolutions	27
Safety Certification and Oversight of Rail Transit Agency Projects	29
Statistics Summary	36
Ongoing Data / Trends	38

# Disclaimer

This Report was prepared by California Public Utilities Commission (CPUC) staff. It does not necessarily represent the views of the CPUC, its Commissioners, or the State of California.

The CPUC, the State of California, its employees, contractors, and subcontractors make no warrants, express or imply, and assume no legal liability for the information in this Report.

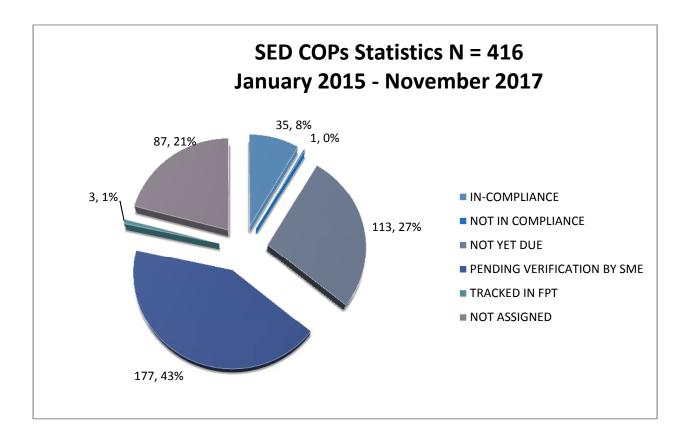
This Report has not been approved or disapproved by the CPUC.

# **COMPLIANCE WITH ORDERING PARAGRAPHS (COPS)**

Through November 30, 2017, SED shows 416 total entries in the COPS system; with 35 reaching compliance (8%), 113 (27%) not yet due for compliance, and 1 (<1%) currently remaining out of compliance. The remaining 267 (65%) are either pending verification or have not yet been assigned.

During November 2017, there were 27 new OPs recorded to the COPs database for the Safety & Enforcement Division, but no change in total reaching compliance.

Note, the category of "tracked in financial payment tracker" (FPT) has been verified and has been deemed "in compliance" but is listed separately in the COPS tracker.



# NATURAL GAS SAFETY PROGRAM

#### **STAFF CITATION PROGRAM**

Citation Number	Utility	Amount	Violations	Date Cited	Appealed	Status
						SWG Appealed Citation, SED has an executed
						Settlement Agreement with SWG Proceeding
D.16-09-055 G.17-05-001	Southwest Gas	\$ 200,000	192.1007 (c)	6/1/2017	Yes	Commission Approval
Total Cited 2017		\$ 200,000				

#### **INSPECTIONS**

**2017 Inspections:** GSRB has conducted 69 scheduled inspections in 2017 and has completed the final inspection report for 56 of these 69 inspections during 2017.

#### **INCIDENT INVESTIGATIONS**

As of November 30, 2017, GSRB Staff received 270 incidents year to date. 157 of the 167 (94%)

of the 2016 incident investigations are completed. Metrics on 2017 Incident Investigations:

TOTAL reported in 2017	270	Percent
Open	176	65 %
Closed	94	35 %

The CY 2017 incidents<sup>1</sup> are categorized as follows:

- 164 Level 1 incidents
- 90 Level 2 Incidents
- 9 Level 3 Incidents
- 7 Level 4 Incidents

#### **UTILITY SELF-IDENTIFIED VIOLATION (SIV) INVESTIGATIONS**

At the end of each year, the SIV process owner will conduct an annual review, which includes a trend analysis of systemic issues, determination of investigation effectiveness, and possible revision of investigation criteria.

There were two self-identified violations reported in November 2017.

<sup>&</sup>lt;sup>1</sup> Level 1: The incident did not result in injury, fatality, fire or explosion. Level 2: The incident did not result in injury, fatality, fire or explosion. The incident may have been reported due to Operator judgment. Level 3: The incident resulted in a release of gas but the incident did not result in injury, fatality, fire or explosion. Level 4: The incident resulted in injury, fatality, fire or explosion caused by release of natural gas from the Operator's facilities.

## NATURAL GAS RELATED PROCEEDINGS

- Distribution Record Keeping (I.14-11-008) (Commissioner Peterman/Lirag) (Advocacy): Decision 16-08-020 was issued on August 18, 2016, which ordered Pacific Gas and Electric to pay a fine of \$25,626,000 for several violations of General Order 112 and the Public Utilities Code. The decision also ordered PG&E to convene, support and report no later than 120 days after the effective date of the order a meet-and-confer process to develop additional remedial measures necessary to address the issues identified in the decision. Staff from GSRB attended two meet-and-confer sessions and submitted comments on PG&E's draft compliance plan, which was filed in the docket on December 16, 2016. Though closed by the decision, the proceeding was reopened based on SED's pending application for rehearing submitted on September 26, 2016. On October 26, 2017, the Commission issued its final decision (D.17-10-023) denying SED's application for rehearing, and modifying D.16-08-020 to correct typographical errors. This proceeding is now closed.
- Gas Safety OIR (R.11-02-019) (Commissioner Guzman Aceves/ALJ Kersten) (Advisory): The proceeding amended General Order GO 112-F, made fully effective no later than January 1, 2017. R.11-02-019 was closed in June 2015, however, it was re-opened after various applications for rehearing were filed by intervenors including the Utility Workers Union of America, the Office of ratepayer Advocates and the City of San Carlos. In February 2017, D. 17-02-015 disposed of a joint rehearing request from the San Carlos and ORA. In addition, Pacific Gas and Electric Company filed a petition to modify Decision 15-06-044 on January 31, 2017, on issues related to cost recovery. Disposition of PG&E's petition and UWUA's application is pending. On August 11, 2017, SED filed a subsequent petition to modify D. 15-06-44, seeking to conform GO 112F to more stringent federal regulations.
- Mobile Home Parks Pilot Program (Implementing D.14-03-021) (ALJ Semcer/ Commissioner Rechtschaffen): This decision established a three-year pilot program authorizing each California investor-owned utility to convert 10% of master-metered gas and/or electric Mobile Home Park spaces within its operating territory to direct utility service. The Pilot Program began on January 1, 2015, and will continue through 2017. San Diego Gas & Electric Company (U902M) filed A.17-05-008/ A.17-05-007 for Approval to Extend the Mobile Home Park Utility Upgrade Program. Program will now be extended.
- Citation Program OIR (R.14-05-013) (President Picker/ALJ Burcham) (Advisory): Decision 16-09-055 was issued on September 29, 2016. Some key points are listed below:
  - An administrative limit of no more than \$8 million for each citation.
  - Utility reporting of self-identified potential violations is voluntary.
  - Utilities need not notify city and county officials of a self-identified potential violation unless staff requires it.

However, the status of R.14-05-013 became "reopened" when on February 21, 2017, Senator Jerry Hill issued a petition for modification, requesting that the Commission modify the decision so as to keep in place, rather than weaken, the mandatory reporting

requirements that were imposed under ALJ-274. In March, several parties filed comments to Senator Hill's request, and Hill filed reply comments in April. The matter is pending.

Pipeline L-1600 Replacement (A.15-09-013) (Commissioner Randolph/ALJ Kersten) (Advisory): The Pipeline Safety & Reliability Project involves replacing existing Line 1600 with a new and larger gas transmission pipeline (Line 3602). The goal is to address the pipeline safety requirements for the existing Line 1600 and expand the capacity of the SDG&E's gas transmission system. On November 22, 2017, all parties including San Diego Gas & Electric Company/Southern California Gas Company (Applicant), the Office of Ratepayer's Advocates (ORA), Southern California Generation Coalition (SCGC), The Utility Reform Network (TURN), Protect Our Communities Foundation (POCF), Sierra Club, and the Utility Consumer's Action Network (UCAN) submitted their Opening Briefs in accordance with the questions presented in the Scoping Memo. Reply Briefs will be submitted on December 15, 2017.

# **ELECTRIC SAFETY AND RELIABILITY PROGRAMS**

**Reorganization:** The Electric Safety and Reliability Branch (ESRB) was reorganized in August. Rather than the two sections being organized by type of facilities (a statewide Generation section and a statewide Electric and Communications Facility section), the reorganized ESRB has a Northern section and a Southern section. There will be a transition period, with a need for cross-training staff and other steps to reorient work to more of a geographic basis. We expect that these monthly reports also will transition to a geographic basis over the next few months. However, some work, such as legislative analysis and participation in rulemaking proceedings, will continue to occur on a statewide basis.

**Pacific Gas & Electric's 2017 Fire Siege:** In October 2017, a series of wildfires devastated many counties in Northern California. At the peak of the fires, there were 21 major wildfires that, in total, burned over 245,000 acres, 11,000 firefighters battled the destructive fires that at one time forced 100,000 to evacuate, destroyed an estimated 8,400 structures, and sadly, took the lives of 42 people. SED investigatory teams have been assigned and have visited the sites of affected areas to examine evidence related to PG&E's facilities. SED is currently working closely with CAL FIRE to investigate PG&E's and communications companies' compliance with the Commission's safety rules.

#### **ELECTRIC AND COMMUNICATIONS FACILITY PROGRAM**

In November 2017, Electric Safety and Reliability Branch:

- Received seven electric facility incident reports and closed five previously reported electric facility incident investigations;
- Investigated 16 customer safety and reliability complaints;
- Performed one Electric Distribution audit

	t nivestigai	lions as or	November	50,2017	
Electric and Communication Facilities	Level 1	Level 2	Level 3	Level 4	Total <sup>2</sup>
Total open incidents	7	15	66	38	126
Total incidents reported in 2017	12	19	62	33	126
Total incidents closed in 2017	14	24	25	33	96
Total open 2017 incidents	6	12	55	26	99
Incidents reported in November 2017	0	2	2	3	7
Incidents closed in November 2017	1	3	1	0	5

#### Metrics for Facility Incident Investigations as of November 30, 2017

## **ELECTRIC AND COMMUNICATIONS FACILITY SAFETY: PROCEEDINGS**

- Investigation into Long Beach Incident (I.16-07-007) (President Picker/ALJ Cooke)(Advocacy): Decision 17-09-024 adopting Settlement Agreement between Southern California Edison and the Safety and Enforcement Division was approved on September 28, 2017. Under the settlement, SCE will pay a \$4 million penalty and spend \$11 million on various system enhancement projects intended to reduce the chance of public injury, reduce the risk of future system failures, and to improve the utility's operational awareness and network maintenance. ESRB is currently monitoring SCE's work to ensure compliance with the settlement agreement.
- Creation of a Shared Database or Statewide Census of Utility Poles and Conduit (R.17-06-028); Communications Provider Access to Poles (I.17-06-027); Competitive Local Exchange Carrier Wireless Facilities on Poles (R.17-03-009) (Commissioner Picker/ALJ Mason/ALJ Kenney)(Advocacy): On June 29, 2017, the CPUC voted to consolidate R.17-03-009 with the new R.17-06-028 and I.17-06-027. ESRB staff will be advocacy in the consolidated proceeding. On November 17, 2017, the ALJ issued a ruling setting a prehearing conference for December 5, 2017 with statements due by November 30, 2017. ESRB staff accordingly filed a prehearing conference statement addressing issues relevant to R.17-06-028 and I.17-06-027.
- Fire Safety Rulemaking (R.15-05-006) (President Picker/ALJ Kenney/ALJ Kao) (Advocacy): D.16-05-036 adopted Fire Map 1, which depicts areas of California with an elevated hazard for the ignition and rapid spread of fires. In January 2017, D.17-01-009 adopted a work plan for completing Fire Map 2 and developing potential new fire safety rules. In June, the Commission adopted D. 17-06-024 deleting Shape C and setting a new due date

<sup>&</sup>lt;sup>2</sup> Level 1: A safety incident that doesn't meet Level 2, 3, or 4 criteria. Level 2: Incident involved a power interruption not due solely to outside forces. Level 3: Incident involved damage estimated to exceed \$50,000 and caused, at least in part, by the utility or its facilities. Level 4: Incident resulted in a fatality or injury requiring hospitalization and that was caused, at least in part, by the utility or its facilities.

for completing Fire Map 2 by November 27, 2017. The work regarding the development of specific fire safety regulations applicable to the forthcoming fire map depicting the "High Fire Threat District" is complete. In the month of November, several milestones were achieved. The Peer Development Panel (PDP) submitted the final Independent Review Team (IRT)-approved maps, in GIS and PDF formats, into the record. The assigned ALJs issued a proposed decision (PD) regarding the potential fire-safety regulations developed in conjunction with the map. Also, parties filed opening comments on the PD and Reply comments are expected in early December. The Commission is scheduled to vote on the decision in its December 14 meeting.

- Proceeding to Consider Amendments to GO 95 (R.17-10-010) (Commissioner Picker/ALJ Mason/ALJ Goldberg) (Advocacy): As directed in D.16-01-046, SED filed P.17-03-004 to adopt, amend, or repeal rules in GO 95. In response to SED's petition, the Commission opened R.17-10-010 in October 2017, to consider the amendments discussed in SED's petition. Pursuant to the ALJ ruling, on November 15, SED and all interested parties met and developed a proposed schedule for the proceeding. On November 29, SED submitted combined comments and prehearing conference statements. Pending.
- Repealing/amendments to Rule 18 OF GO 95 (R.16-12-001) (President Picker/ALJ Kenney) (Advocacy): In response to an SED petition for rulemaking, the Commission opened this proceeding to consider amendments to, and possible repeal of, Rule 18 of GO 95. On October 6, 2017, SED and a majority of parties filed a joint motion requesting that the Commission adopt the attached Settlement Agreement. Replies to the joint motion were filed on October 30, 2017.
- Physical Security of the Electric System (R.15-06-009) (Commissioner Rechtschaffen/ALJ Kelly) (Advocacy): Phase I will address physical security for electric supply systems, and additional phases will address disaster and emergency preparedness plans for electrical corporations and regulated water companies. On September 14, ESRB submitted comments on the joint utilities' straw proposal for physical security regulations. Parties continue to follow ALJ Kelly's proceeding schedule for the Physical Security OII. The next workshop is planned for December 6, 2017.
- Electric Storage Procurement (R.15-03-011) (Commissioner Peterman/ALJ Cooke) (Advisory): ESRB continues to provide advisory support to help determine best practices related to energy storage, and the proper way to inspect such facilities. On November 3, 2017, a Proposed Decision was filed and could be heard, at earliest, at the Commission's December 14, 2017 Business Meeting. The decision provides direction to the utilities on how to promote the ability of storage resources to realize their full economic value when they are capable of providing multiple benefits and services to the electricity system. The decision will also close the proceeding.
- Distributed Energy Resources (R.14-08-013) (President Picker/ALJ Mason/ALJ Allen) (Advisory): On September 28, 2017, the Commission adopted a Decision that addressed Track 1 Demonstration Projects A (Integration Capacity Analysis) and B (Locational Net Benefits Analysis). ESRB will continue to review the issues and provide advisory support.

SB 1028 (Hill) "Electrical corporations: wildfire mitigation plans": In September 2016, the Governor signed SB 1028, which requires each electrical corporation and each publicly owned electrical utility or electrical cooperative to annually file a wildfire mitigation plan. Additionally, this bill requires the Commission (for electrical corporations) or the governing board (for publicly owned electrical utilities or electrical cooperatives) to review and to comment on the submitted plans. The Governor's approved budget for FY 17-18 contains three positions in ESRB for this project; ESRB is in the process of initiating a new program dedicated to wildfire mitigation practices.

## **REPORTS AND OTHER ACTIVITIES**

 Transmission Maintenance Coordination Committee (TMCC): TMCC is an advisory committee to help the CAISO develop, review and revise Transmission Maintenance Standards. ESRB is a member and attends quarterly meetings.

## **ELECTRIC GENERATION SAFETY AND RELIABILITY PROGRAM**

ESRB performed the following generation-related activities in November 2017:

- Completed a draft audit report for Topaz Solar Farm.
- Continued to work on both the facility audit and an investigation of a fatality incident that occurred on March 6, 2017 at Sentinel Energy Project in North Palm Springs.
- Completed a draft incident investigation report and notice of violation letter for the investigation of an injury incident that occurred on April 8, 2017 at La Paloma Generating Station in McKittrick.
- Continued to work on the investigation of a fire incident that occurred on January 29, 2017 at Delta Energy Center in Pittsburg.
- Monitored two forced and 18 planned outages that were reported by natural gas and renewable power plants.
- Continued to verify the corrective actions that were taken by the Generating Asset Owners (GAOs) as a result of the Colusa, Redondo Beach, Mandalay, and High Winds power plant audits for compliance with GO 167 requirements.
- Continued to coordinate with Energy Division on reliability monitoring calls with the IOUs to monitor system reliability.
- Staff attended a 2-day EUCI training on Distributed Energy Resources.
- Implemented a new web-based outage reporting database, Power Plant Outage Reporting (PPOR), which allows the GAOs to report the major outages by directly entering the information into a web portal. In November, ESRB contacted all Plant Managers to set up database access credentials, provided user instructions, and responded to questions regarding the new database. The GAOs started reporting outages to the PPOR on December 1, 2017. Staff also updated the website to support the PPOR rollout.

Electric Generation Incidents	Level 1	Level 2	Level 3	Level 4	Total <sup>3</sup>
Total open incidents	0	0	1	2	3
Total incidents reported in 2017	0	0	1	2	3
Total incidents closed in 2017	0	0	1	0	1
Total open 2017 incidents	0	0	1	2	3
Incidents reported in November 2017	0	0	0	0	0
Incidents closed in November 2017	0	0	0	0	0

#### Metrics for Generation Incident Investigations as of November 30, 2017

# UTILITY RISK ASSESSMENT AND SAFETY ADVISORY

## **REVIEWING SAFETY & RISK IN GENERAL RATE CASES**

On October 6, 2017, San Diego Gas & Electric and Southern California Gas Company each filed their applications for Test Year 2019 General Rate Cases, along with a request to consolidate the two applications into a single GRC proceeding (A.17-10-007/008). Though they have not specifically requested a four-year rate cycle, the Sempra utilities provided analysis for an additional attrition year, projecting costs through 2022.

SDG&E is seeking a \$218 million revenue requirement increase for 2019, for a total \$2.199 billion, with subsequent yearly attrition increases that would raise total revenue to \$2.6 billion in 2022. While the first year increase is 11%, the cumulative total for the four years would represent a 30% increase over current authorization.

As is standard practice, the utility provided a Test Year figure for O&M expenses (\$1.056 billion) and a three-year amount for Capital (\$3.139 billion 2017-2019).

For SoCal Gas, the 2019 increase would be \$480 million, or 19.1% above the current authorized \$2.509 billion—raising the revenue requirement to a total \$2.989 billion. This would continue rising through 2022 for a total \$3.658 billion, a cumulative increase of nearly \$1.150 billion, or 45% higher than currently. O&M in 2019 was projected at \$1.636 billion, and the 2017-2019 Capital budget was put at \$3.419 billion.

<sup>&</sup>lt;sup>3</sup> Level 1: A safety incident that doesn't meet Level 2, 3, or 4 criteria. Level 2: Incident that occurred during an Electric Alert, Warning or Emergency (AWE). Level 3: Incident resulted in a significant outage that was due, at least in part, to plant equipment and/or operations. Level 4: Incident resulted in a fatality or injury requiring hospitalization and was caused, at least in part, by plant equipment and/or operations.

**From a risk and safety perspective**, this GRC represents the first attempt to translate the Risk Assessment Mitigation Phase (RAMP) approach of identifying and prioritizing key safety risks, and analyzing potential mitigations, into a rate case. Having taken into consideration the evaluation from SED staff (see April 2017 monthly report for details) and comments from intervenors, Sempra's GRC testimony reflects a more considered portfolio of proposed mitigations programs for each of its 28 identified risks and proposed budgets (11 risks for SoCal Gas and 17 for SDG&E, with of these "cross-cutting" or common to both companies).

Sempra scheduled public workshops on November 1 and November 14, to review aspects of the application and testimony. A Pre-Hearing Conference will be held January 10, 2018.

SED RASA's role in the proceeding is to be determined. Staff are currently reviewing how Sempra has integrated the RAMP evaluation into its GRC filing. Otherwise RASA will provide an SB 900 analysis of safety-related incidents as an input to the GRC record.

#### PG&E RAMP

On November 30, 2018, Pacific Gas & Electric filed its first RAMP case, a year in advance of its 2020 GRC (I.17-11-003). In the filing PG&E identified 22 of its top risks for electric and natural gas operations, and several "cross-cutting" risks, including contractor safety, cyber security and workplace violence. Additionally, the utility at the Commission's request provided some details for electric substation reliability, as well as executive compensation and corporate safety culture.

Six of the identified gas risks are also part of the PG&E 2019 Gas Transmission & Storage rate case (A.17-11-009), that was filed on November 17.

RASA staff will be conducting an evaluation of the RAMP, with a report expected in 1<sup>st</sup> Quarter 2018. The natural gas risks will also be evaluated for the GT&S case, so there is complementary analysis available to intervenors and the Commission. Other issues in the GT&S case will include PG&E's gas storage strategy, which involves selling or closing two facilities; the gas storage risk mitigation program ordered in the previous GT&S case, and other compliance matters

A PHC is scheduled for December 14 in the PG&E RAMP. The GT&S PHC will occur January 4, 2018.

## **PROCEEDINGS**

 Investigation into Safety Culture of Pacific Gas and Electric Company and PG&E Corp. (I.15-08-019) (President Picker/ALJ DeAngelis) (Advisory): A Phase 2 PHC was held August 1, 2017, during which PG&E representatives indicated that that have reviewed the report from consultants NorthStar and concur "with the vast majority" of

recommendations contained in the report. PG&E said it has created a "One PG&E Safety Action Plan" that will address the major recommendation for an "enterprise wide" plan, and that it intends to implement some 60 other recommendations as soon as possible. According to PG&E 10 percent are already being implemented, 30 percent will be underway by the end of the year and the remainder will be implemented during 2018. On September 12, 2017, the Commission hosted a workshop during which NorthStar principles were available to answer questions about the findings of the report. A November 17, 2017, Assigned Commissioner's Ruling called for PG&E testimony to be filed January 8, 2018, with intervenor testimony to follow January 29. Depending upon responses, the Commission may set hearings thereafter.

- Gas Leak Abatement OIR (R.15-01-008) (Commissioner Rechtschaffen/ALJ Kersten) (Advisory): The Commission on June 15 issued the Phase 1 decision adopting structures and policies for methane leak reporting and reduction activities, in particular formalizing the annual gas leak reporting mechanism, changes to leak reporting templates, and instituting a list of 26 Best Practices for leak detection, quantification and repairs. Parties have submitted the consensus plan and template for Compliance Plans that will be due in March 2018. RASA and staff of the Air Resources Board are conducting their review of the 2016 gas leak survey reports, which were filed June 16, 2017. On November 27, 2017, the ALJ issued a draft Joint Report on the results of the 2016 annual leak surveys, with comments due Dec. 15. The ruling also sent out for comment the Staff Proposal for Safety Metrics. Comments are due Dec. 22. Additionally, the larger utilities submitted advice letters detailing their proposed R&D and pilot projects; a workshop will be scheduled in early 2018 to review those filings.
- SCE 2017 General Rate Case (A.16-09-001) (President Picker/ALJs Roscow & Wildgrube) (Advisory): Evidentiary hearings wrapped up during the first week of August. No additional issues related to risk or safety were raised during cross-examination of witnesses. Opening briefs were filed September 8, with replies filed September 29. The Proposed Decision is currently being drafted.
- Sempra Utilities 2019 General Rate Case (A.17-10-007/008 consolidated) (President Picker/ALJ Lirag) The test year 2019 GRC applications were filed October 6, 2017 (see details in GRC section above). SED will be reviewing the testimony to evaluate how the utilities have incorporated elements of the Risk Assessment Mitigation Phase (RAMP) evaluation, and provide ongoing support regarding safety issues.
- Physical Security of Electric Infrastructure (R.15-06-009) (Commissioner Rechtschaffen/ALJ Kelly) (Advisory) On August 31, the utilities presented a revised Straw Proposal for Commission consideration. The proposal outlines a process for utilities to assess their distribution-level electrical assets, particularly substations, and to prepare a mitigation plan to reduce vulnerability to physical incursions and/or limit impacts. The process entails vetting by a qualified third-party and review by Commission staff to ensure compliance. A separate but similar review and approval process is contemplated for publicly-owned utilities, with approval of the compliance plans resting with the POUs'

governing bodies, not the CPUC. Following a September 29 workshop to review the utility proposal, SED staff is completing a whitepaper and recommendations for consideration.

- Safety Model Assessment Proceeding (A.15-05-002, et al) (Commissioner Rechtschaffen/ALJ Kersten) (Advisory): The Phase 1 Interim Decision to advance this proceeding (D. 16-08-018) determined that the risk scoring models initially proposed by utilities were not adequate and should be supplemented by use of a multi-attribute scoring model that was proposed by stakeholder groups TURN/Indicated Shippers/Electric Producers & Users Coalition. The Phase 2 Scoping Memo was issued on December 13, 2016, establishing a new schedule for the proceeding. Test Drive working groups commenced in mid-January. The two approaches were detailed in filings in mid-October, with workshops held on November 6-7 in San Francisco. Parties have requested a settlement process to reach potential agreement on the risk assessment models.
- Fire Safety Rulemaking (R.15-05-006) (President Picker/ALJ Kenney/ALJ Kao) (Advisory): D.16-05-036 adopted Fire Map 1, which depicts areas of California with an elevated hazard for the ignition and rapid spread of fires. D. 17-01-009 adopted a revised work plan and schedule on January 19, 2017. In June, the Commission adopted D. 17-06-024 deleting Shape C and setting a new due date for completing Fire Map. That map was forwarded during November for Commission consideration in December, along with a package of changes to General Order 95 and other regulations that would apply to the newly designated high-fire threat areas.
- Undergrounding Rule 20A (R.17-05-010) (Commissioner Picker/ALJ Hecht) (Advisory)
   This rulemaking was launched May 11 to review policies and funding mechanisms for the
   overhead to underground conversion program administered by electric utilities for cities
   and other jurisdictions. A PHC was held September 11, 2017, and a scoping memo will
   follow. SED will monitor the proceeding with an interest in adding safety as one of the
   program eligibility criteria.
- Utility Poles (I.17-06-027/R.17-06-028) (Commissioner Picker/ALJs Mason and Kenney) (Advisory) The Investigation and Rulemaking into possible creation of a shared database or statewide census of utility poles and conduit was initiated on June 29, 2017. This proceeding is to consider strategies for increased and non-discriminatory access to poles and conduit by competitive communications providers, the impact of such increased access on safety, and how best to ensure the integrity of the affected communications and electric supply infrastructure going forward. On a parallel track, the Commission will consider rules that would allow broadband Internet access service (BIAS) providers to attach facilities to poles and to use conduit. This proceeding is consolidated with R.17-03-009 that considers whether and how our existing Rights-of-Way Rules should be applied to wireless support facilities (lines and antennas). A PHC will be held December 5, 2017.

#### MONITORING THE WHISTLEBLOWER WEBSITE

The Risk Section has been overseeing intake for complaints that arrive via a "whistleblower" application on the Commission's web site. Whistleblower protections are afforded to utility employees and contractors who report potentially unsafe or illegal practices.

#### STATISTICS - 1/01/17 - 11/30/2017

Confirmed or Possible Whistleblower Complaints							
	САВ	Transportation	Electric Safety	Gas Safety	Telco Fraud	Rail	
January	0	0	1	0	0	0	
February	0	0	0	0	0	0	
March	0	1	0	0	0	0	
April	0	1	0	1	2	0	
May	0	1	0	1	1	1	
June	0	1	0	1	0	0	
July	0	0	0	0	0	0	
August	0	0	1	0	0	0	
September	0	1	0	1	0	0	
October	0	0	1	0	0	1	
November	0	0	0	1	1	0	
Total 2017	0	5	3	5	4	2	

Note: This is for complaints filed using the on-line Whistleblower Application ONLY.

Invalid Whistleblower Complaints Converted to Standard Complaints							
	CAB	Transportation	Electric Safety	Gas Safety	Telco/Utility Fraud	Rail	Referred to Outside Agency
January	0	1	0	0	1	1	0
February	0	0	0	0	0	0	0
March	0	0	0	0	0	0	0
April	0	0	0	0	0	0	0
May	0	0	0	0	0	0	0
June	0	0	0	0	0	0	0
July	0	0	0	0	0	0	0
August	0	0	0	0	0	0	0
September	0	1	1	0	0	0	0

October	0	0	0	0	1	0	0
November	0	0	0	0	0	0	0
YTD	0	2	1	0	2	1	0

Test, Incomplete or Duplicate Whistleblower Complaints					
January	1				
February	3				
March	0				
April	1				
May	1				
June	4				
July	0				
August	3				
September	0				
October	1				
November	0				
YTD	14				

# **OFFICE OF RAIL SAFETY**

#### **RAILROAD SAFETY - ROSB**

In the month of November 2017, SED Staff's Railroad Operations group completed:

New Incidents Investigated	11
Informal Complaints Investigated	1
Safety Assessments/Reviews	13
Compliance Actions	671
Major Inspections Completed- Such as Focused Inspections	1
Operation LifeSaver Presentations	9

## **ROSB INSPECTION, INVESTIGATION & FIELD ACTIVITIES**

November 4, 2017: Three CPUC railroad safety inspectors and one CPUC utilities engineer observed a passenger train emergency-preparedness simulation at the CalTrain Tamien Station in San Jose. The exercise was conducted jointly by CalTrain and the Altamont Corridor Express (ACE). CalTrain simulated a derailment resulting from a terrorist placing a derail device on the mainline track. The ACE train subsequently ran into the side of the derailed CalTrain train.

49 CFR Part 239.103 requires each railroad that operates passenger service to conduct fullscale emergency simulations to determine its capability to execute the emergency preparedness plan under a variety of scenarios that could reasonably be expected to occur. The CPUC railroad safety inspectors checked for compliance with federal and state regulations and to evaluate preparedness and coordination between CalTrain and ACE passenger railroads and their dispatch control centers. Passenger train emergencypreparedness simulations are extremely useful in identifying any impediments to life-saving efforts and rescue should a real passenger train emergency occur. The simulation also afforded an opportunity to observe the working relationships with the railroads and emergency responders and the dissemination of information concerning access to railroad equipment, facilities and any special circumstances such as bridges, tunnels or anything that could make handling emergencies difficult.

The CPUC safety staff observed comprehensive job briefings between the passenger railroad officials, railroad crews, railroad managers, emergency responders, and public volunteers acting as injured passengers prior to the exercise. The briefing included familiarization with the location of emergency information on board the trains, emergency exit locations, and emergency operation of doors, removal of windows, and the shutdown of locomotives. The CPUC safety staff monitored radio communication between train crews and the control center. The CPUC safety staff also evaluated the effectiveness of the emergency-response personnel including police, fire, and ambulance services.

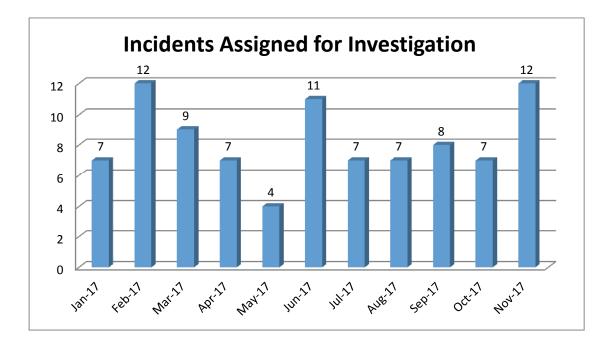
The CPUC railroad safety staff was concerned about an ineffective shutdown of locomotives and insufficient access to passenger cars. A mistake made in the shutdown process could create a situation where an ignition source for a fire via a running locomotive could add to an already volatile situation. At the conclusion of the simulation, the senior CPUC railroad safety inspector briefed the exercise participants, referenced the positive aspects that the CPUC observed, and made recommendations for additional training of those who were tasked with the shutdown of locomotives and accessing passenger cars. The CPUC safety staff also noticed that neither CalTrain nor ACE notified the Office of Emergency Services (OES). Notifying OES is one of the essential parts of the process because OES provides dispatch and central coordination between all of the state departments and emergency

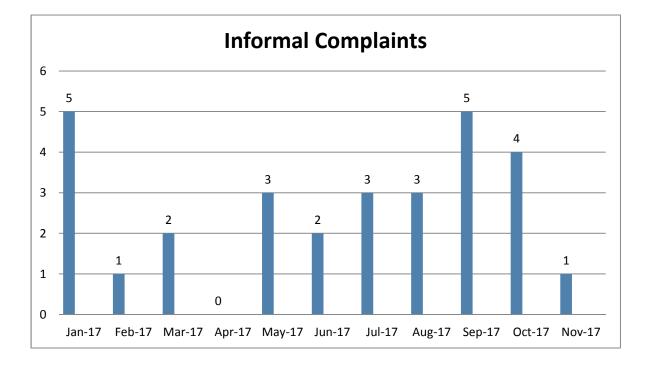
responders. OES also provides critical safety information to the general public. The CPUC railroad safety staff conveyed these deficiencies to CalTrain and ACE personnel and recommended a review and revision to their safety procedures.

49 CFR part 239.105 requires the passenger railroads to conduct a debriefing and critique session within 60 days after each passenger train emergency simulation to evaluate the effectiveness of their emergency-preparedness plans and make recommendations on improvements. The senior CPUC railroad safety inspector requested a written copy of CalTrain's debriefing and critique session to ensure the noted deficiencies would be addressed.

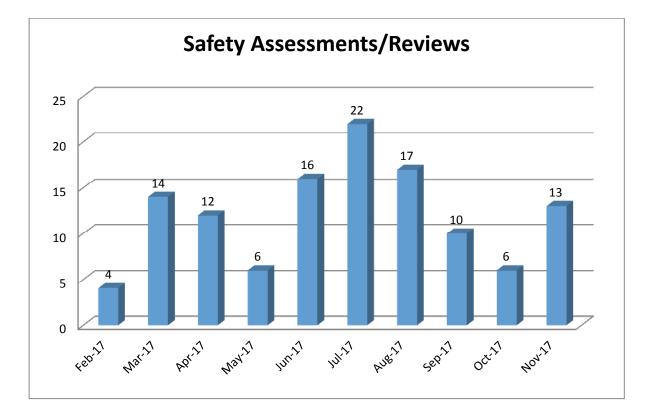
- November 4, 2017: A CPUC railroad safety inspector performed an Operation Lifesaver (OL) presentation at the Orange Rail Museum in the city of Perris, Riverside County. Over 50 people took part in the presentation which included disruption of OL safety brochures and handouts.
- November 8, 2017: A CPUC railroad safety inspector performed an Operation Lifesaver (OL) presentation to a professional trucker's association organization in the City of Corona, Riverside County. 48 attendees took part in the presentation where rail safety literature was passed out and avoidance of rail safety hazards being the focus of the presentation.
- November 8, 2017: A CPUC railroad safety inspector performed an Operation Lifesaver (OL) presentation at the Torch Middle School in the City of Industry, Los Angeles County. An OL PowerPoint presentation and distribution of OL safety handouts were part of the event. Over 400 K-8 grade students, teachers and administrators attended the event.
- November 13, 2017: A CPUC railroad safety inspector performed an Operation Lifesaver (OL) presentation at Banning High School in the city of Banning, Riverside County. OL safety handouts were distributed at the event and over 100 K-8 students, teachers and administrators attended the event.
- November 17, 2017: A CPUC railroad safety inspector who specializes in railroad equipment conducted an inspection on the UPRR in Fairfield. During the inspection, he identified impaired walkways which can cause tripping hazards to railroad employees. In a few areas, tree limbs and vegetation had overgrown, which can cause a railroad employee riding on the side of a car to get knocked off, often resulting in injury or fatality. In another section, he observed a stack of railroad ties and a switch stand that were too close to the track, which are tripping hazards to railroad employees, especially employees who work in the evenings. General Order 26-D requires walkway clearances of at least 8' 6" on straight track and 9' 6" on curved track. The CPUC railroad safety inspector contacted a UPRR manager and the manager of track maintenance and reported his findings. The manager stated that he would get the issues remediated.

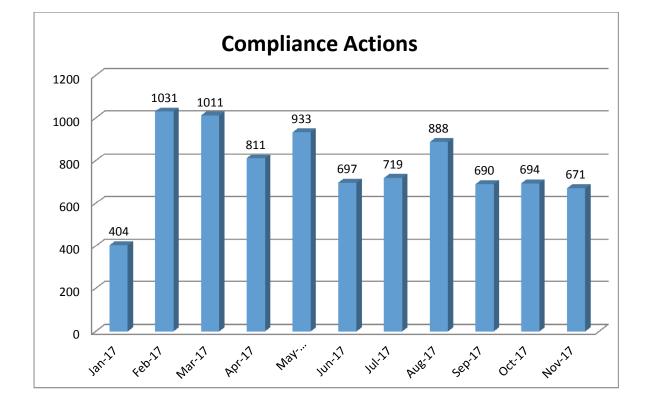
On November 30, 2017, the CPUC railroad safety inspector performed a follow-up inspection and found that the walkways were clear of foliage and debris, creating a safe working condition for railroad employees.

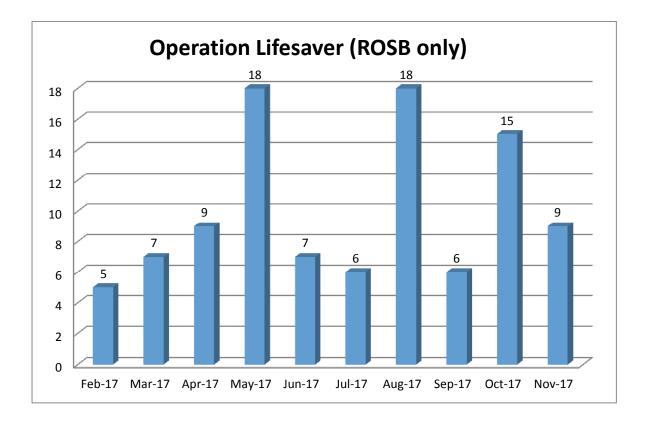




November Report - 12/18/2017







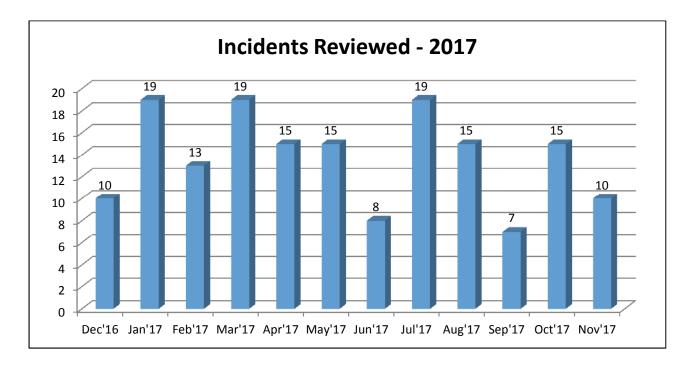
## **RAIL CROSSINGS AND ENGINEERING BRANCH – RCEB**

In November 2017, the Rail Crossings and Engineering Branch completed the following:

	New During Period	Closed During Period
Crossing Incident Reviews	19	10
Informal Complaints Investigations	0	0
Safety Assessments/Quiet Zones/Reviews	15	15
Proceedings, Resolutions and G.O. 88- B Reviews	7	11
Operation LifeSaver Presentations	11	11

#### RAIL CROSSING INCIDENT INVESTIGATIONS

In November 2017, the Rail Crossings and Engineering Branch (RCEB) assigned 19 new incidents reviews with 18 at highway-rail crossings and one at a highway-light rail transit (LRT) crossings. RCEB completed 10 crossing incident reviews and evaluations.



#### **INFORMAL COMPLAINTS**

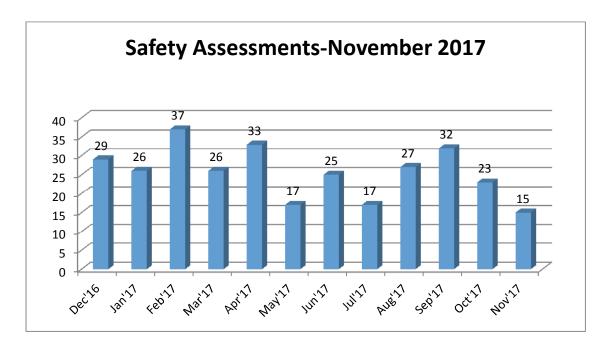
**Informal Complaints - November 2017** Closed 2 2 2 1.5 1 1 1 1 1 1 0.5 0 0 0 0 0 Junil 14127 Decito AUEII sepil octl 40<sup>11</sup> Jan 1 Feb 1 Maril APIT MAYIT

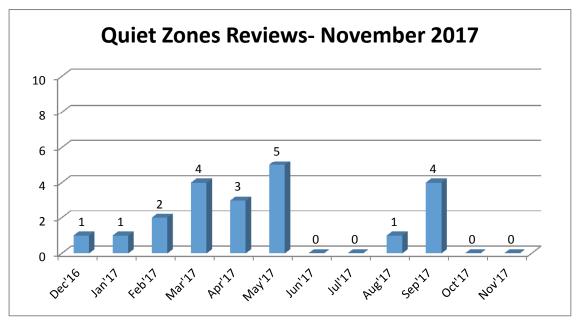
In November 2017, RCEB did not receive or close any highway-rail crossing complaint.

November Report - 12/18/2017

#### SAFETY ASSESSMENTS, QUIET ZONES AND REVIEWS

In November 2017, RCEB completed 15 rail-crossing safety assessments involving: communications, field inspections, and diagnostic reviews with railroads and local agencies. RCEB did not update any Quiet Zones (QTZN) during this period.





#### PROCEEDINGS, RESOLUTIONS AND G.O. 88B REVIEWS

In November 2017, RCEB staff received two new major proceedings requiring Administrative Law Judge (ALJ) review; two new Resolution requests; and, three new General Order 88-B applications for changes to existing crossings. This month, RCEB closed three ALJ Proceedings and eight General Order 88-B applications.

**PROC A1706003** – With Decision (D.) 1711025 on November 30, 2017, the CPUC approved the application of the San Francisco Bay Area Rapid Transit District (BART) for the construction of 12 grade separated rail crossings in the Cities of Pittsburg and Antioch. The BART project includes overcrossings and under crossings as part of the East Contra Costa BART Extension.

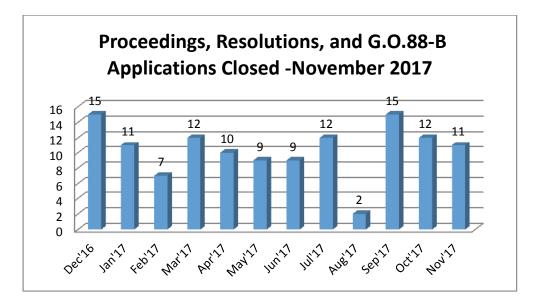
**PROC A1707006** – With Decision (D.) 1711007 on November 9, 2017, the CPUC approved the application of the City of San Mateo authorizing the construction of two grade separated vehicular underpasses and one pedestrian underpass near the 25<sup>th</sup> Avenue and Hillsdale CalTrain stations over the Peninsula Corridor Joint Powers Board Tracks in the City and County of San Mateo. The two vehicular crossings are at 28<sup>th</sup> Avenue and 31<sup>st</sup> Avenue. The pedestrian crossing is at 29 ½ Avenue. All crossings shall have the treatments and configurations specified in the application.

**PROC A1609010** – With Decision (D.) 1711015 on November 30, 2017, the CPUC approved the application of the California High Speed Rail Authority authorizing the construction of high-speed rail tracks and a rail-rail grade separation over Union Pacific Railroad's existing mainline track in Fresno County, California. The decision grants authorization to construct a grade separated track-above-track crossing at milepost 181.59 over Union Pacific Railroad existing Fresno Subdivision mainline track and at milepost 195.12 in the County of Fresno.

File	Record Id	Project	County	Date Closed
XREQ	2017100003	1st Street Modification, City of Lincoln	Placer	11/21/2017
XREQ	2017100004	3rd Street Modification, City of Lincoln	Placer	11/21/2017
XREQ	2017100005	5th Street Modification, City of Lincoln	Placer	11/20/2017
XREQ	2017100006	6th Street Modification, City of Lincoln	Placer	11/20/2017
XREQ	2017100007	7th Street Modification, City of Lincoln	Placer	11/20/2017
			Santa	
XREQ	2017100008	Cohansey Ave, Gilroy Modification	Clara	11/21/2017
XREQ	2017100012	Black Butte OH Project	Siskiyou	11/02/2017
XREQ	2017110001	SR 156, Castroville Modification	Monterey	11/14/2017

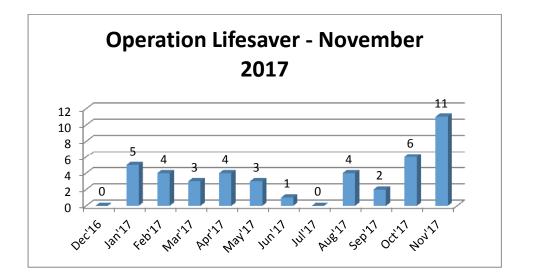
**G.O. 88-B Applications**- RCEB staff's review in November 2017 of the G.O. 88-B applications resulted in granting the modifications to the following crossing projects:

The authorizations for the projects expire in November 2020.



#### **OPERATION LIFESAVER INC.**

In November 2017, RCEB completed three Operation LifeSaver Inc. (OLI) activities that resulted in 10 presentations and staffing a booth at a fair. Staff presented the OLI rail safety message on November 2, 2017 to eight K-8 groups reaching 138 students and adults at the Manteca Agricultural Venture event in Manteca, CA. The other two presentations were at the Cosumnes Oaks High School for 78 driver's education students presented on November 3, 2017 in Elk Gove, CA. The LIFT Tehama Fair in Red Bluff on November 17, 2017, requested OLI to staff a booth. RCEB staff shared the rail safety message with over 160 homeless and low-income constituents. Staff also gave gloves with the OLI logo and socks to help the constituents remember the rail safety message and the dangers of trespassing on rail property.



## RAIL TRANSIT - RTSB

In November 2017, the Rail Transit Safety Branch (RTSB) completed the following activities:

#### **CORRECTIVE ACTIONS PLANS**

- Six CAPs were opened for November 2017.
- Six CAPs were closed.

#### INCIDENT INVESTIGATIONS

- In November 2017, 25 incidents were reported by Rail Transit Agencies (RTA).<sup>4</sup>
- Seven incident investigations were closed.

#### MAJOR AUDITS

 On November 6<sup>th</sup>, RTSB started its triennial on-site safety and security review of the Santa Clara Valley Transportation Authority (VTA) light rail system. The purpose of the triennial review is to verify compliance and evaluate the effectiveness of SRTD's System Safety Program Plan (SSPP) and System Security Plan (SSP), and to assess the level of compliance with GO 164-D as well as other Commission and regulatory safety requirements.

#### Administrative Accomplishments

 Federal Certification of SSOA Programs: State Safety Oversight Agencies (SSOAs) have until April 15, 2019 to have their program certified by the FTA. In order for the CPUC to receive FTA certification, the Commission needs to revise GO 164-D (Rules and Regulations Governing State Safety Oversight of Rail Fixed Guideway Systems) and RTSB's Program Management Standard (Procedures Manual) to bring them in compliance with the new 49 CFR Part 674 issued last year; and RTSB needs to provide the FTA a list of other required documents. RTSB is working on drafting proposed revisions to GO 164-D and its Program

<sup>&</sup>lt;sup>4</sup> Per General Order 164-D, the Commission must be notified within 2 hours by rail transit agencies of incidents if they include one of the following: a fatality at the scene, or where an individual is confirmed dead within 30 calendar days of a rail transit-related incident; an injury to two or more individuals requiring immediate medical attention away from the scene; property damage to rail transit vehicles, non-rail transit vehicles, other rail transit property or facilities, and non-transit property that equals or exceeds \$25,000; a collision at an at-grade crossing; a mainline derailment; a collision with an individual on a rail right-of-way; a collision between a rail transit vehicle and a second rail transit vehicle, or a rail transit non-revenue vehicle; an evacuation due to life safety reasons.

Standards. On August 18, RTSB electronically transmitted the required documents to the FTA. On October 17, RTSB transmitted additional required documents to FTA staff for their informal review. Currently, RTSB is in Stage 2 of the Certification process, which has the following 4 stages:

- Stage 1 State (Commission is the designated SSOA for the state) is working on its submissions to the FTA. Where applicable, legislation has not yet been enacted or executive action taken.
- Stage 2 State has submitted some requirements to the FTA.
- Stage 3 State has submitted all required documents to the FTA and is engaged in a dialogue with the FTA to address comments and questions. Where applicable, all required legislation has been enacted.
- Stage 4 (Certified) State has successfully met all SSOA Program requirements, including the resources to carry out the requirements, and has received FTA certification.
- FTA Joint SSO-RTA Workshop: On October 24-27, RTSB management participated in the FTA's Joint State Safety Oversight (SSO) and Rail Transit Agency (RTA) Workshop in Arlington, VA. The workshop provided pertinent information and guidance to help States meet Federal certification requirements, and opportunities for SSO and RTA safety personnel to learn from their peers and FTA about key topics and best practices in rail transit safety.
- Web Form for the RTAs to Report Incidents to RTSB: Under GO 164-D, RTAs are required to report incidents to RTSB staff within specified time frames and when they meet certain thresholds. Currently, those notifications are being made through telephone calls and/or emails to designated RTSB staff. However, if the incident occurs outside of business hours or when the designated staff person is on leave (vacation, sick leave, etc.), RTSB staff may not receive the notification in a timely manner and forward the incident information to their management. RTSB worked with CPUC's Webmaster to develop a web form the RTAs can use to submit incident reports, which will automatically get emailed to a list of Commission staff, eliminating the need to rely on one RTSB staff person to receive the notification and forward it to others that are in need to know. On June 23<sup>rd</sup>, the Webmaster created the first version of the web form, and RTSB staff has been testing it to identify bugs and has been submitting requests to the Webmaster to address them. The San Francisco Municipal Transportation Agency and Sacramento Regional Transit District are helping RTSB test the new system.
- Training: On October 17 and 18, two RTSB inspectors completed the Fundamentals of Railway Train Control and Signaling training provided by University of Wisconsin-Madison.

#### PROCEEDINGS / RESOLUTIONS

#### Ongoing:

I.16-06-010 Investigation into Fatal Accident on BART Tracks (Commissioner Randolph/ALJ Kim) - On June 28, 2016, the Commission instituted a Formal Investigation in response to a two fatality Bay Area Rapid Transit (BART) accident on October 19, 2013. The purpose of this investigation is to a) examine the accident, b) determine whether BART repeatedly violated state codes and regulations by failing to provide adequate protection for BART's wayside workers, c) whether BART's train-operating personnel's lack of training and certification contributed to the accident, d) whether BART violated Rule 1.1 of the Commission's Rules of Practice and Procedure by failing to provide the Commission with an accurate list of who would be operating its trains during a strike occurring at the time of this accident, and e) whether Rule 1.1 was violated by BART's failure to obtain prior approval of the use of uncertified, untrained, and unapproved personnel to operate trains during the strike. Additionally, the investigation will determine whether BART should be fined or otherwise penalized for any of these violations.

A prehearing conference was held on October 11, 2016. On October 18, 2016, both parties filed a Joint Case Management Statement. On December 28, 2016, the Commission issued a scoping memo for the case, identifying the topics to be investigated and affirming the need for a hearing. On January 23, 2017, ALJ Kim issued a ruling setting the dates of evidentiary hearing to February 13-16, 2017.

Hearings were held and closing briefs were filed by both SED and BART on March 28, 2017. On June 20, 2017 the Commission issued D.17-06-018 extending the statutory deadline for the proceeding to December 23, 2017.

The ALJ's September 5th Ruling directed Staff to resubmit three (3) new Exhibit SED-50's by September 18, 2017 because the video with the original submission was defective... A September 7<sup>th</sup> Ruling relieved staff of the resubmittal obligation as the Commission's IT staff was able to resolve the problem.

On October 6, 2017, ALJ Kim issued "Presiding Officer's Decision Regarding Alleged Violations by San Francisco Bay Area Rapid Transit District Relating to the October 19, 2013 Fatal Accident" (POD). It includes the following orders:

- Assesses a fine of \$659,000.00, and immediately stays two thirds of the total assessed fine;
- In lieu of the stayed fine places BART on probation for 3 years, during which BART must comply with certain requirements; and

 Requires SED to monitor BART's compliance with this decision; and to no later than 9 months prior to the expiration of BART's probation, prepare and submit SED's recommendation on whether BART's probation should be extended beyond three years.

In November 2017, the assigned ALJ issued a Proposed Decision (PD) that would extend the statutory deadline for resolution of the proceeding to June 23, 2018. The PD asserts that the extension is necessary in order to consider pending appeals and the record. On November 6<sup>th</sup>, the CPUC's Safety Enforcement Division and BART each filed separate appeals to the Presiding Officers Decision that was issued on October 6, 2017.

R.09-01-020 Rulemaking into Railroad Worker Protections (Commissioner Rechtshaffen/ALJ Kim): On January 29, 2009, the Commission issued an Order Instituting Rulemaking "OIR" or "rulemaking" in response to a fatal Bay Area Rapid Transit (BART) employee accident on January 12, 2001, a fatal July 24, 2008 Sacramento Regional Transit District (SRTD) maintenance employee accident, and an October 14, 2008, BART employee fatal accident. The purpose of this investigation is to determine (1) whether current protections for rail transit agency roadway workers are adequate, (2) whether the State of California should implement a Commission General Order (GO) implementing new rules for rail transit agency protection of maintenance-of-way, track, signal, operating employees, and others engaged in roadway work, and (3) if new protections are needed, a description of the protections to be required by rail transit agencies and included in the Commission General Order.

On March 17, 2017, as requested by the ALJ, staff filed a report that contained staff's recommendations for reconciling Commission GO 172: Rules and Regulations Governing the Use of Personal Electronic Devices by Employees of Rail Transit Agencies and Rail Fixed Guideway Systems and Commission GO 175-A: Rules and Regulations Governing Roadway Worker Protection Provided by Rail Transit Agencies and Rail Fixed Guideway Systems language and the proposed Commission GO language. Staff proposed changes to Commission GO 172 only. On September 27, 2017 Commissioner Rechtschaffen and ALJ Kim issued "Assigned Commissioner's and Administrative Law Judge's Joint Ruling and Eighth Amendment to Scoping Memo and Ruling", which adopted the limited proceeding scope and schedule for the remainder of the proceeding. The Ruling found the only issues left for the Commission's consideration are the pending recommendations by SED and determination of the most prudent procedures to consider any amendments needed to GO 172 and/or GO 175-A. It also sets a projected release of the Proposed Final Decision in October 2017.

On October 30, Commissioner Rechtschaffen issued a proposed decision, finding that all issues relating to GO 175-A had been resolved and closing the rulemaking. It also stated

an intention to open a new rulemaking to consider SED's proposed amendments to GO 172. On November 30<sup>th</sup>, the CPUC approved Decision D.17-11-017 that closed the rulemaking and deferred the consideration of Staff's recommended changes to GO 172 to a new prospective proceeding.

 Resolution ST-206 – On October 26, 2017, Bay Area Rapid Transit (BART)'s Communication-Based Train Control Project (CBTC) Safety Certification Plan (SCP) was approved via ST-206. The project will re-signal the entire BART mainlines with CBTC. The new technology utilizes two-way digital Radio Frequency communications between intelligent trains, and a network of distributed zone controllers. CBTC will improve BART's reliability and availability beyond the existing fixed block train control. The project is a design-build project and will complete in phases. The project is to award a design-build contract sometime in 2018.

#### SAFETY CERTIFICATION AND OVERSIGHT OF RAIL TRANSIT AGENCY PROJECTS

- AirTrain Extension Project: On August 10, 2017, the AirTrain Extension Safety Certification Plan (SCP) was approved via Resolution ST-205. The project expands the existing AirTrain System to include a new Long Term Parking (LTP) Garage Station and add an additional inline Hotel Station serving a future hotel. Additional planned changes include an upgrade to line-of-sight (LOS) train to wayside signaling and communications, field retrofits of 39 vehicles to LOS technology, an upgrade to the Central Control, a 2000 ft. guideway extension, four additional guideway crossover switches, additional traction power system, and three new Innovia APM 100 vehicles. The project will have three Safety Certification Verification Reports, as it has three phases and will start revenue services accordingly, from October 2018 to June 2019. AirTrain recently submitted draft design conformance checklists to which Staff returned comments.
- BART New Vehicle Procurement: BART is in the process of procuring 775 new rail vehicles. BART has already received ten of these vehicles (five D cars and five E cars) for testing, and is storing them at its Hayward Yard facility. RTSB staff has been witnessing testing and participating in Safety and Security Certification meetings to oversee the procurement process. BART I submitted its interim Safety Certification Verification Report (SCVR) for these first 10 vehicles on October 30, 2017.
- East Contra Costa BART Extension: This project, also known as eBART, will add 10 miles of track extending rail service eastward from the Pittsburg Bay Point station utilizing eight Diesel Multiple Unit (DMU) vehicles. This project is currently in the construction phase, and is being safety certified by RTSB, whose staff regularly attends safety certification meetings. Signal testing is on-going. Trains are currently undergoing testing during the

non-revenue hours. Station and Maintenance Facility construction is currently ongoing. Remaining construction activities are going through punch lists. The main construction activity is the escalator installation. Track work is completed. Pre-revenue period will begin after turnover of facilities to the Operations group. eBART has recently hired 30 new staff for operations. In addition, BART has hired a Safety and Training Manager for the eBART and Oakland Airport Connector (OAC) systems. The new manager, Tony Onisko will report directly to BART's Chief Safety Officer. Also, the new eBART and OAC manager is required to notify RTSB's Designated Engineer for BART of any reportable incidents on the eBART or OAC systems. This project expects to be in revenue service by approximately May 2018. The System Safety Program Plan and draft Emergency Response Plan were submitted officially to RTSB staff. The SSPP has been approved.

Silicon Valley Berryessa Extension (SBVX): Bay Area Rapid Transit (BART) and Santa Clara Valley Transportation Authority (SCVTA) are currently in the process of jointly constructing a 10-mile BART system track extension and two new stations – the Milpitas and Berryessa stations. The project is expected to be completed toward the end of 2017 (December), and is currently in the construction and testing phase for Traction Power Substation (TPSS), Train Control, Communication, etc., and in the pre-testing phase for other elements of the system. RTSB Staff regularly attends and participates in the Safety and Security Review Committee (SSRC) and Fire Life Safety and Security Committee (FLSSC) meetings and monitors the project progress. Additionally, RTSB Staff receives weekly or monthly schedule updates via email on the testing progress. On May 1, 2017, Staff observed the Railroad Intrusion Detection System (RIDS) testing at S24 location in Milpitas and on May 12, 2017, Staff observed the Powell Phase 3 pre-testing related to SME TPSS. Staff attended and participated in the SSRC and FLSSC meetings related to the SVBX project on May 18, 2017. On May 22 and 23, 2017, RTSB Staff observed SHO TPSS functional testing from field. There were some discrepancies noted and BART engineers will have it on the punch list items. On May 24, 2017, RTSB Staff attended and participated in the FTA Quarterly meeting at the SVBX Office in Milpitas. On June 8, 2017, RTSB Staff participated and observed the Traction Power Substation Testing from the Project Test Center. On June 21-22, 2017, RTSB Staff participated in the SVBX track inspection walkthrough with BART engineers and inspectors along with the SVBX contractors. The 10 miles of tracks was inspected.

On July 13, 2017, Staff attended and participated in the SSRC and FLSSC meetings related to the SVBX project at the SVBX office in Milpitas. On July 27, 2017, Staff attended, observed and participated in the Traction Power Substation (TPSS) integration regression testing related to TPSS SWA (Warren Avenue). July 29, 2017, Staff attended and observed the TPSS integration regression testing related to TPSS from Hostetter to Maybury. On

the night of Friday, September 8, 2017, Staff attended and participated in the BART Power Train Run testing. On October 26, 2017, Staff attended and participated in the SSRC meeting #46.

- Downtown Sacramento Streetcar Project: On July 12, RTSB staff participated in an FTA quarterly meeting with SRTD regarding the Downtown Sacramento Streetcar project. Although a Joint Powers Authority is being established as the system owner/operator involving the City of Sacramento and City of West Sacramento, SRTD, as the only local entity with expertise on rail transit construction and operations has been requested to provide design and construction oversight of the project. Additionally, the Streetcar will operate over a portion of the existing SRTD tracks. The project is still in preliminary design. Crossing diagnostics were held in July. They have requested an interpretation on GO 143-B as it pertains to interlockings at rail-rail crossings.
- Central Subway Project: SFMTA is excavating 1.7 miles of tunnel to extend the Muni Metro Third St. Line to provide a direct transit link between the Bayshore and Mission Bay areas to SoMa, downtown, and Chinatown. This project, due to be completed in December 2019 per the latest update, is in the construction phase and is being monitored by both Central Subway Project (CSP) and RTSB staff through regular meetings, review of documentation related to safety certifiable elements to ensure conformance with specified safety requirements and design criteria, and site visits.

On August 31, 2017, between 11 AM and 1 PM, RTSB Staff and Inspectors, and ROSB Staff participated in the construction site tour of CSP's Yerba Buena/Moscone Center (YBM) station, along with SFMTA's Chief Safety Officer. The tour was provided and facilitated by the SFMTA CSP Deputy Director. YBM is currently the most developed station of the CSP's three underground stations with the station platform and tracks nearing completion. CSP periodically provides verification documentation for any construction certification items that are completed to members of the CSP Safety and Security Certification Review Committee (SSCRC), which includes RTSB and SFMTA system safety staff. Whenever RTSB or SFMTA Safety staff has any questions with such document submittals, they will communicate them to CSP team. CSP tracks the items in guestion by RTSB or SFMTA Safety staff on its monthly SSCRC meeting minutes until satisfactory resolution is reached. This process will continue throughout the construction phase of the project. On November 16, 2017, CSP provided verification documentation for 35 construction certification items to the SSCRC for review and approval. Other than these items currently undergoing review by staff, CSP has yet to address RTSB staff's inquiries sent to CSP on a number of documentation submittals sent to the SSCRC within the past year, which is being tracked on the monthly SSCRC meeting minutes through resolution. The completion of the project has been forecasted to be delayed by almost a year, mostly caused by the

production rate at the Chinatown station being behind schedule. A project contractor was limited in terms of equipment, tight spaces, environmental issues, etc. CSP is trying to accelerate the construction of the project to close that gap by increasing and paying for more construction hours.

- LA Metro (LACMTA) P3010 New Vehicle Procurement Project: Los Angeles County Metropolitan Transportation Authority (LACMTA or LA Metro) is in the process of procuring up to 235 new rail vehicles to provide the needed capacity expansion for the recently completed projects (Expo Phase 2 and Foothill Extension Phase 2), and for the future LAX/Crenshaw line which is currently in construction. On March 4, 2016, RTSB staff approved the LACMTA request to introduce the first batch of P3010 cars into revenue service after review of the Safety Certification Verification Report, various test records, and the individual vehicle history books. As of November 30, 2017, ninety-eight (98) P3010 vehicles have been approved for revenue service by RTSB staff.
- LACMTA HR4000 Heavy Rail Vehicle Procurement: LACMTA is in the process of procuring a base order of 64 with options for up to 282 new heavy rail vehicles (HRV) to provide for the future expansions of Regional Connector and Purple Line Extensions, and to replace the existing aging HRV fleet operating on the Red Line subway. The Safety Certification Plan was approved under Resolution ST-185; however, no vehicles have yet been delivered.
- LACMTA Regional Connector Project: Currently in tunnel boring and utility relocation phase. RTSB staff regularly attends LACMTA's monthly Fire Life Safety and Security Meetings, as well as Safety and Security Certification Review Meetings, and has approved a temporary shoofly track to allow tunnel boring to commence. The tunnel boring machine has completed one tunnel and currently boring the second parallel tunnel.
- LACMTA Purple Line (Westside) Extension Project: LACMTA is currently expanding rail network and services, including extending the Purple Line. The Westside Purple Line Extension, previously named the Westside Subway Extension, extends service from the terminus at Wilshire/Western Station to Westwood (UCLA and Veteran's Administration Hospital). This extension, consisting of nearly nine miles of heavy rail subway and seven stations, is planned to be constructed in three sections, and is currently in the utility relocation phase.

On June 16, 2017, LACMTA has submitted an update to the original Safety and Security Certification Plan, dated November 30, 2011. Staff has reviewed and approved the revision. RTSB staff regularly attends Westside PLE's monthly Fire Life Safety and Security Meetings, as well as Safety and Security Certification Review meetings.

 LACMTA/MGLFECA Foothill Extension Phase 2B: LACMTA and Metro Gold Line Foothill Extension Construction Authority have submitted the project's Safety Certification Plan (SCP), which was approved by Resolution ST-194, "Granting Approval of the Los Angeles

County Metropolitan Transportation Authority and Metro Gold Line Foothill Extension Construction Authority Foothill Extension Phase 2B Safety Certification Plan", on January 19, 2017. Phase 2B alignment is from the current terminus of LACMTA Gold Line, Azusa Station, to the City of Montclair. It will traverse through six cities with six new stations on 12.3 miles of light rail transit (LRT) at-grade track.

Foothill Authority held a kick-of meeting on June 29, 2017, for public agencies and key officials, presenting the project's current funding status and timeline. Discussions and crossing diagnostics review meetings have taken place, however no alignment construction has begun. Ground breaking is scheduled for December 2, 2017. The first two years will be to relocate and protect utilities, conduct pre-construction activities and begin qualification process for the alignment project design-build team. The project funding is short an estimated amount of \$279 million.

A recent request was made by State Senators Anthony Portantino and Connie Leyva and Assemblyman Freddie Rodriguez in support of the Foothill Gold Line Extension. The three legislators requested that the state fill the estimated \$280 million funding gap for the project using revenues from the Cap-and-Trade program; a request supported by LACMTA, as a follow-up to the project Funding Agreement. If approved as requested, the Cap-and-Trade dollars will be an important part of the overall funding for the project in both Los Angeles and San Bernardino Counties.

Foothill Authority held the project's Groundbreaking Ceremony on December 2, 2017 at 9:30am at Citrus College in Glendora. The Groundbreaking Ceremony was open to the public.

- LACMTA Crenshaw/LAX Corridor Project: LACMTA is constructing a new light rail transit line through the Crenshaw/LAX Corridor. The Line will travel 8.5 miles from the existing Metro Exposition Line at Crenshaw and Exposition Boulevards to the LACMTA Green Line and will serve the cities of Los Angeles, Inglewood and El Segundo; and portions of unincorporated Los Angeles County. The project is currently in the construction phase and is being monitored by RTSB through regular meetings. The project is due to be completed in 2019.
- Los Angeles Streetcar: The Los Angeles Streetcar is a project that is advancing under the Los Angeles County Measure M funding. Although it has not been identified for near term funding by LACMTA, the preliminary design is proceeding. The LA Streetcar staff is requesting RTSB staff to examine Commission GO 143-B requirements and suggests that the American Society of Mechanical Engineers (ASME) Standard RT-1 regarding vehicle crashworthiness/strength requirements should be considered a viable alternative to the 2 g. buff strength requirements of Commission GO 143-B.
- LAWA Automatic People Mover Project: The Los Angeles World Airports is in the Environmental Document phase for their Landside Access Modernization Project and

constructing the Automatic People Mover is part of the overall project. Below is their current timeline:

Final EIR released – February 2017 Board of Airport Commissioners Certified Final EIR – March 2017 City Council approved project and entitlements – June 2017 Final Environmental Assessment approved – Dec 2017

Award of Contract for Automated People Mover – First quarter 2018 The project is fully funded but it is a Design, Build, Finance, Operate and Maintain project and LAWA is still going through the environmental phase, therefore the contract will not be awarded until early 2018. As a result, they will not have a contractor on board to do the design until later in 2018 and a Safety Certification Plan for CPUC review in 2018.

Orange County Transportation Authority (OCTA) OC Streetcar Project: The OC Streetcar project consists of 4.15 miles of track between the Santa Ana Regional Transportation Center in the City of Santa Ana and the Harbor Boulevard/Westminster Avenue intersection in the City of Garden Grove. The trackway includes operations in the Pacific Electric (PE) Right-of Way and along Santa Ana Boulevard and 4th Street. The Project includes 10 stations in the eastbound direction and 10 stations in the westbound direction. A new operations and maintenance facility will be bordered by 5th Street to the north, the PE Right-of-Way to the south, approximately 500 feet west of Raitt Street to the east, and approximately 1,000 feet west of Raitt Street to the west. Construction is planned for mid-2018 and revenue service begins late 2020.

RTSB staff is attending the System Safety Review Committee Meetings and Fire Life Safety Committee meetings for this project. The Safety and Security Certification Plan (SSCP) for the project has been reviewed, and staff prepared Resolution ST-191 accepting the SSCP for consideration. The Commission approved the Safety and Security Certification Plan (SSCP) at its meeting on April 27, 2017.

San Francisco Municipal Transportation Agency (SFMTA) LRV4 Procurement to Expand and Replace the Rail Fleet: In September of 2014, SFMTA awarded the contract to Siemens to provide up to 260 new light-rail vehicles, to replace and expand the existing fleet. The first new car arrived in January of this year, with six (6) added in subsequent months, for a total of seven (7) cars received. The cars are now undergoing qualification testing on site to ensure integration with the existing and newly installed systems of Automatic Train Control System (ATCS), radio replacement, passenger information system and new fare collection system. This on-going project is expected to be completed in the next ten years in given phases of five needs. SFMTA and their contractor have met with CPUC staff to discuss the overall project and the requirements for submittal of the Safety and Security Certification Verification Report (SCVR).

The safety and security certification-related aspects of this project, scheduled for full completion in 2027, are being monitored by RTSB through regular meetings, review of records produced pursuant to the requirements of the project Safety and Security Certification Plan (SSCP) (e.g. Certificates of Conformance and associated supporting documentation for certifiable elements at pertinent project milestones), and participation in witness point activities (e.g. vehicle testing).

Throughout the month of October, staff attended a series of LRV4 Safety Certification Audit Sub-committee meetings held at the Muni Metro East (MME) rail facility. During these meetings, the SFMTA Audit Sub-committee reviewed documents related to the LRV4 certifiable elements and certificates of conformance.

Staff participated in the weekly SFMTA LRV4 Project Safety/Security Certification Committee (SSCC) Meetings held at the SFMTA office located on 1 South Van Ness Ave, 8th Floor, San Francisco, during October. During each of these weekly meetings, a select number of Certificates of Conformance for the project were approved. With the SSCC meeting held on 10/24/2017, all certificates of conformance for the project were approved. The exceptions for several certifiable elements and associated restrictions/workarounds were discussed during the 10/24/17 meeting.

On October 25, 2017, SFMTA submitted the Safety and Security Certification Verification Report (SCVR) package for Siemens Car 2006, Procurement of New Light Rail Vehicles (LRV4) Contract No. SFMTA 2013-19, which certifies completion of the activities outlined in the SSCP for the project and specifically for Car 2006. The SCVR requests Operation of Car 2006 running only as a single car, until more cars are certified and readied for service for the multi-car train testing.

On November 2, 2017, staff participated in the ride check on LRV4 car #2006 in response to the SCVR for the initial LRV4 car (#2006), which was submitted on 10/25/17, and SFMTA's request to CPUC to approve the commencement of revenue service of the initial LRV4 car on or after 11/16/17. The ride check began and ended at MME yard. During the ride check, the test train #2006 operated along portions of the T and J Lines and the entire N Line in manual mode and portions of the Muni metro subway tunnel in ATCS mode. Staff evaluated many aspects of car 2006 during the ride check including ride quality and performance of the LRV operating in manual and ATCS modes, closing force of the LRV's doors, roll back test on a hill on the J-Line right of way north of Church St and 20th St, and clearances between the platform edges and the vehicle doorsill pursuant to GO 143-B. On November 3, 2017, staff sent a letter to SFMTA, regarding Car 2006 of the LRV4 Project and SFMTA's SCVR submittal. This letter approves SFMTA's request to operate the LRV4 car 2006 in revenue service, operating only as a single car, after the corrections are made to three issues of concern identified in the letter. According to the letter, SFMTA may place Car 2006 in revenue service on or after November 15, 2017.

The letter further makes the following requests for SFMTA:

- Additional cars must be safety certified by testing and approved by CPUC prior to being placed into revenue service.
- Conformance certificates and testing documentation on train-line testing of multicar consists shall be provided to RTSB in accordance with GO 164-D, 21 days in advance of placing multi-car consists into revenue service.

The first day of revenue service operation of LRV4 #2006 commenced on 11/17/17. Currently, the car is running in manual mode because a revision of Thales software required for ATCS operation is needed in order for the new cars to run in ATCS mode. The next car SFMTA will certify is Car 2005. However, it will not be certified until the Thales software revision required for ATCS operation and the software for optimizing operation of the car's doors are completed.

San Diego Trolley, Inc. (SDTI) Mid-Coast Corridor Project: The San Diego Metropolitan Transit System Mid-Coast Corridor Project is a 10.9-mile double-track light-rail transit line, which begins at the Old Town Transit Center in San Diego. The project provides future SDTI revenue service to the Linda Vista, Clairemont, University California San Diego (UCSD) campus and the University City areas. The additional stations will be: Tecolote Road, Clairemont Drive, Balboa Avenue, Nobel Drive, potential Veterans Administration (VA) Medical Hospital, UCSD West (along Voigt Drive), UCSD East (along Voigt Drive), Executive Drive, and University Town Center (UTC) Transit Center.

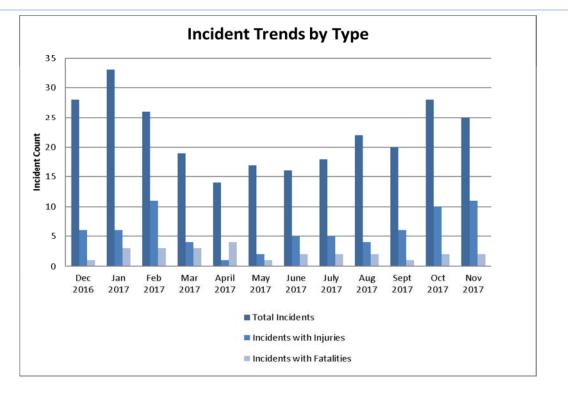
Construction started in 2016 and revenue service is planned to begin late 2021. RTSB staff is attending the System Safety Review Committee Project Meetings and Fire Life Safety Committee Project Meetings. The Commission approved Resolution ST-186, the Safety and Security Certification Plan (SSCP), on January 19, 2017.

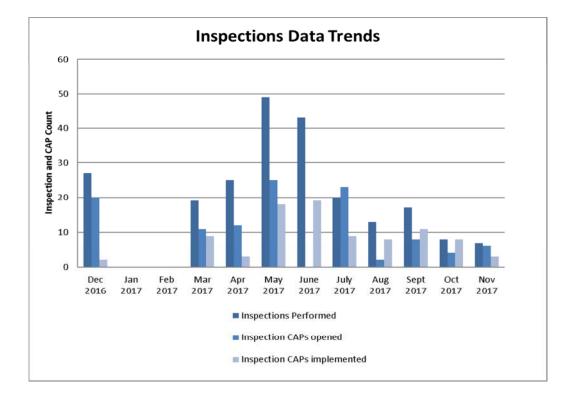
Investigations	
Incidents Reported	25
Incident Investigations Closed	7
Complaints Investigated	0
Rail Transit Inspections	7
Triennial Review	1

#### STATISTICS SUMMARY

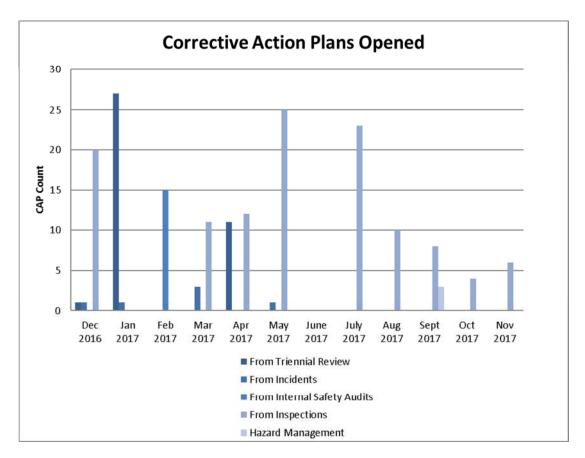
Corrective Action Plans			
New Corrective Action Plans	6		
From Triennial Review	0		
From Incidents	0		
From Hazard Management	0		
From Internal Safety/Security Audits	0		
From Rail Transit Inspections	6		
Closed Corrective Action Plans	6		
From Triennial Audits	1		
From Incidents	2		
From Hazard Management	0		
From Internal Safety/Security Audits	0		
From Rail Transit Inspections	3		

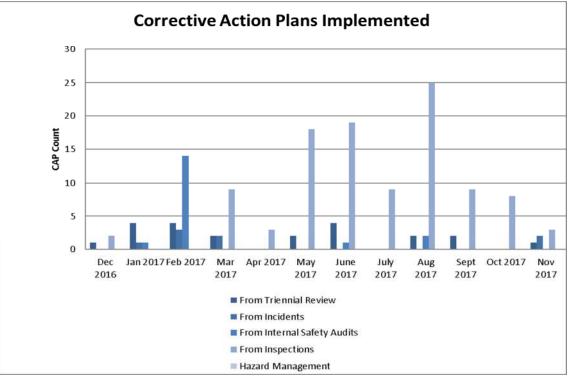
#### ONGOING DATA / TRENDS













November Report - 12/18/2017