

Safety and Enforcement Division



Monthly Performance Report

August 2017

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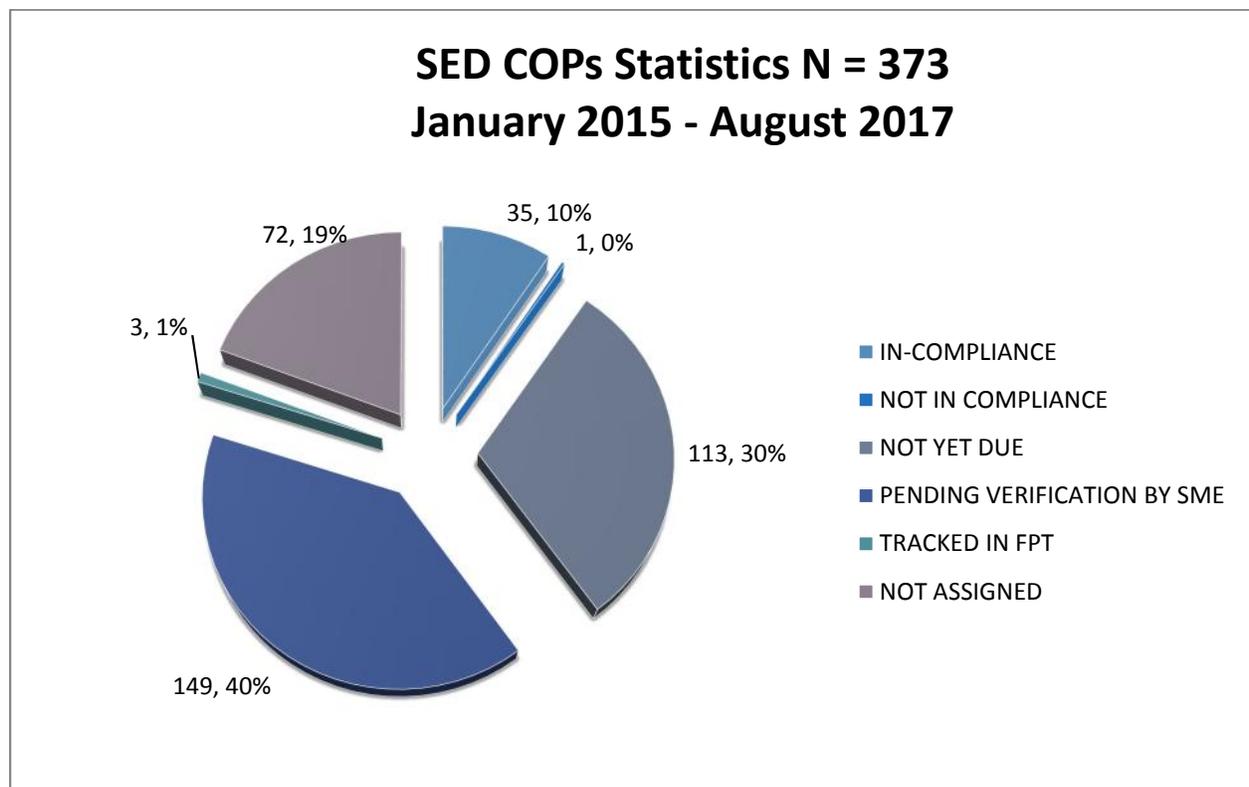
This Report has not been approved or disapproved by the CPUC.

COMPLIANCE WITH ORDERING PARAGRAPHS (COPS)

Through August 31, 2017, SED shows 373 total entries in the COPS system; with 35 reaching compliance (<10%), 113 (30%) not yet due for compliance, and 1 (<1%) currently remaining out of compliance. The remaining 224 (59%) are either pending verification or have not yet been assigned.

During August 2017, there were four (4) 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
D.16-09-055 G.17-05-001	Southwest Gas	\$ 200,000	192.1007 (c)	6/1/2017	Yes	SWG Appealed Citation, SED was approached on Settlement. SED is Awaiting Hearing. Proceeding No. K.17-07-002
Total Cited 2017		\$ 200,000				

INSPECTIONS

2017 Inspections: GSRB has conducted 39 scheduled inspections in 2017 and has completed the final inspection report for 36 of these 46 inspections during 2017.

INCIDENT INVESTIGATIONS

As of August 31, 2017, GSRB Staff received 180 incidents year to date. 154 of the 167 (92%) of the 2016 incident investigations have been completed. Metrics on 2017 Incident Investigations:

TOTAL reported in 2017	180	Percent
Open	149	83 %
Closed	31	17 %

The CY 2017 incidents¹ are categorized as follows:

- 124 – Level 1 incidents
- 47 – Level 2 Incidents
- 5 – Level 3 Incidents
- 4 – 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 no self-identified violations reported in August 2017.

¹ 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.
- **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.
- **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 Mobilehome Park Utility Upgrade Program. No significant changes in August.
- **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 July 10- 14, 2017, the evidentiary hearings took place in San Francisco, but were continued to September 27-28, and October 3. On August 9 - 11, SED staff reviewed various records which validated MAOP establishment of all the pipeline segments of Transmission Line 1600. The staff also reviewed records of all the bell hole inspections performed on L1600 during the period from 1949 to the present to verify the long seam type of the pipe.

ELECTRIC SAFETY AND RELIABILITY PROGRAMS

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.

ELECTRIC AND COMMUNICATIONS FACILITY PROGRAM

In August 2017, Electric Safety and Reliability Branch:

- Received 15 electric facility incident reports and closed four previously reported electric facility incident investigations;
- Investigated 30 customer safety and reliability complaints.

Metrics for Facility Incident Investigations as of August 31, 2017

Electric and Communication Facilities	Level 1	Level 2	Level 3	Level 4	Total ²
Total open incidents	9	19	47	34	109
Total incidents reported in 2017	10	15	34	23	82
Total incidents closed in 2017	10	17	17	29	73
Total open 2017 incidents	9	11	32	17	69
Incidents reported in August 2017	2	3	7	3	15
Incidents closed in August 2017	0	0	2	2	4

² 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.

ELECTRIC AND COMMUNICATIONS FACILITY SAFETY: PROCEEDINGS

- **Investigation into Long Beach Incident (I.16-07-007) (President Picker/ALJ Cooke)(Advocacy):** August 22, 2017, ALJ Cooke issued a proposed decision to approve the proposed settlement of issues reached by SCE and the SED Electric Safety & Reliability Branch in May. Under the settlement, SCE would pay a \$4 million penalty and commit to spending \$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 maintenance of its network. The PD may appear on the September 28 business meeting agenda.
- **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):** 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 is assessing its role and participation in this combined proceeding.
- **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 for completing Fire Map 2 by November 27, 2017. In August, parties filed opening and reply comments on the workshop report containing party-proposals for fire-safety regulations in the High Fire Threat District.
- **Applicability of Right-of-Way Rules to CMRS Carriers (R.14-05-001) (Commissioner Randolph/ALJ Kenney) (Advocacy):** D.16-01-046 adopted GO 95 amendments to provide Commercial Mobile Radio Service (CMRS) carriers with nondiscriminatory access to public utility infrastructure, including poles. The decision closed the proceeding. ESRB is undertaking follow-up work directed by the decision, and on March 1 filed a petition to adopt, amend, or repeal rules in GO 95 (P.17-03-004). Parties have filed comments and on May 15, 2017, SED filed reply comments. On August 28, 2017, Commissioner Picker issued a Proposed Decision (PD) regarding Petition 17-03-004 and Order Instituting Rulemaking Proceeding to Consider Amendments to General Order 95. ESRB is reviewing the PD and deciding whether to file comments on the PD.
- **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 to consider repeal of GO 95, Rule 18, the Commission opened this proceeding to consider specified amendments to, and possible repeal of, Rule 18 of GO 95. On January 25, 2017, SED and other parties requested a suspension in the schedule to allow settlement discussions. A PHC was held on April 11, 2017, and settlement discussions are currently ongoing.
- **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 March 10, 2017, Commissioner

Rechtschaffen issued a Scoping Memorandum setting the schedule. In July, ALJ Kelly issued a ruling for parties to review workshop notes for factual accuracy, and to file a consensus straw proposal on physical substation security. On July 28, ESRB staff completed review of the May 2, May 31, and June 21 workshop notes. ALJ Kelly ordered parties to submit a consensus straw proposal by August 31. ESRB is reviewing the proposal and plans to comment on the proposal by September 14, 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 June 2, 2017, ESRB participated in a workshop that was held by the Energy Division and the California Independent System Operator to discuss the Joint Staff Proposal on Multiple-Use Applications for Energy Storage. ESRB will continue to follow, review and evaluate all documents related to safety.
- **Distributed Energy Resources (R.14-08-013) (President Picker/ALJ Mason/ALJ Allen) (Advisory):** On August 25, 2017, the Assigned Commissioner issued a Proposed 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. Next meeting will be in October.
- **National Electric Safety Code (NESC) meeting:** On August 24, staff from ESRB attended a meeting between the NESC committee and CPUC staff. Present were the NESC Senior Manager, Chair and Vice Chair and representatives from the ESRB, Risk Assessment and the Office of the Safety Advocate. There were presentations by the NESC members about the history of the NESC and a short summary of its requirements. The presentations were followed by a discussion comparing the NESC and CPUC General Orders 95/128/165 requirements such as safety factors, clearances, inspection standards and vegetation management.

ELECTRIC GENERATION SAFETY AND RELIABILITY PROGRAM

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

- Completed and issued the audit report of the High Winds Energy Facility audit, which was the first renewable power plant audit that ESRB staff conducted.
- 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.
- Continued to work on 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 7 forced and 5 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 (GAO) as a result of the Colusa, Redondo Beach, , and Mandalay power plant audits for compliance with GO 167 requirements.
- Continued to coordinate with Energy Division on summer reliability monitoring calls with the IOUs to monitor system reliability and potential curtailments due to extreme high temperatures and loads in the last two weeks of August. Monitored the IOUs’ Emergency Preparation Plans for the Solar Eclipse on 8/21, which was anticipated to reduce solar capacity by 5,000 MWs.
- Continued to work with the Information Technology Department to develop a new web-based outage reporting database which will allow the GAOs not only to report the outages but also provide notifications by directly entering the information into the ESRB database. The project is currently in the test stage. ESRB and IT will set up logins for the GAOs and the Power Plant Outage Reports system will become effective in October.

Metrics for Generation Incident Investigations as of August 31, 2017

Electric Generation Incidents	Level 1	Level 2	Level 3	Level 4	Total ³
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 August 2017	0	0	0	0	0
Incidents closed in August 2017	0	0	0	0	0

³ 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.

UTILITY RISK ASSESSMENT AND SAFETY ADVISORY

REVIEWING SAFETY & RISK IN GENERAL RATE CASES

The Southern California Edison TY2018 General Rate Case (A.16-09-001) wrapped up evidentiary hearings in early August, although the assigned Administrative Law Judges determined a need for additional Public Participation Hearings that will take place in September. Opening briefs in the case are due to be filed September 8.

There were no other significant developments during the months of August.

Physical Security of Electric Supply Facilities

In a separate rulemaking, the Commission is considering a new program for identifying electric utility distribution assets that might be vulnerable to attacks or disruptions that pose a substantive threat to physical security or cause service disruptions (R.15-06-009). This proceeding was initiated to implement terms of Senate Bill 699 (2014, Sen. Hill), which was a political response to the April 2013 gunfire attack on Pacific Gas & Electric's Metcalf substation. This incident, which remains unsolved to this day, has been characterized a "a wake-up call" to the utility industry nationally about the vulnerability of exposed critical assets, and caused PG&E to expend well over \$100 million on upgrades to high-voltage facilities at substations.

One outcome of the rulemaking is expected to be a process for utilities (both investor-owned and publicly-owned) to identify such assets and devise plans for mitigating the risks. Eventually, for CPUC jurisdictional utilities, the costs of such preventive measures – whether in the form of "hardening" assets against attack, or ensuring that any disruptions to service are minimized by bolstering the resiliency of the system – would be accounted for in General Rate Case applications. Such costs would be separate from and additional to those incurred to meet federal requirements for protecting Critical Infrastructure; in particular, the CIP-014 protocols that are overseen by the North American Electric Reliability Corporation (NERC) and subject to ratemaking by the Federal Energy Regulatory Commission (FERC).

As a result of the physical security rulemaking, and as an outcome of the Safety Model Assessment Proceeding (S-MAP) process and Risk Mitigation Assessment Phase (RAMP) for identifying and mitigating safety risks in GRCs, the Commission anticipates greater transparency about what utilities are doing to enhance physical security and how much it costs ratepayers.

To date, California’s investor-owned utilities vary widely in how much information they provide to the CPUC about expenditures for physical security. The following narrative briefly describes how physical security has been documented in the most recent GRCs.

PG&E – Despite the enhanced physical security upgrade program announced in the aftermath of the Metcalf attack, PG&E did not provide much information in its most recent GRC covering the 2016-2018 period (A.15-09-001). In its GRC testimony, PG&E noted that costs associated with physical security at distribution substations are bundled together in Major Work Category 58, via four subprograms covering safety, security, fire protection and seismic enhancements. “Expenditures include the replacements or upgrades of substation fences, security cameras and card readers, fire suppression systems and seismic retrofits to control buildings.” At the time of its filing, PG&E did not project any expenditures to meet future requirements under SB 699/R.15-06-009, and it did not plan to recover any costs during this rate case cycle.

The utility documented over \$1 million in distribution substation security measures in 2014, with a varied projection of expenditures through 2019 approaching \$6 million in total:

Nominal \$ (000) PG&E Distribution Substation Security 2014-2019; PGE-04, pg. 12-27

Substation	2014 (actual)	2015 (forecast)	2016	2017	2018	2019	Total
Security	\$1,070	\$461	\$364	\$1,300	\$1,300	\$1,300	\$5,795

The settlement of the PG&E GRC approved by the Commission in D.17-05-013 did not alter PG&E’s forecast spending on substation security. In November 2017, the utility will file a first-of-its-kind RAMP for the next GRC cycle, in which it is expected to provide more details on risks and mitigations associated with both physical and cyber security.

Southern California Edison – In contrast to PG&E, SCE provided a great deal of information about its physical security efforts, but at part of testimony on Corporate Security (SCE-7, Vol. 5). Its documentation was largely about expenditures and projects to comply with the strengthening of CIP-14 standards at the federal level, with no detailed information about distribution-level asset security. However, the utility’s testimony devoted to transmission & Distribution substation construction (SCE-02, Vol. 6) provided a high level of expenditures for substation physical security during the GRC period 2016-2020, with a breakout for costs that are CPUC jurisdictional amounting to over \$49.5 million for the forecast period.

(\$000) SCE Substation Construction & Maintenance 2016-2020; SCE-06, Vol. 6, pg.2

	2016	2017	2018	2019	2020	Total
Total Substation Physical Security	\$22,341	\$51,617	\$25,641	\$22,404	\$23,877	\$145,880
CPUC Jurisdictional	\$10,040	\$12,226	\$9,403	\$8,798	\$9,077	\$49,544

SCE noted that it has 188 transmission substations and 677 distribution-level substations. Many substations reduce voltage from transmission level to distribution level voltages, so are dual jurisdictional. Within its substation physical security program, there are three categories of spending: Copper theft mitigation program, CIP-14 compliance and lower-tier in terms of potential impacts on the system if a physical attack or breach occurs.

(\$000) SCE Substation Physical Security Enhancement SCE-02, Vol. 6, pg. 46

Program	2014	2015	2016	2017	2018	2019	2020	Total
Copper Theft	N/A	\$3,330	\$8,151	\$8,321	\$8,530	\$8,798	\$9,077	\$46,207
Tier 1 CIP-014	\$10,861	\$14,344	\$14,190	\$42,550	\$9,052	N/A	N/A	\$90,997
Tier 2-4	N/A	N/A	N/A	\$746	\$8,059	\$13,606	\$14,800	\$37,211
Total	\$10,861	\$17,674	\$22,341	\$51,618	\$25,640	\$22,404	\$23,877	\$174,414

Note: Except for expenditures under the Copper Theft prevention program, these figures relate mainly to FERC jurisdictional transmission assets.

Physical upgrades for CIP-14 compliance, include: improvements to walls, reinforcement of gates, concealing key assets, and improved cameras, alarms and lighting; CIP-014 upgrades for about 7 substations per year and as many as 29 per year for the lower-tier substations. The copper theft mitigation program largely involves additional fencing and lighting where needed.

San Diego Gas & Electric

SDG&E's most recent GRC was for TY 2016 (A.14-11-003). Unlike SCE, the utility's testimony does not provide much detail on physical security expenditures to comply with federal CIP-014, noting only that such expenditures would fall under Infrastructure Integrity, Physical Security and Environmental costs. For the three-year GRC period, SDG&E projected a total \$100.5 million for capital for this category, and an O&M budget of \$11.22 million for TY2016 (future year O&M spending was established under the attrition year adjustments approved in the final GRC decision D.16-06-054).

For its GRC, SDG&E documented a steady-state physical security budget of \$834,000 per year in 2014-2016, essentially the same as actual 2013 spending. The cost justification was based on increase compliance for critical infrastructure at 59 substations and to prevent copper theft and sabotage, according to SDG&E (SDG&E-09, pg. 101). Among security measures in the program: video surveillance, night-time illumination, access control door card readers, perimeter microwave intrusion detection and alarms. Security systems would be installed at all 230 KV cable locations.

In its more recent Risk Assessment Mitigation Phase (RAMP) filing in advance of the TY 2019 GRC filing that will be made in October 2017, the Sempra Utilities did not provide a risk assessment for physical security of electric assets, but did conduct an assessment for Southern California Gas Company assets. The risk analysis was based on a "worst case" scenario of a terrorist attack on pipeline assets, leading to significant disruptions of service. SoCal stated that its 2015 "control" level spending for this risk is about \$7.9 million, and a combined capital/O&M expenditure to effect increased mitigations during the GRC period might be as much as \$32 million. More information on SDG&E physical security of distribution assets is expected as part of the next GRC filing, due to be filed in early October.

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 they 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. During the PHC, several Parties signaled their active participation, including ratepayer advocates ORA and TURN, as well as the CPUC’s Office of Safety Advocate. The Commission set a workshop for September 12.
- **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. SED staff conducted a workshop on August 1 to reach agreement on guidelines and a 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. A Phase 2 pre-hearing conference was held August 24, and a new scoping memo is expected by September 21.
- **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. The utility and intervenors are completing exhibits and preparing for opening briefs that are due September 8.
- **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 POU’s governing bodies, not the CPUC. A workshop on the proposal and other matters is scheduled for September 29 in San Francisco.
- **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 joint utilities will present results of their test drives at a Commission workshop on Sept. 28.

- **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 2 by November 27, 2017. Working groups have forwarded a package of 31 proposed changes to regulations that would apply to the high-fire-risk areas on Fire Map 2. SED RASA staff is assisting the ALJs in reviewing those proposals.
- **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 scheduled for September 11, 2017. 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).

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 – 8/31/2017

Note: This is for complaints filed using the on-line Whistleblower Application ONLY. There were few new additions to the site during August.

California Public Utilities Commission | Safety and Enforcement Division

Confirmed or Possible Whistleblower Complaints						
	CAB	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
Total 2017	0	4	2	3	3	1

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
YTD	0	1	0	0	1	1	0

Test, Incomplete or Duplicate Whistleblower Complaints	
January	1
February	3
March	0
April	1
May	1
June	4
July	0
August	3
YTD	13

OFFICE OF RAIL SAFETY

RAILROAD SAFETY – ROSB

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

New Incidents Investigated	7
Informal Complaints Investigated	3
Safety Assessments/Reviews	17
Compliance Actions	888
Major Inspections Completed - Such as Focused Inspections	2
Operation LifeSaver Presentations	18

ROSB INSPECTION, INVESTIGATION & FIELD ACTIVITIES

August 16, 2017: Five CPUC railroad safety inspectors performed a Multi-Discipline Focused Inspection at the Central California Traction (CCT) Railroad and the Pacific Ethanol facility in Stockton in response to a rail equipment collision incident that resulted in the release of hazardous materials.

Pacific Ethanol receives grain in covered hopper cars and ethanol in tank cars. They convert the grain into ethanol and distribute the ethanol locally via trucks. Unloading of both products is performed on one track. There is an additional track located adjacent to the unloading track. On the day of the incident, Pacific Ethanol was in the process of unloading ethanol from four tank cars. Earlier in the day, they had requested additional loads of ethanol from the CCT. Pacific Ethanol managers stated that they had told the railroad crew that there were 12 cars in the unloading track, but that they wanted the additional 36 cars to be placed on that same track. 49 CFR part 173.31(g) (Tank car loading and unloading) requires a tank car that is placed for unloading to be protected against movement or coupling by securing access to the track and

displaying caution signs on the track or on the tank cars. The specified protection was at the entrance to the track, and it had been removed to bring in the additional cars. This left the attached cars vulnerable.

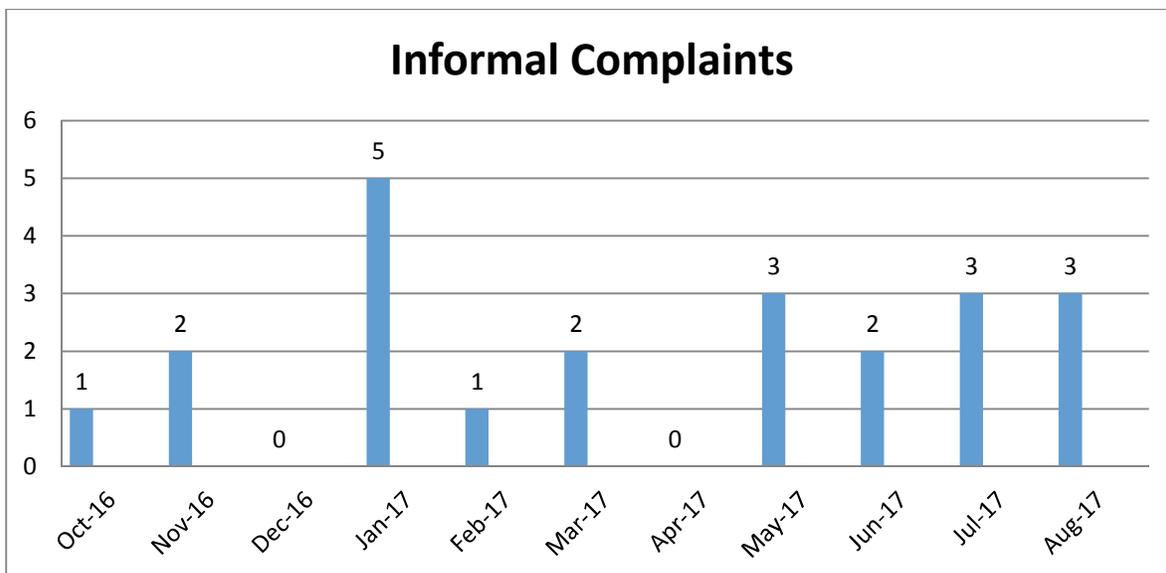
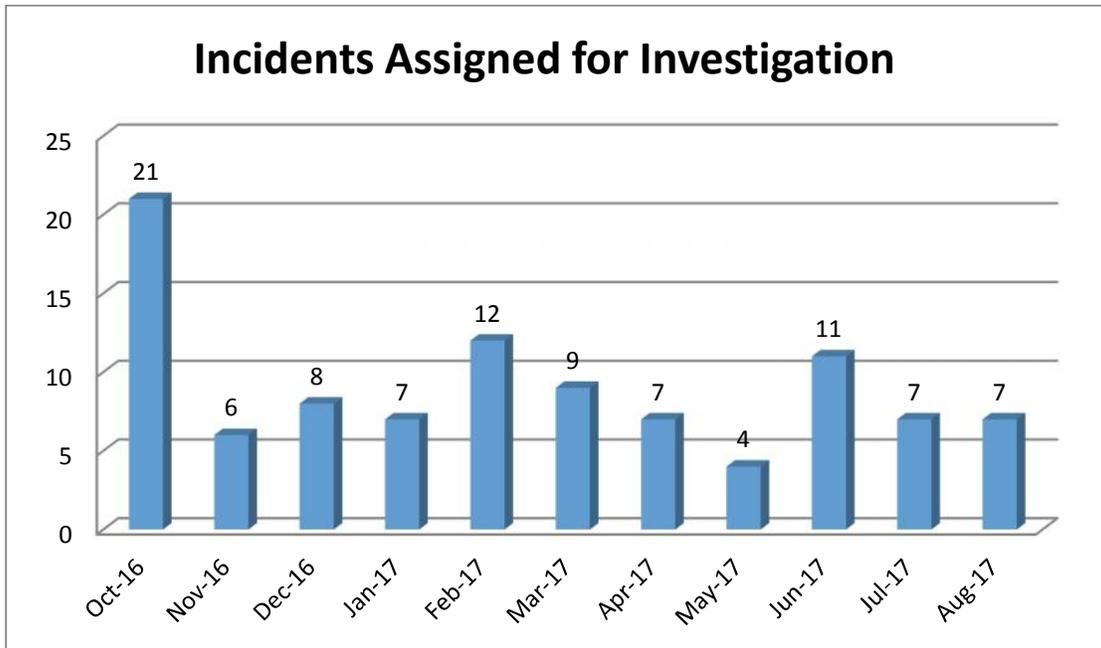
The facility was originally built to handle inbound grain only. As inbound ethanol shipments by rail became economical, they also brought in tank cars. An inspection of the facility was performed in February 2016, where it was discovered that there was no protection against inbound movements by the railroad. This was discussed with Pacific Ethanol managers on at least three occasions, and they made arrangements to have the protection installed. By August 2016, they had installed the required protection.

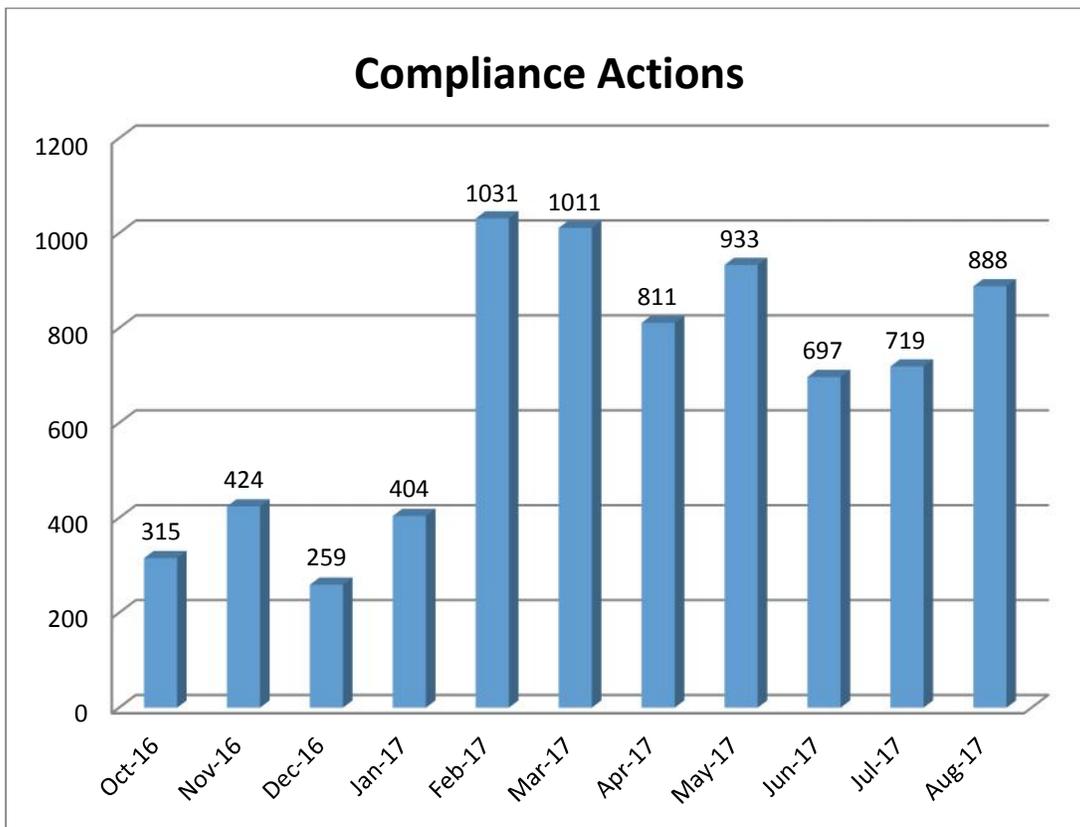
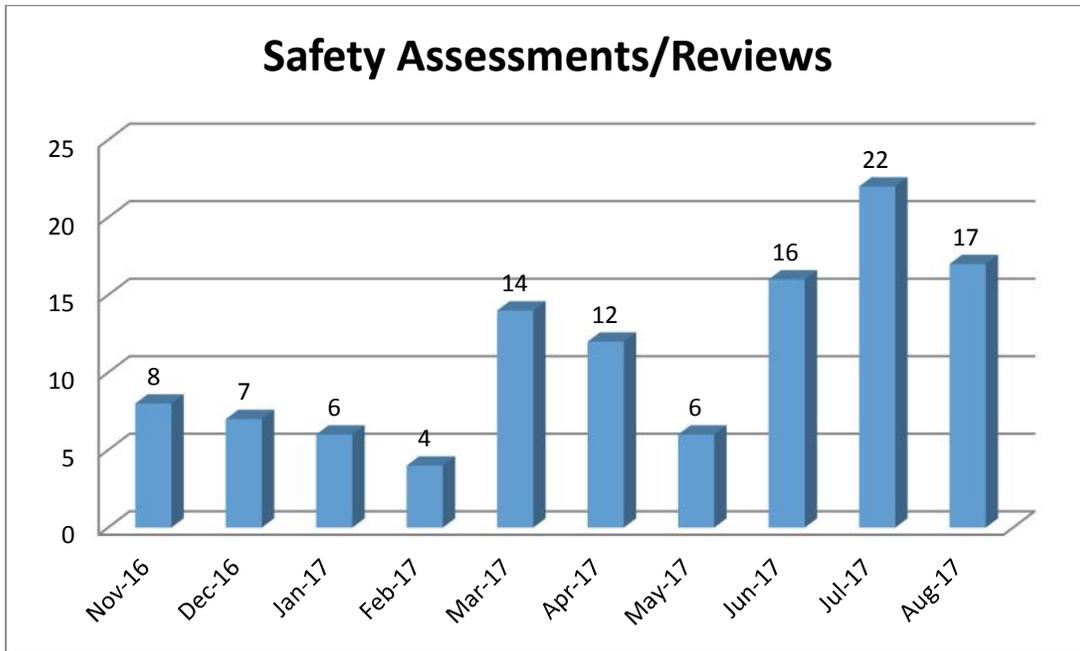
Because there is only one way in or out of the facility, the CCT crew shoved the new cars in ahead of the locomotive. They are required to make this move safely by 49 CFR part 218.99, which requires the employee who is controlling the movement, to see that the route is clear and be in a position to continuously observe the leading end of the equipment until it is stopped and clear of equipment. The employee controlling the movement stated that he thought the track they were shoving into was empty, and called the Engineer on the radio and directed him to continue for "another 20 car lengths." Sometime after that, he realized that there were cars in the rail, and told the Engineer to stop. There was not sufficient distance to stop, and the movement collided with the 12 cars already in the track, shoving them approximately 60 feet. Four of the cars were still in the process of being unloaded with hoses connected. The hoses were torn out and approximately 7,000 gallons of ethanol reached the ground. In addition, there was damage to two unloading racks and the fire suppression system. Estimated repairs and cleanup are approximately \$200,000. No one was injured and there was not a resulting fire. UPRR managers and Stockton Fire Department responded immediately. The Air and Water Resource Boards and Environmental Protection Agency personnel responded for later evaluation. Currently, contaminated soil has been removed and an evaluation of environmental impact is taking place.

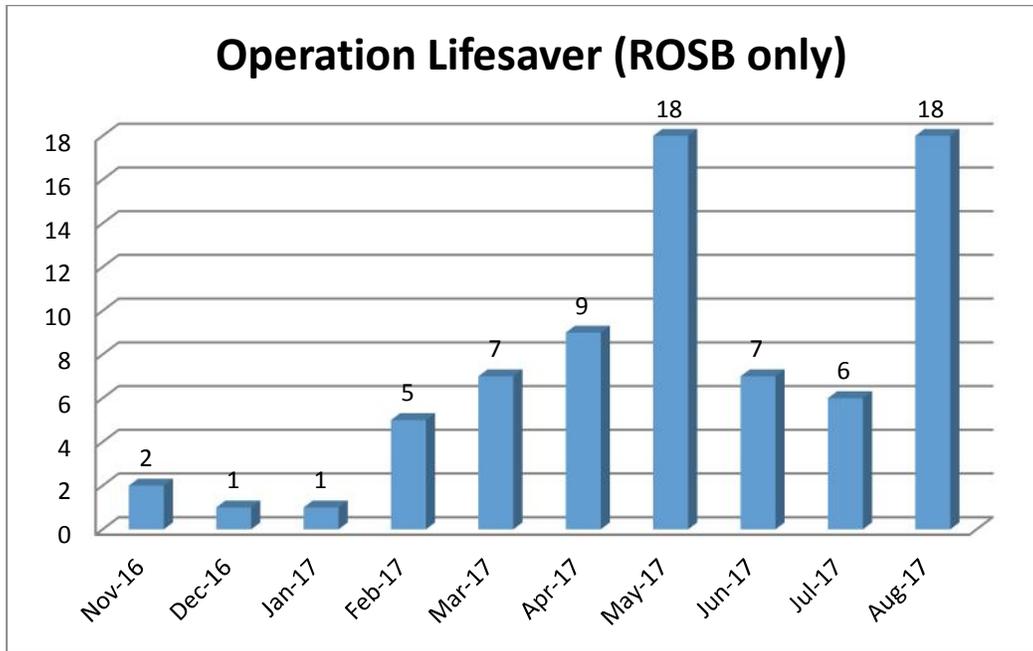
Discussions with both Pacific Ethanol and CCT managers determined that both parties realized that required procedures were not being followed. Pacific Ethanol did not provide the required protection for the connected cars, and CCT did not follow safe procedures when they shoved

into the track. As a result, both parties are revising their procedures jointly, so that required protection is provided and operating rules are complied with.

As mitigation is still in progress, follow up inspections will be performed to check on both parties' compliance with state and federal laws. At the request of Pacific Ethanol managers, CPUC railroad safety inspectors will also review their future expansion plans for compliance with State General Orders.







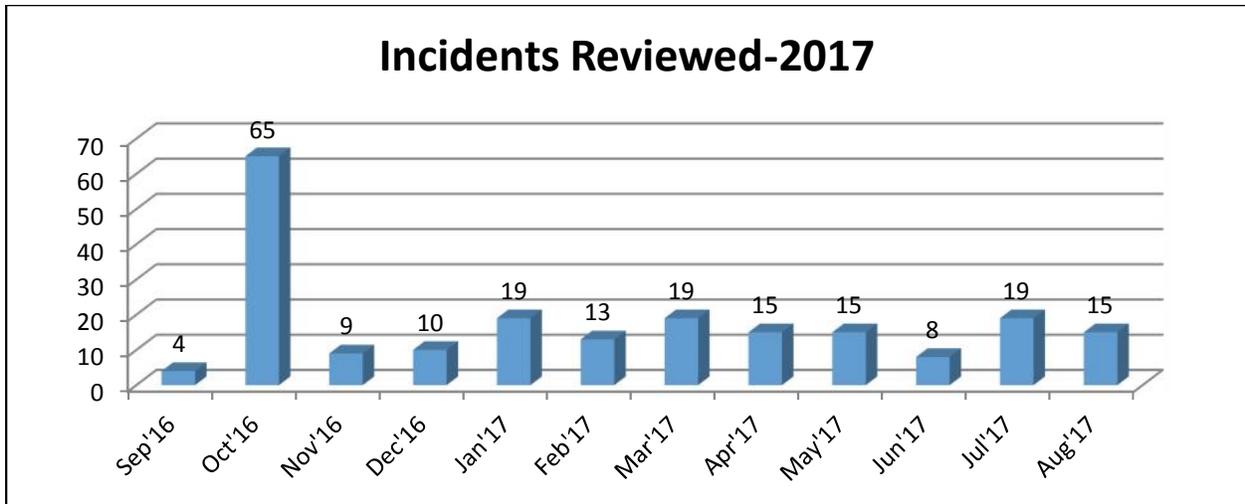
RAIL CROSSINGS AND ENGINEERING BRANCH – RCEB

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

	New During Period	Closed During Period
Crossing Incident Reviews	28	15
Informal Complaints Investigations	1	1
Safety Assessments/Quiet Zones/Reviews	30	30
Proceedings, Resolutions and G.O. 88-B Reviews	14	2
Operation LifeSaver Presentations	4	4

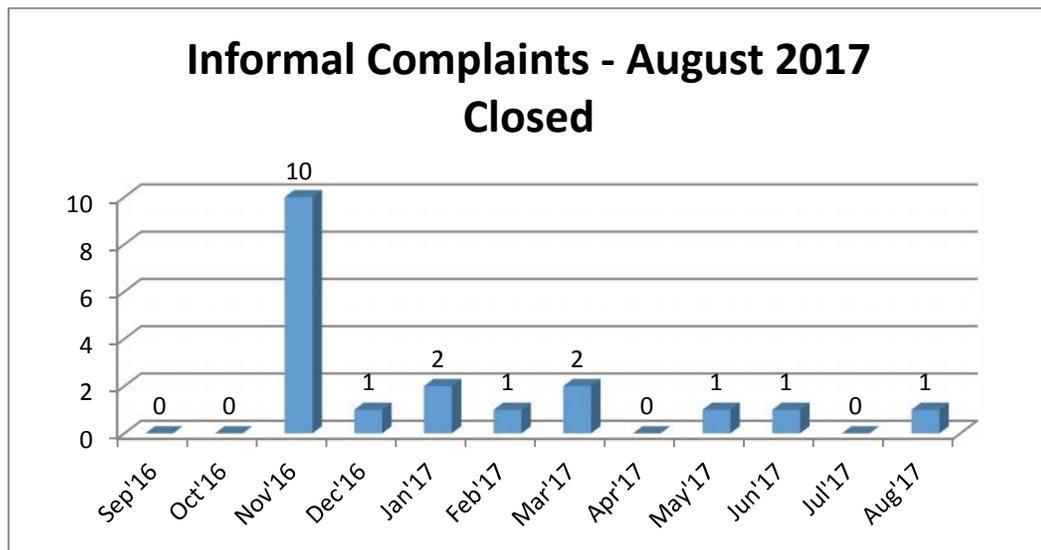
RAIL CROSSING INCIDENT INVESTIGATIONS

In August 2017, the Rail Crossings and Engineering Branch (RCEB) assigned 28 new incidents reviews with 26 at highway-rail crossings and two at a highway-light rail transit (LRT) crossings (crossings). RCEB completed 15 crossing incident reviews and evaluations.



INFORMAL COMPLAINTS

In August 2017, RCEB received one new highway-rail complaint and closed one complaint. The new complaint is in regards to a rough crossing at the 170th Street in the City of Lawndale, CA. The closed complaint involves the start-up of rail service in Vallejo, CA. The constituent is concerned that the existing crossings are unsafe for the proposed rail service. Staff responded that before the rail service begins, RCEB would require the railroad to bring all crossings into compliance. RCEB staff also discussed the issue of trespassing on railroad property with the complainant. The complainant was not aware that the railroad property is private property and residents of Vallejo should stop using the rail right of way for walks.



SAFETY ASSESSMENTS, QUIET ZONES AND REVIEWS

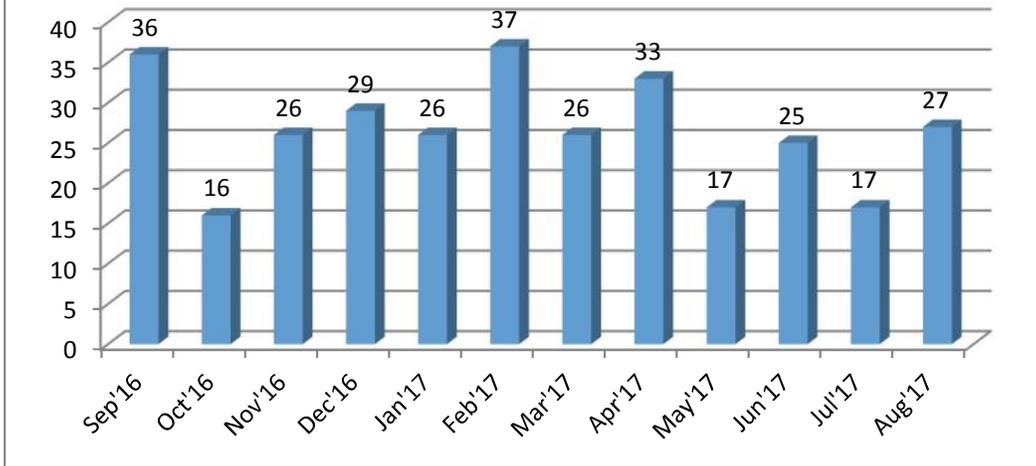
In August 2017, RCEB completed 27 rail-crossing safety assessments involving: communications, field inspections, and diagnostic reviews with railroads and local agencies. RCEB completed a Quiet Zone review for the City of Sunol, CA and issued comments to the Draft Environmental Impact Report for the ACE *forward* project. RCEB staff completed the CPUC “Privacy and Security” training and staff also trained the consultants working on the STOP/YIELD passive crossings inventory project.

QTZN 2017050001 – Staff issued comments for the Notice of Intent to Establish a Quiet Zone in the City of Sunol, Alameda County. The zone is for three crossings at Castlewood Drive (PUC ID 004-39.52/DOT 834061V), Bond Street (PUC ID 004-36.10/DOT 834168X), and Main Street (PUC ID 004-36.00/834169E). The recommendations include improvements for crossing warning devices and closure of a private crossing near Castlewood Drive.

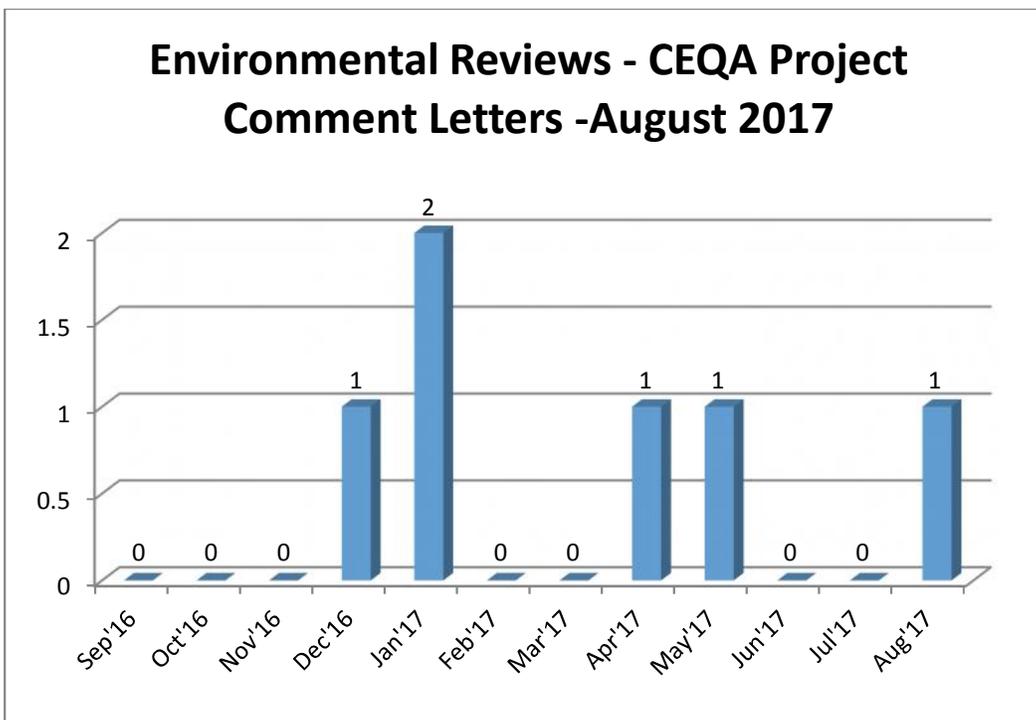
ENVR-2017080001 – Staff reviewed the Draft Environmental Impact Report by the San Joaquin Regional Rail Commission ACE *forward* Project. The project includes rail safety improvements for the existing line between the cities of San Jose and Stockton including an extension to Manteca, Modesto, Turlock and Merced. Staff provided information on the rules and general orders that the project must follow to obtain CPUC authorization for modifications to crossings. Staff also provided comments on rail safety improvements and proper signal design considerations for intersections near the crossings.

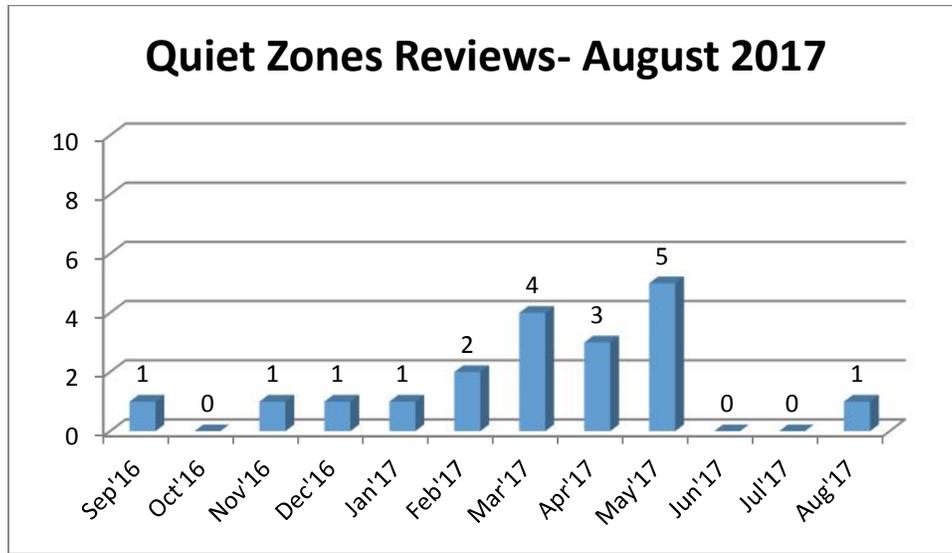
XACT-2017090003 - On August 28 through September 1, 2017, RCEB staff met and conducted RSSIMS training in the San Francisco office with the contract consultant for the Stop-Yield passive crossings inventory project. The full week of training allowed the consultant's data-entry staff to become familiar with how to enter the crossing inventory data. The consultant enters data manually into RSSIMS for thousands of crossings throughout the State.

Safety Assessments-August 2017



Environmental Reviews - CEQA Project Comment Letters -August 2017



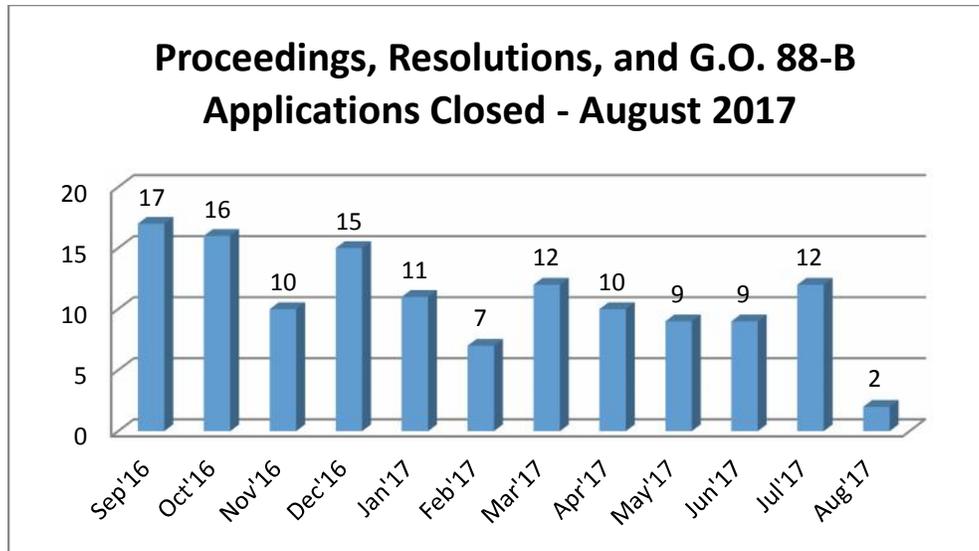


PROCEEDINGS, RESOLUTIONS AND G.O. 88B REVIEWS

In August 2017, RCEB staff received two new major proceedings requiring Administrative Law Judge (ALJ) review; and, 12 new General Order 88-B applications for changes to existing crossings. This month, RCEB closed one ALJ proceeding and RCEB issued a Resolution for the Maintenance Fund program.

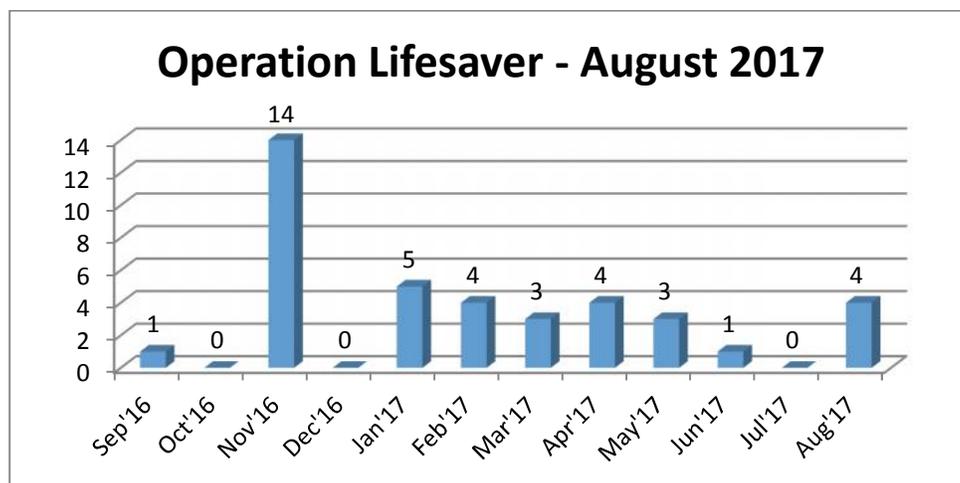
PROC – A1505014 – With Decision (D.) 1708017, the CPUC approved the New Jennings Ave Public At-Grade Pedestrian/Bike Path crossing in the City of Santa Rosa. RCEB staff, and an interested party, filed a protest requesting a rehearing of the application. In its rehearing application, SED argued that D.16-09-002 misinterprets Commission precedent with respect to at-grade crossings and unlawfully relies on a new public interest standard, in place of safety, to grant the at-grade crossing. The CPUC denied the rehearing. The decision concludes that after considering the at-grade crossing design and the safety impacts of a separated-grade crossing, the City established a convincing showing of safety of the at-grade crossing. D.1708017 also modified D.1609002 to clarify language related to the arguments by RCEB and the interested party.

Resolution SX-125 – The resolution recommends to the California Transportation Commission funding \$3,750,000, for FY 2018-2019, for maintaining automatic grade crossing protection devices under PU Code Section 1231.1.



OPERATION LIFESAVER INC.

In August 2017, RCEB completed four Operation LifeSaver Inc. (OLI) activities. Staff presented the OLI safety message on August 25, 2017, to 74 driver’s education students at the Cosumnes Oaks High School in Elk Grove, CA. On August 24, 2017, RCEB presented the OLI message to 25 adult drivers at the Tulare County Association of Governments in Visalia, CA. On August 26, 2017, RCEB staff participated in a Community Safety Blitz in Old Sacramento. Staff also replied to a data request from the California Highway Patrol (CHP) to identify the most effective locations to share the OLI rail safety message and conduct enforcement throughout California. CA OLI and RCEB worked together to respond to the CHP. As time permits, RCEB staff continues to volunteer and participate in OLI events and activities.



RAIL TRANSIT - RTSB

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

CORRECTIVE ACTIONS PLANS

- Ten CAPs were opened for August 2017.
- 29 CAPs were closed this month.

INCIDENT INVESTIGATIONS

- In August 2017, 22 incidents were reported by Rail Transit Agencies (RTA).⁴
- Twenty-one transit incident investigations were closed by RTSB in August 2017.

ADMINISTRATIVE ACCOMPLISHMENTS

- **Federal Transit Administration Grant:** On August 18, RTSB transmitted its application for its third Federal Transit Administration (FTA) Grant Award in the amount of \$2,935,303. The Federal State Safety Oversight Agency (SSOA) Grant program provides reimbursement to SSOAs for 80% of their expenditures for their safety oversight of FTA funded RTAs.
- **Federal Certification of SSOA Programs:** State Safety Oversight Agencies 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 Commission General Order 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. On August 18, RTSB electronically transmitted the required documents to the FTA.

⁴ 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.

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.
- **Quarterly FTA Conference Call with SSOAs:** On August 16, RTSB participated in the FTA’s quarterly conference call with SSOAs. The following issues were discussed:
- FTA Certification of SSOAs - FTA is tracking the FTA Certification status of all the SSOAs, and they will continue issuing status reports on their progress.
 - FTA may get involved in investigating transit accidents that may garner significant national media attention.
 - FTA’s Joint SSOA and RTA Workshop in Washington, DC, to be held October 24-27, 2017. The workshop agenda includes: accident investigations, accident notifications, security oversight, FTA Certification of SSOAs, new transit systems and extensions, FTA Grants to SSOAs, training requirements, safety data trends, rail grade crossings, safety culture, Corrective Action Plans, FTA drug and alcohol compliance program, and other relevant topics.
 - Usage of FTA Grants Funds for Security Oversight Activities – An FTA attorney stated that until one year after the FTA issues its proposed Public Transportation Agency Safety Plan (TPASP) rules as 49 CFR Part 673, the SSOAs can use the FTA grant funds for security oversight activities required under 49 CFR Part 659 and emergency management activities. The FTA does not have an estimate as to when the new PTASP rules will be issued.

- **Web Form for the RTAs to Report Incidents to RTSB:** General Order 164-D, requires RTAs to report incidents to RTSB staff within specified time frames and under 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, 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.
- **New Email Inbox RTSBInspectors@cpuc.ca.gov:** On August 23, CPUC's IT Services created a new email inbox at RTSB's request. Emails received to this email address are delivered to all RTSB inspectors. This eliminates the problem RTSB had in the past where RTAs did not know which of the RTSB inspectors they should send their email concerns to, and instead sent it to the RTSB Supervisor who may not always be available to immediately read and forward them to the appropriate staff. The new email address also eliminates the need for the RTAs to know which RTSB Inspector is working on which project.
- **New RTSB Employee:** On August 7, Richard Fernandez joined RTSB as an Operating Practices Inspector (Associate Transportation Operation Supervisor) in Southern California. Rich was a conductor for Union Pacific Railroad for 13 years. He worked in the Greater Los Angeles area, while mostly working the Long Beach to Yuma Arizona route. He served in the United States Marine Corps for 12 years. He was born and raised in Baton Rouge, Louisiana, moving to Solvang, California, in 1986 where he attended high school.
- **Training:** On August 23, six RTSB staff completed the Safety Management System (SMS) Safety Assurance training provided by US DOT's Transportation Safety Institute (TSI). The SMS Safety Assurance training is mandated for SSOA staff under the FTA's Final Interim Safety Certification Training Provisions, pursuant to 49 U.S.C. 5329(c)(2).

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. 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.
ALJ ruling, of September 5, 2017, directed Staff, by or before September 18, 2017, to resubmit three (3) new Exhibit SED-50, to replace the original ones it submitted because the video was defective and could not play video and audio simultaneously.
ALJ ruling, of September 7, 2017, the Commission's IT staff made additional attempts and has cured the previously discovered defects with Exhibit SED-50, therefore the ruling excuses SED from the ALJ's previous ruling to replace the exhibit.

- **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. Pending ALJ ruling.

Approved:

- **Resolution ST-205:** On June 27, 2017, SED filed a proposed resolution to approve the San Francisco International Airport (SFO) AirTrain Extension Project’s Safety Certification Plan. The project will expand the existing AirTrain System to include a new Long Term Parking (LTP) Garage and add an additional in-line station (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 is currently in the final design phase. The project will have three Safety

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Certification Verification Reports, as it has three phases and will start revenue services accordingly, from October 2018 to June 2019. Resolution was approved by the Commission at its August 10, 2017 voting meeting. The report is posted on RTSB's website.

SAFETY CERTIFICATION AND OVERSIGHT OF RAIL TRANSIT AGENCY PROJECTS

- **Angels Flight 2016/17 Restoration and Refurbishment Project:** In January 2017, the Angels Flight Safety Certification Plan (SCP) was approved via Resolution ST-197 to allow the system to be upgraded in accordance with Resolution ST-170, tested, and brought back into service. During the first half of 2017, Staff was involved and witnessed the system upgrades and tests. In August, Angels Flight submitted the Safety Certification Verification Report (SCVR) for the project and requested its approval. The letter notified the CPUC that the proposed in-service date would be August 30th. RTSB recommended the SED Director sign off on the SCVR and Director Malashenko did so on August 29, 2017.
- **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 is witnessing testing and participating in Safety and Security Certification meetings to oversee the procurement process. BART will submit its interim SCVR for these first 10 vehicles in early October 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 on-going. 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 draft System Safety Program Plan and draft Emergency Response Plan were submitted unofficially to RTSB staff for review.

- **BART Warm Springs Extension:** This project added 5.4 Miles of BART track, connecting the currently existing Fremont BART station with a new BART station located in the Warm Springs district in the city of Fremont. This project was safety certified by RTSB staff. Warm Springs Station opened for revenue service on March 25, 2017. There is currently one open item that should all be completed by August 2017.
- **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 in the Fall 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.

- **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. 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 question 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 July 14 and August 3, 2017, CSP sent new batches of verification documentation for some 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 on September 9, 2016, January 26, 2017, May 10, 2017, June 12, 2017, and August 3, 2017 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.

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; it is about 65% done at this time.

- **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 June 30, 2017, seventy-five P3010 vehicles have been approved for revenue service by RTSB staff. As of August 31, 2017, eighty-four 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 is being dismantled and relocated for reassembly in the tunnel launch pit to bore 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. RTSB staff regularly attends Westside PLE's monthly Fire Life Safety and Security Meetings, as well as Safety and Security Certification Review meetings.

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.

- **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-off 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 October 21, 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.

- **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 – December 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 five (5) added in subsequent months, for a total of six (5) 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). A draft report is in the works.

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 SC Plan (e.g. Design Criteria Certificates of Conformance and associated supporting documentation for certifiable elements as SFMTA completes them), and participation in witness point activities (e.g. vehicle testing). In Spring 2017, staff has learned a number of issues of concern in relation to car clearance, Americans with Disabilities Act (ADA) issues “between car barriers”, software bugs in the doors, and electromagnetic interference (EMI), etc., from SFMTA staff. On May 15, 2017 RTSB staff participated in a testing of the new prototype vehicle and ascertained the existence of these issues on the prototype. Staff has discussed these issues with SFMTA and will follow up on their resolution prior to final safety certification approval. Currently, SFMTA and Siemens are working through these issues to resolution. On June 13, 2017, a number of RTSB engineers and inspectors participated in a tour of the Siemens facility in Sacramento.

On July 10, 2017, staff went to the testing of a new vehicle (Car #2002) and has learned that SFMTA and Siemens are working through the issues of concerns on the new vehicle prototypes to resolution; they are making good progress in resolving these issues.

Furthermore, on 7/24/17, a RTOSS inspector witnessed testing of a new LRV4 vehicle (LRV #2005) that occurred in the subway between Embarcadero and Church/Duboce stations in ATC mode.

California Public Utilities Commission | Safety and Enforcement Division

Some additional issues of concerns on the new vehicle were discovered during the test. Siemens is currently aware of and will be addressing them.

According to SFMTA, the LRV4 Interior Noise testing had been completed and the results were in review with Siemens. The EMI testing was completed successfully. SFMTA recently started the towing test and will complete the ATCS test of single car consists soon.

- **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.

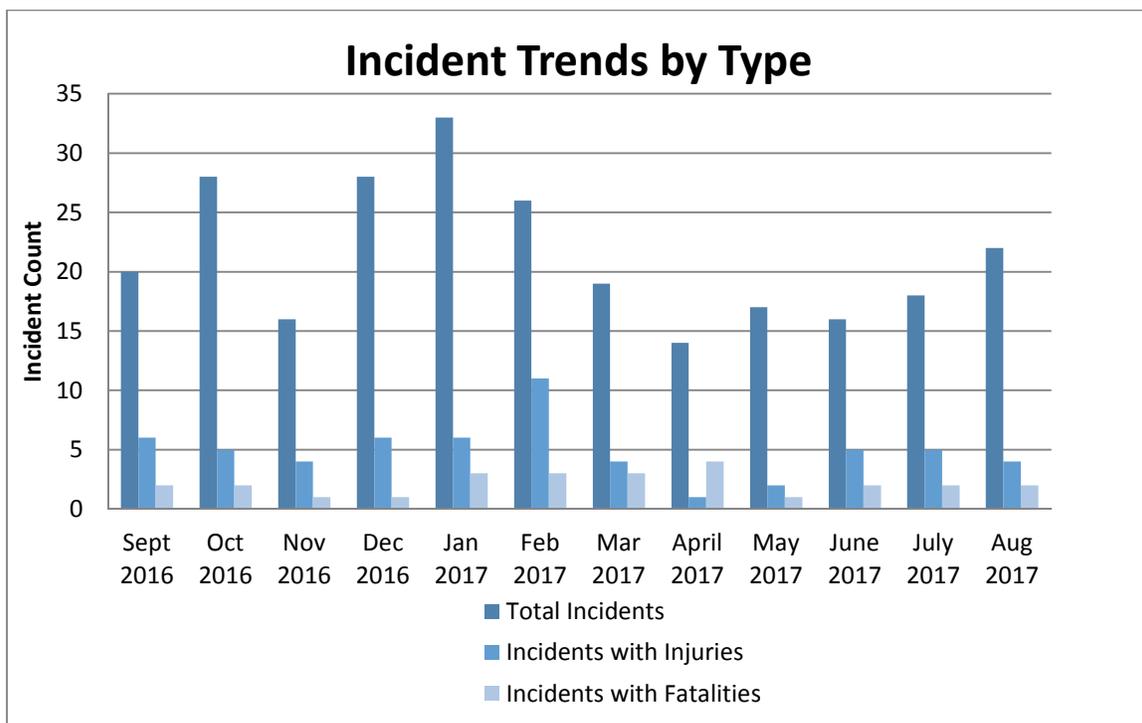
Construction started in 2016 and revenue service is planned to begin late 2021. RTSB staff is attending the System Safety Review Committee Project Meetings and Fire Life Safety Committee Project Meetings. The Commission approved Resolution ST-186, which approves the Safety and Security Certification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

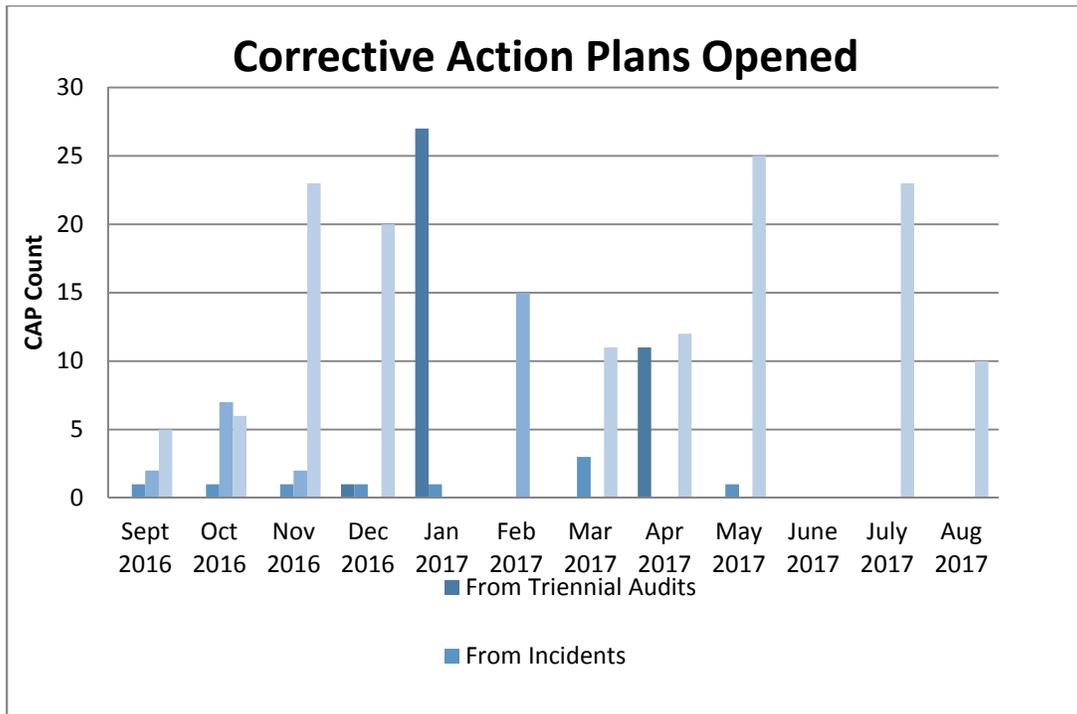
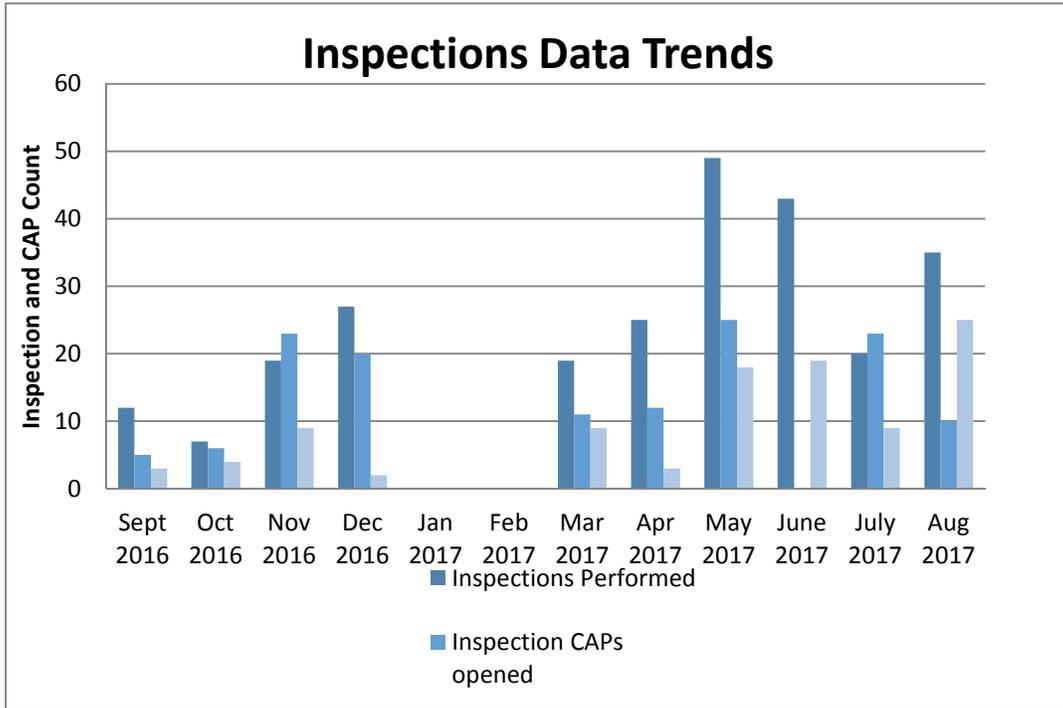
STATISTICS SUMMARY

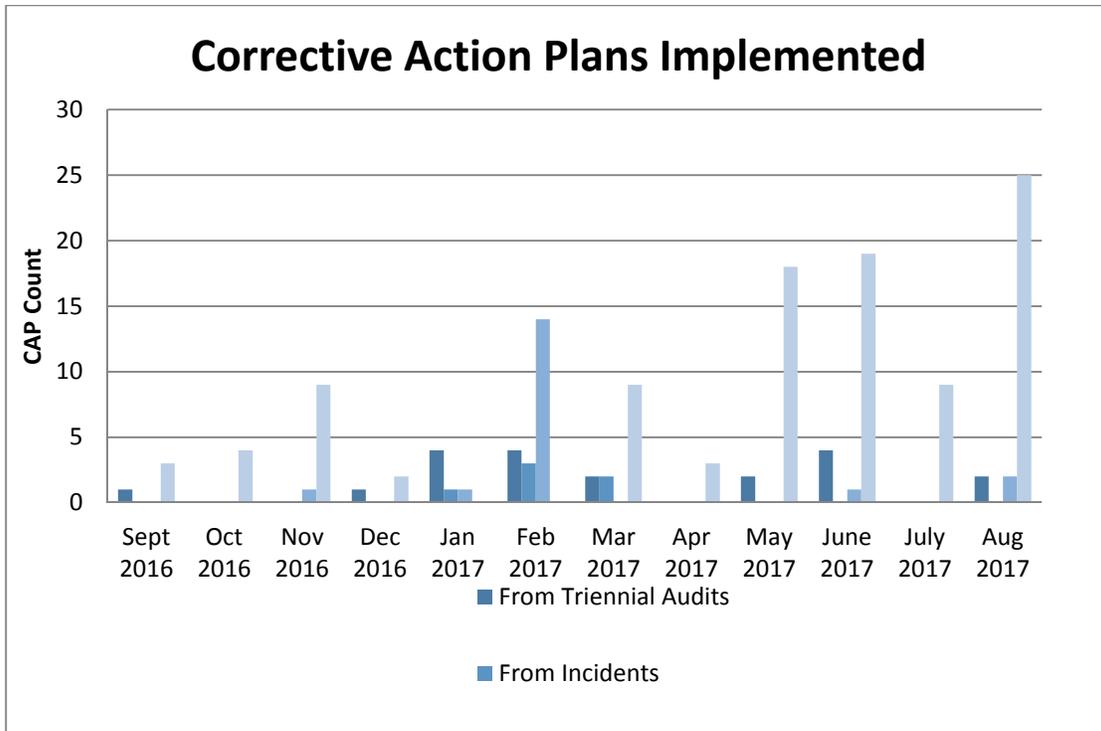
Investigations	
Incidents Reported	22
Incident Investigations Closed	21
Complaints Investigated	0
Rail Transit Inspections	35
Triennial Audits	0

Corrective Action Plans	
New Corrective Action Plans	10
From Triennial Audits	0
From Incidents	0
From Internal Safety/Security Audits	0
From Rail Transit Inspections	10
Closed Corrective Action Plans	29
From Triennial Audits	2
From Incidents	0
From Internal Safety/Security Audits	2
From Rail Transit Inspections	25

ONGOING DATA / TRENDS







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