

Safety and Enforcement Division



Monthly Performance Report

May 2017

CONTENTS

COMPLIANCE WITH ORDERING PARAGRAPHS (COPS)	3
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: AUDITS AND INCIDENT INVESTIGATIONS	6
ELECTRIC AND COMMUNICATIONS FACILITY SAFETY: PROCEEDINGS	7
ELECTRIC AND COMMUNICATIONS FACILITY SAFETY: REPORTS AND OTHER ACTIVITIES	8
ELECTRIC GENERATION SAFETY AND RELIABILITY: INVESTIGATIONS, INSPECTIONS, AND AUDITS	9
UTILITY RISK ASSESSMENT AND SAFETY ADVISORY	10
REVIEWING SAFETY & RISK IN GENERAL RATE CASES	10
PROCEEDINGS	14
MONITORING THE WHISTLEBLOWER WEBSITE.....	16
OFFICE OF RAIL SAFETY	17
RAILROAD SAFETY – ROSB.....	17
ROSB INSPECTION, INVESTIGATION & FIELD ACTIVITIES.....	18
RAIL CROSSINGS AND ENGINEERING BRANCH – RCEB	22
<i>Rail Crossing Incident Investigations</i>	23
<i>Informal Complaints</i>	23
<i>Safety Assessments, Quiet Zones and Reviews</i>	24
<i>Environmental Reviews</i>	25
<i>Proceedings, Resolutions and G.O. 88B Reviews</i>	26
<i>Operation LifeSaver Inc.</i>	27

RAIL TRANSIT - RTSB27

Corrective Actions Plans27

Incident Investigations28

Proceedings / Resolutions28

Safety Certification and Oversight of Rail Transit Agency Projects29

Statistics Summary35

Ongoing Data / Trends36

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.

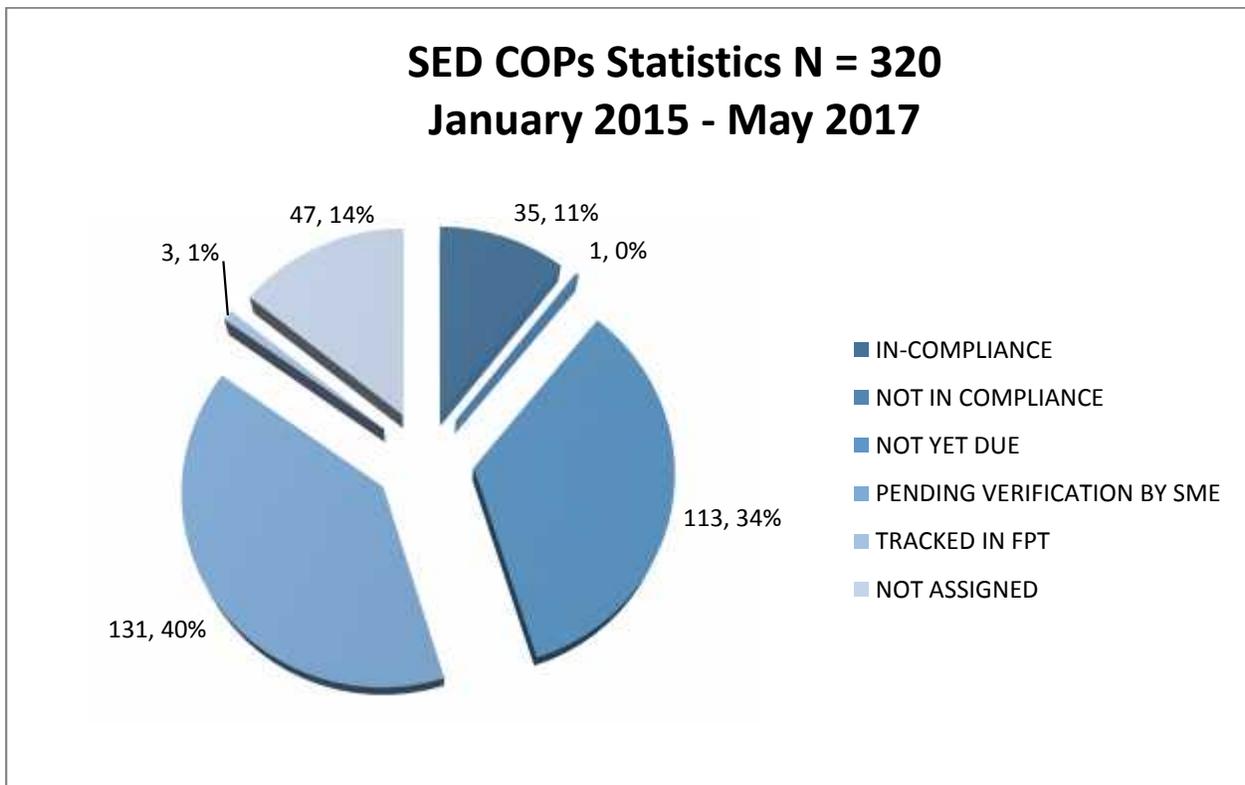
This Report has not been approved or disapproved by the CPUC.

COMPLIANCE WITH ORDERING PARAGRAPHS (COPS)

Through May 31, 2017, SED shows 320 total entries in the COPS system; with 35 reaching compliance (11%), 113 (34%) not yet due for compliance, and 1 (<1%) currently remaining out of compliance. The remaining 172 (55%) are either pending verification or have not yet been assigned for verification.

During May 2017, there were 10 new entries into the COPS system for the Safety & Enforcement Division.

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

Date Cited	Work Type	Utility	Amount	Violations	Status
6/1/2017	Audit - 2016 DIMP	Southwest Gas	\$ 200,000	192.1007 (c)	Appeal Period ends July 1, 2017
Total 2017			\$ 200,000		

INSPECTIONS

2017 Inspections: GSRB has conducted 26 scheduled inspections in 2017 and has completed the final inspection report for 18 of these 26 inspections during 2017.

INCIDENT INVESTIGATIONS

As of May 31, 2017, GSRB Staff received 105 incidents year to date. All pre-2016 incident investigations have been completed. Metrics on 2016 Incident Investigations:

TOTAL reported in 2016	167	Percent
Open	29	17 %
Closed	138	83 %

The CY 2016 incidents¹ are categorized as follows:

- 135 – Level 1 incidents
- 15 – Level 2 Incidents
- 8 – Level 3 Incidents
- 8 – 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 May 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. Additionally, SED has a pending application for rehearing that was submitted on September 26, 2016, and is still pending. On November 22, 2016, the Commission issued a Notice of Reassignment to ALJ Rafael Lirag. On December 16, 2016, Pacific Gas and Electric Company filed its Initial Compliance Plan.
- **Gas Safety OIR (R.11-02-019) (Advisory)(Commissioner Guzman Aceves/ALJ Kersten):** GO 112-F in Attachment A of D.15-06-044 is effective June 25, 2015; except that as to Sections 105, 122, 123, 125, 142, 143, 144, 145, and 162, the gas operators shall comply with these sections as soon as feasible but no later than January 1, 2017, unless compliance is extended for a particular provision pursuant to Rule 16.6 of the Commission's Rules of Practice and Procedure or its successor. R.11-02-019 was closed in June 2015, however, it was re-opened on an application for rehearing of the June 2015 decision by Office of Ratepayer Advocates and Utility Workers Union of America in July 2015. In addition, Pacific Gas and Electric Company filed a petition to modify Decision 15-06-044 on January 31, 2017, causing the proceeding to be re-opened and reassigned. Decisions on the rehearing requests and PG&E's petition are still pending.
- **Mobile Home Parks Pilot Program (Implementing D.14-03-021):** 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. No significant updates for May.
- **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 issued under the gas and electric safety citation programs should be adopted.
 - Both the gas and electric safety citation programs should be modified to make utility reporting of self-identified potential violations voluntary.
 - Under the modified rule, we will not require the utility to 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):** This application was filed on September 30, 2015. The project described in the application, 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. SED performed a technical review of available records related to Line 1600 from the pipeline safety and integrity perspective. On May 23-25, 2017, Energy Division conducted six Public Hearing Environmental Impact Scoping meetings at three locations in San Diego County to solicit comments. SED staff attended each meeting as an observer to respond any gas safety related questions.

ELECTRIC SAFETY AND RELIABILITY PROGRAMS

ELECTRIC AND COMMUNICATIONS FACILITY PROGRAM: AUDITS AND INCIDENT

INVESTIGATIONS

In May 2017, Electric and Communications Facility Safety Section Staff:

- Received 11 electric incident reports and closed 16 previously reported electric incident investigations;
- Investigated 17 customer safety and reliability complaints;
- Conducted one Communication Infrastructure Provider audit;
- Issued five Notice of Violation (NOV) letters/reports.

Metrics for Facility Incident Investigations as of May 31, 2017

Electric and Communication Facilities	Level 1	Level 2	Level 3	Level 4	Total ²
Total open incidents	7	14	36	39	96
Total incidents reported in 2017	6	7	18	16	47
Total incidents closed in 2017	8	14	12	17	51
Total open 2017 incidents	5	4	17	14	40
Incidents reported in May 2017	3	2	3	3	11
Incidents closed in May 2017	2	3	5	6	16

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):** On July 15 and July 30, 2015, fires and explosions in underground electric vaults caused power outages that affected thousands of Long Beach customers for several days. On August 15, 2015, another fire occurred in an underground vault with additional outages. After ESRB's investigation and upon SED's recommendation, the Commission adopted an Order Instituting Investigation on July 14, 2016. On May 25, 2017, SED and Southern California Edison filed a settlement agreement for Commission consideration; pending.
- **Investigation into Huntington Beach Incident (I.15-11-006) (Commissioner Randolph/ALJ Kim) (Advocacy):** A subcontractor was fatally injured in a Southern California Edison underground vault in Huntington Beach. On December 15, 2016, SED and Southern California Edison filed a settlement agreement for Commission consideration; pending.
- **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. The schedule anticipates that a final map and the new rules will be in place by the end of 2017. Over the next several months, parties will be holding numerous workshops and filing comments to address proposed rules and mapping products.
- **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; a prehearing conference is scheduled for June.
- **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 current settlement discussions are 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. On May 31, ESRB staff participated in a workshop to examine and discuss existing Federal statutes and guidelines on physical security of electric facilities, including an overview of the implementation of the critical infrastructure protection (CIP-014) standard from the North American Electric Reliability Corporation (NERC).

- **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. A set of inspection protocols was issued for review by the ALJ on September 29, 2016, who sought comment on whether Commission general orders need to be revised to include the protocols. On January 10, 2017, the assigned ALJ issued a ruling seeking comments on the joint staff Proposed Rules for Station Power for Electric Storage Devices and reply comments were filed by January 31, 2017. On May 18, 2017, the Assigned ALJ issued a ruling requesting the Energy Division and the California Independent System Operator to hold a workshop on Friday, June 2, 2017, to discuss the Joint Staff Proposal on Multiple-Use Applications for Energy Storage. ESRB will participate in the workshop and 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 February 10, 2017, the Commission held a workshop on DER Growth Scenarios and Load Forecasting. A February 27 Assigned Commissioner’s Ruling set a new schedule for developing a utility framework based on the workshop discussions, with working group meetings scheduled during April and May. On May 16, 2017, the Assigned Commissioner issued a ruling soliciting answers to stakeholders’ questions in the Energy Division Staff White Paper on grid modernization. Also, a workshop is scheduled for June 5, 2017 to discuss stakeholders’ responses to the questions in the White Paper. ESRB will participate in the workshop and 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 proposed budget contains three positions in ESRB for this project; ESRB is planning next steps for the Commission’s consideration.
- **Butte Fire Investigation and Citation:** ESRB completed its incident investigation of the Butte Fire, which burned 70,868 acres, destroyed 921 structures, damaged 44 structures, and resulted in two indirect civilian fatalities and one injury. On April 25, 2017, SED issued two citations to PG&E for its involvement in the Butte Fire. The total financial penalty for the two citations is \$8.3 million. On May 15, 2017, PG&E requested an extension of time to reply to the citation. The extension of time was granted, and the deadline for PG&E to respond to the citations was revised to June 9, 2017.

ELECTRIC AND COMMUNICATIONS FACILITY SAFETY: 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: INVESTIGATIONS, INSPECTIONS, AND AUDITS

The Electric Generation Safety and Reliability Section (EGSRS) staff has performed the following in May 2017:

- Completed an audit of High Winds Generating Facility, from May 22 through 25, 2017 in Birds Landing.
- Completed a draft notice of violation (NOV) letter for 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.
- Continued to work on the investigation of the Ocotillo incident that resulted when one of the towers on a wind turbine buckled and fell.
- Continued to improve EGSRS’ Incident Investigation Procedure by updating the methods and best practices that the investigators should follow to conduct more efficient and effective investigations.
- Monitored nine forced and 12 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 Walnut Creek power plant audits for compliance with GO 167 requirements.
- 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 database.
- Corresponded with the CAISO following a Stage 1 Emergency.
- Coordinated with CPUC’s Energy Division as part of ongoing collaborative summer electric emergency monitoring to monitor resource availability, generator and transmission outages, and fires.
- Please see the 2017 year-to-date incident statistics in the table below.

Metrics for Generation Incident Investigations as of May 31, 2017

Electric Generation Incidents	Level 1	Level 2	Level 3	Level 4	Total ³
Total open incidents	0	0	2	2	4
Total incidents reported in 2017	0	0	1	2	3

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.

Total incidents closed in 2017	0	0	0	0	0
Total open 2017 incidents	0	0	1	2	3
Incidents reported in May 2017	0	0	0	0	0
Incidents closed in May 2017	0	0	0	0	0

UTILITY RISK ASSESSMENT AND SAFETY ADVISORY

REVIEWING SAFETY & RISK IN GENERAL RATE CASES

The Commission on May 11 issued a decision to approve, with some modification, a comprehensive settlement of issues in the Pacific Gas & Electric TY 2017 General Rate Case (D.17-05-013). The decision authorized a GRC revenue requirement increase for 2017 of \$88 million over PG&E’s current authorized level of \$7.916 billion, a 1.1% increase. This authorized increase is the net result of a decrease from 2016 levels of \$62 million for electric distribution, a decrease of \$3 million for gas distribution, and an increase of \$153 million for electric generation. The Commission also authorized post-test year revenue requirement increases of \$444 million in 2018 (an annual increase of 5.5%), and \$361 million in 2019 (an annual increase of 4.3%).

PG&E’s total authorized 2017 revenue requirements for its gas distribution, electric distribution, and electric generation lines of business are \$1.738 billion, \$4.151 billion, and \$2.115 billion, respectively, a total of \$8.004 billion.

Elements in the settlement not approved were related to Rule 20A undergrounding and tax accounting. The unsettled issue of moving PG&E to a four-year rate cycle was dismissed without prejudice, to be addressed in another proceeding.

Reflecting recent legislative and policy directives in the aftermath of the 2010 San Bruno fatal gas pipeline explosion and other serious incidents affecting safety of PG&E gas and electric operations, the decision features an extensive discussion of safety and the CPUC’s efforts to incorporate risk management practices in GRCs. Citing aspects of the settlement agreement and supplemental testimony and workshop input, the decision determined, “[W]e have a solid record upon which to base our decision on matters in this proceeding regarding PG&E’s safety showing, as well as the linkage between safety and executive compensation.”

As previously described, the settlement agreement largely left intact PG&E’s proposed spending for safety and risk reduction efforts that were highlighted in the SED Risk Assessment & Safety Advisory (RASA) staff evaluation issued in March 2016.

One area related to the safety of hydroelectric and dam operations, which are not directly subject to CPUC jurisdiction, but rather regulated by the U.S. Federal Energy Regulatory Commission (FERC) and the California Division of Safety of Dams (DSOD). Based on issues raised by RASA in the evaluation report, the GRC decision directed PG&E to continue efforts to incorporate risk management in its dam operations: “PG&E should work with DSOD and then develop a reporting schedule and format that will enable the Commission to monitor the progress and outcome of PG&E’s discussions with DSOD regarding development of a structured risk portfolio management program to assess, rank, and effectively mitigate risks at its dams in a timely manner.”

PG&E was ordered to report on the results of its discussions with the DSOD within 60 days of the decision, via letter to the SED Director.

Additionally, SED was directed to meet and confer with PG&E and other parties to ensure that safety spending accountability and safety performance metrics reporting – another element of the settlement agreement – are “implemented in a manner that best suits SED’s purposes.”

The settlement agreement endorsed by the GRC decision included a substantial increase in safety reporting requirements. Many will be expected as part of future GRCs, while others will supplement existing safety/reliability reporting mechanisms. The table below was compiled by RASA staff from the settlement:

Section	New Reporting Required	Name of Report	How this affects other safety proceedings
3.1.5.5	PG&E required to report in next GRC on % of annual funding authorized by Commission for safety outreach and info for low-income customers	GRC	Could affect proceedings related to disadvantaged communities – but maybe not safety proceedings
3.2.1.3	PG&E directed to submit annual reports to Commission to track forecast as compared to actual cross bore work and explain variances, as well as repairs, expenses, and variances	Gas Distribution Pipeline Replacement Program Annual Report	Will affect GRC
3.2.1.4	Enhancements to Gas Distribution Pipeline Safety	Gas Distribution Pipeline Safety Reports	Could be useful for GT&S, GRC, and more

California Public Utilities Commission | Safety and Enforcement Division

	Reports required by D.11-05-018 Attachment 5 to add work performed at the MAT level		
3.2.2.1	PG&E to report in its next GRC the ratio of the averaged Customer Average Interruption Duration Index (CAIDI) stats for the five worst performing divisions vs. the average for five best performing divisions; and will consolidate reliability reports	GRC & reliability reports	Adds information to the GRC
3.2.2.2	PG&E required to report annually on work conducted on certain poles, circuit breakers, cable, overhead conductors, switches, FLISR installations, and fuses	Various documents (does not state)	RAMP, GRC, and more
3.2.2.3	PG&E required to report annually on progress in the Surge Arrester Grounding Program	PG&E's annual budget report	Could be useful for analysis related to GRC or others
3.2.2.7	PG&E allowed to discontinue its annual Line Extension Reporting report, but shall put similar information into its GRCs	Line Extension Reporting report [Discontinue]; Add to GRCs	Makes the GRC more detailed
3.2.4.6	Sets forth procedural requirements for an annual reporting process about improving accessibility for disabled customers	No document yet; procedural requirements set forth for the future	
3.2.4.8	Reporting frequency reduced to once a year for the Safety Net Program and Quality Assurance Program reports	Safety Net Program and Quality Assurance Program reports	This is about frequency of the existing report only

California Public Utilities Commission | Safety and Enforcement Division

3.2.8.3	PG&E will file reports comparing authorized expense and capital to actual spending, and units of work authorized to units of work performed	Spending Accountability Reports (replace Budget Reports previously required under D.11-05-018 and D.14-08-032)	RAMP, GRC, GT&S
3.2.8.4	For previously funded safety work that PG&E deferred but now seeks funding, it must demonstrate how the funding is consistent with Commission identified principles (such as what other work took place instead of the deferred work)	GRC	GRC, GT&S, others. This could be very useful analysis
3.1.3.2	PG&E shall report the number of poles replaced and cost, explain why that group of poles was chosen, and provide risk analysis	Does not say – but must be the GRC	Could enhance the RAMP filing, and will be useful for GRC
3.1.5.5.3	PG&E shall report what percent of annual funding authorized for outreach and education on safety and emergency notifications was used for underserved communities	GRC	New requirement
3.2.1.1.2	PG&E plans to develop capability to differentiate gas leak rates by survey technology and will make this available	Gas Distribution Pipelines Safety Reporting	Methane Leak Proceeding; GT&S
3.2.8.9	Annually for the prior calendar year, PG&E shall provide monthly data for each LOB showing safety metrics (see text below).	Not specified	RAMP, RAMP-related performance metrics, GRC, GT&S

Safety Metrics: Under Sec. 3.2.8.9 described above, PG&E agreed to provide on an annual basis monthly data, if available, for each line of business showing the following safety metrics:

1. Incidents of wires down,
2. 911 Emergency Response,
3. Dig-in reductions,
4. Gas emergency response,
5. Diablo Canyon Safety and Reliability Indicators,
6. Hydro public safety index,
7. Lost work day case rate,
8. OSHA recordable rate (injuries per 200,000 production hours),
9. Near-hits reported,
10. Preventable motor vehicle accidents,
11. Serious preventable motor vehicle accidents,
12. Contractor lost work days,
13. Contractor days away,
14. Contractor OSHA recordable rate,
15. Number of fires requiring engine response attributed to PG&E operations, and
16. Employee fatalities and life-altering injuries attributed to PG&E operations.

It is expected that the data collection will commence during 2017 and reports made available beginning in 2018.

Also during May, SED RASA staff met with PG&E in preparation for the upcoming Risk Assessment Mitigation Phase (RAMP) filing that the utility will submit in November. PG&E described its evolving approach to risk identification, prioritization and development of mitigations to address the identified top safety risks.

PROCEEDINGS

- **Investigation into Safety Culture of Pacific Gas and Electric Company and PG&E Corp. (I.15-08-019) (President Picker/ALJ DeAngelis) (Advisory):** On March 8, 2017, the Commission issued the evaluation report prepared by NorthStar Consulting after a year-long investigation into PG&E's safety culture. CPUC President Picker also issued a Scoping Memo for Phase 2 of the OII, which will consider NorthStar's recommendations and other actions the Commission may take. A Phase 2 PHC is expected in early July.
- **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 and continue. A workshop for joint utility methodologies was held on February 15. SED is leading a technical working group to determine applicable safety performance metrics.

- **PG&E 2017 General Rate Case (A.15-09-001) (President Picker/ALJ Roscow) (Advisory):** D.17-05-013 was issued on May 11, 2017 (see description above). As directed in the decision, SED staff will continue working with PG&E to structure spending accountability reports and develop safety performance metrics.
- **Gas Leak Abatement OIR (R.15-01-008) (Commissioner Rechtschaffen/ALJ Kersten) (Advisory):** A proposed decision was issued May 15 to adopt the structures and policies for methane leak reporting and reduction activities that were developed during Phase 1 of this rulemaking. The Phase 1 PD formalizes the annual gas leak reporting mechanism and changes to reporting templates worked out among the parties and staff. A major component of the methane abatement effort will involve application by gas utilities of 26 Best Practices for planning, detection, quantification, repair of leaks and training. The PD will be considered during the Commission's June 15 business meeting. Separately, utilities are preparing their responses to the annual leak survey, covering leaks and repairs during 2016, which are due June 16, 2017.
- **SCE 2017 General Rate Case (A.16-09-001) (President Picker/ALJs Roscow & Wildgrube) (Advisory):** While not subject to the full S-MAP/RAMP requirements for this GRC cycle, SCE has included some level of analysis of its risk mitigations in the new GRC application testimony filed September 1, 2016. SED Risk Assessment staff issued an evaluation report on January 31, 2017. No parties requested a workshop on the SED evaluation. Parties filed their initial testimony on May 2, 2017.
- **Long Beach Outage Incidents (I.16-07-007) (President Picker/ALJ Cooke) (Advisory):** On May 25, Southern California Edison and the SED Electric Safety & Reliability branch (ESRB) forwarded a proposed settlement of issues raised by the investigation into a series of incidents that caused extensive and repeated disruptions of service to the city of Long Beach in July and August 2015. 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.
- **Electric Storage Procurement (R.15-03-011) (Commissioner Peterman/ALJ Cooke) (Advisory):** D.17-04-039 was approved April 27; the Track 2 decision includes new storage safety inspection protocol for grid-scale storage located at utility substations or other facilities. SED RASA is working with ESRB to implement the new protocols in the field.
- **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. Workshops and working groups are underway to complete the fire mapping process and develop new policies or regulations.

- **Physical Security of Electric Infrastructure (R.15-06-009) (Commissioner Rechtschaffen/ALJ Kelly) (Advisory)** After a year-long hiatus, this proceeding resumed with a Pre-Hearing Conference on February 2. Risk section staff issued data requests to IOUs to update information from 2014. A Scoping Memo was issued March 10, establishing a series of staff-led workshops to address the current state of federal policies and establish information sharing protocols. During May, RASA conducted two workshops. The first workshop was held May 2, 2017, at California Office of Emergency Services (Cal-OES) facilities in Mather, CA. The second was held May 31 at the CPUC to review federal-level policies for evaluating utility programs to protect critical infrastructure. Workshops will continue through the summer.
- **PG&E Gas Transmission & Storage Rate Case (A.13-12-012/I.14-06-016) (Picker) (Advisory):** The GT&S case was decided on June 25, 2016, with D.16-06-056. Among other provisions for disallowances for safety lapses, the decision also disallowed from immediate recovery \$696.4 million for 2011-2014 capital expenses above that previously approved in Gas Accord V. \$120 million is permanently disallowed, but \$576 million would be subject to an audit by Commission staff. Staff has begun reviewing PG&E’s extensive documentation of the relevant projects.

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 - 5/31/2017

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

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
Total 2017	0	3	1	2	3	1

Invalid Whistleblower Complaints Converted to Standard Complaints							
	<u>CAB</u>	<u>Transportation</u>	<u>Electric Safety</u>	<u>Gas Safety</u>	<u>Telco/Utility Fraud</u>	<u>Rail</u>	<u>Consumer Referred to Outside Agency</u>
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
YTD	0	1	0	0	1	1	0

Test, Incomplete or Duplicate Whistleblower Complaints	
January	1
February	3
March	0
April	1
May	1
YTD	6

OFFICE OF RAIL SAFETY

RAILROAD SAFETY – ROSB

In the month of May 2017, SED Staff’s Railroad Operations group completed the following:

New Incidents Investigated	4
Informal Complaints Investigated	3
Safety Assessments/Reviews	6
Compliance Actions	933

Major Inspections Completed - Such as Focused Inspections	2
Operation LifeSaver Presentations	18

ROSB INSPECTION, INVESTIGATION & FIELD ACTIVITIES

May 3, 2017: CPUC railroad safety inspectors performed a regular inspection at the BNSF Kimberly Clark yard in Fullerton. The inspectors found that an air valve plug was not properly tightened on a tank car loaded with Toluene Diisocyanate (TDI), a toxic and highly reactive organic substance. 49 CFR Part 173.31(d)(iv) requires a shipper of a tank car to perform an external visual inspection and ensure that all closures all fastenings on tank cars are properly tightened in place by the use of a bar, wrench, or other suitable tool.

The BNSF Hazardous Material Manager was immediately notified and corrected the non-compliant condition. CPUC inspectors reviewed the shipper’s inspection history and discussed the defective condition with the management team to determine the proper corrective action, which resulted in a recommendation of civil penalties.

May 5, 2017: On January 31, 2017, a CPUC railroad safety inspector performed a routine inspection of a UPRR yard in Indio and discovered a large sinkhole in the walkway next to the track. The sinkhole is a dangerous tripping hazard to railroad employees who often work at night on and around moving trains. General Order 118-A requires standards for the construction, reconstruction, and maintenance of walkways adjacent to railroad tracks to provide a safe area for train crews to work. The CPUC railroad safety inspector notified both the manager for the facility and the railroad manager, and issued a General Order Defect Report. On May 5, 2017, the CPUC railroad safety inspector performed a follow-up inspection and confirmed that the facility manager addressed the problem and repaired the sinkhole in a timely manner and within the parameters of the General Order requirements.

May 20, 2017: CPUC railroad safety inspectors have been performing ongoing monitoring of a railroad bridge repair project in the San Diego area that has been under construction for

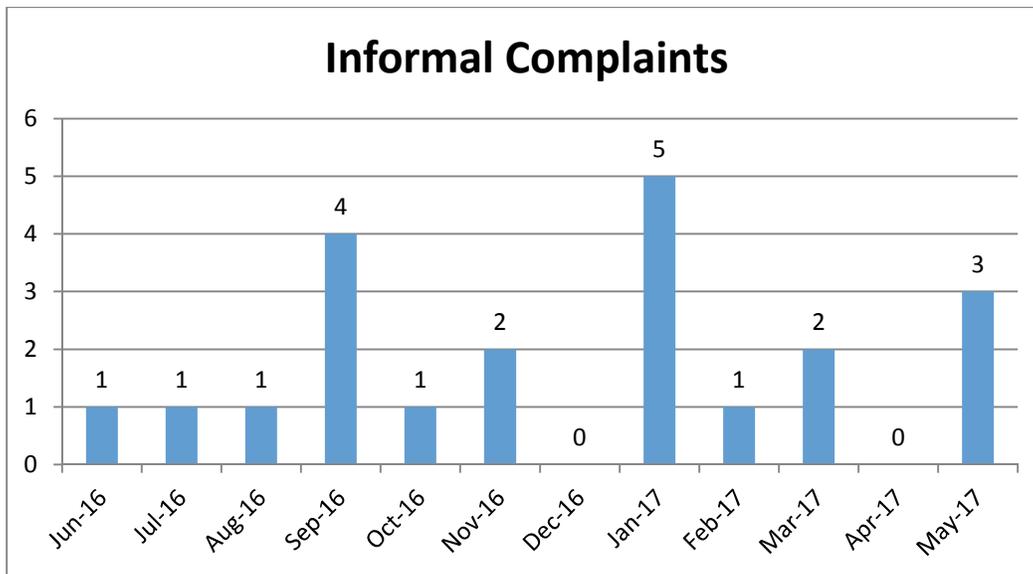
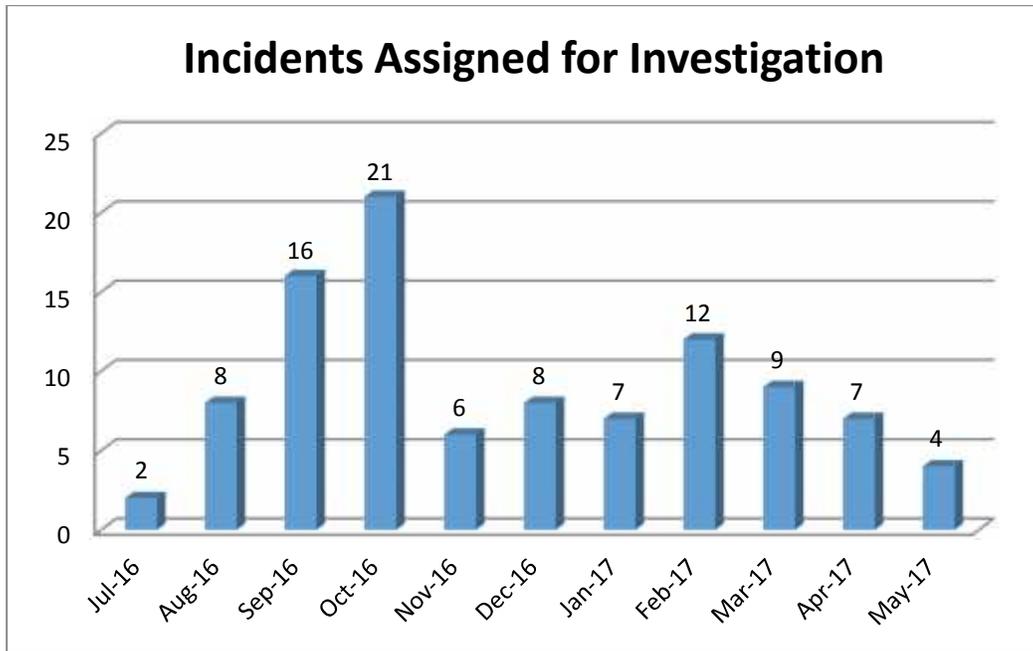
approximately two years. The bridge carries the Coaster passenger trains that run north and south through San Diego County for the North County Transit District, serving eight stations between Oceanside and downtown San Diego. More than 20 trains run on weekdays, with additional service on the weekends. The railroad bridge crosses the Los Penasquitos lagoon and has experienced progressive sinking of the pilings, which can cause damage to the bridge spans and derail a freight or passenger train into the body of water below.

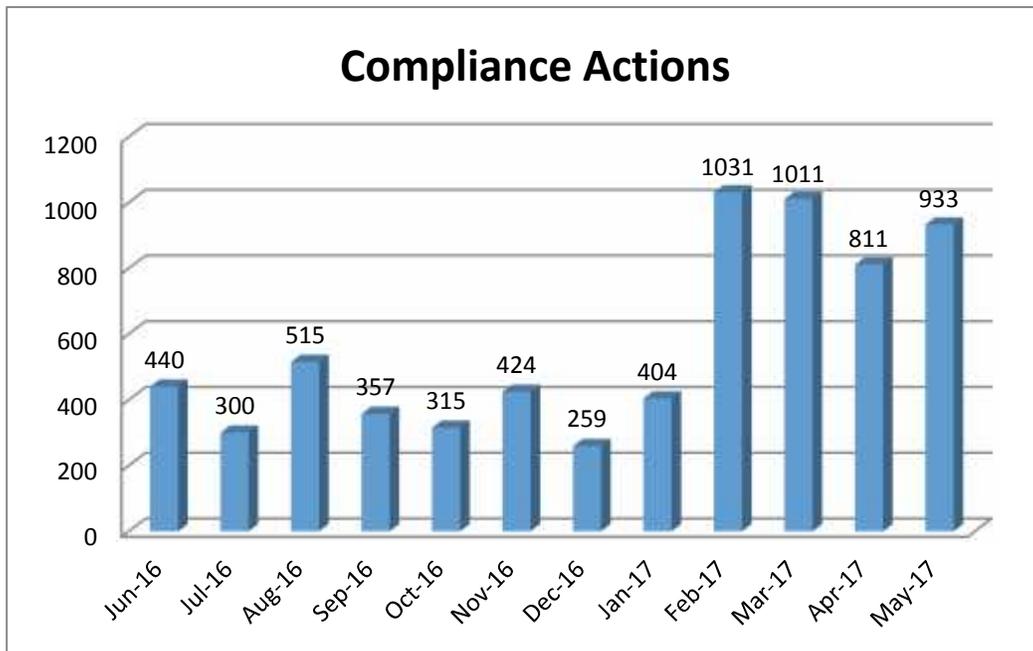
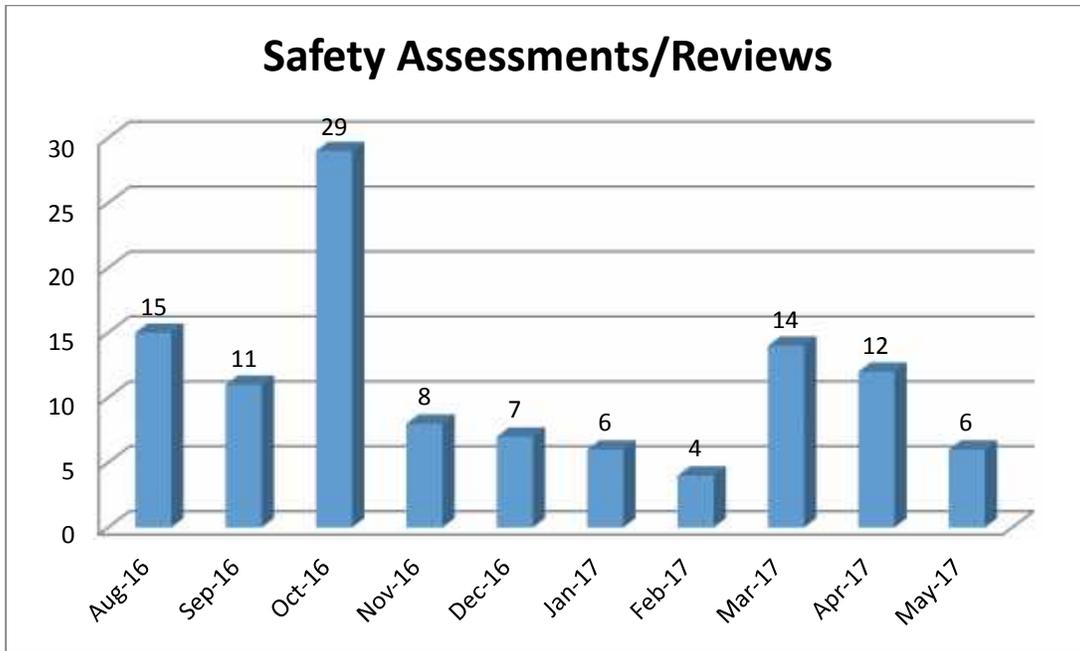
The CPUC railroad safety inspectors have been working with the railroad contractor and the bridge engineer to ensure that the repairs are appropriate and consistent with acceptable bridge repairs. Due to the significant risks associated with the heavily-used passenger rail, the CPUC railroad safety inspectors opened a Risk Management Status Report and are engaging in ongoing monitoring of this bridge, as well as three other bridges on the Coaster route.

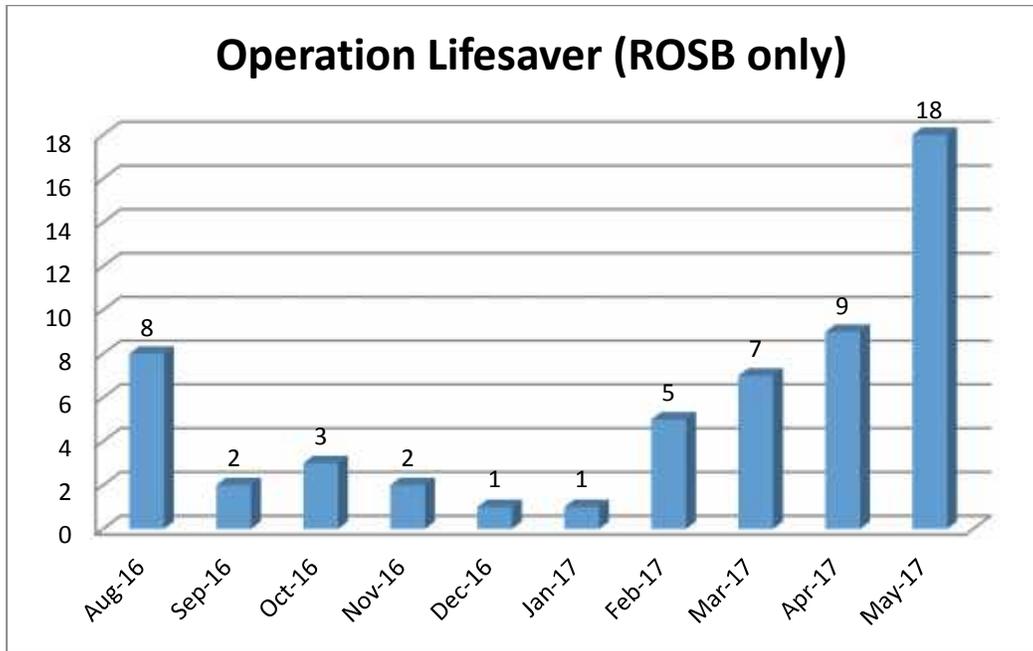
May 30, 2017: Three CPUC railroad safety inspectors performed a hazardous materials compliance inspection in UPRR's Ozol and Pittsburg Yards in Martinez and Pittsburg. One new inspector-in-training accompanied the experienced inspectors. The inspectors discovered a tank car containing hazardous material with degraded stenciling on one end of the car. The stenciled markings let the shippers know which tank cars should be used for shipping certain hazardous materials. The stenciling also identifies the car so if there is a derailment, first responders can identify the cars in the train's consist that are carrying hazardous materials. Without these marks or if the stenciling is illegible, neither the railroad nor the first responders can identify the car(s) carrying hazardous materials. Federal law 49 CFR Part 179.22(a) requires each tank car to be marked according to specific requirements and references appendix C of the AAR Specifications for Tank Cars. The railroad was notified of degraded stenciling. The shipper and car owner were sent a copy of the FRA Inspection Report (Form 6180.96) notifying them of the condition requiring correction.

The inspectors discovered a tank car containing hazardous material with a missing placard and content identification number on one side. Missing placards and identification numbers delay or prevent emergency responders from identifying the contents, which can result in exposure to hazardous contents or improper treatment of a release. Federal laws 49 CFR Parts 179.22(a) and 172.508(b) require each rail car that transports hazardous materials to have placard affixed

to the car that identifies the hazardous material. The railroad was notified of the missing placard and ID number and made immediate corrections. A copy of the FRA Inspection Report (Form 6180.96) was sent to the railroad. The inspectors also discovered two tank cars containing hazardous materials with placards that had substantially reduced visibility due to deterioration. Federal law, 49 CFR Part 172.516(c) (VI), requires easily identifiable placards.







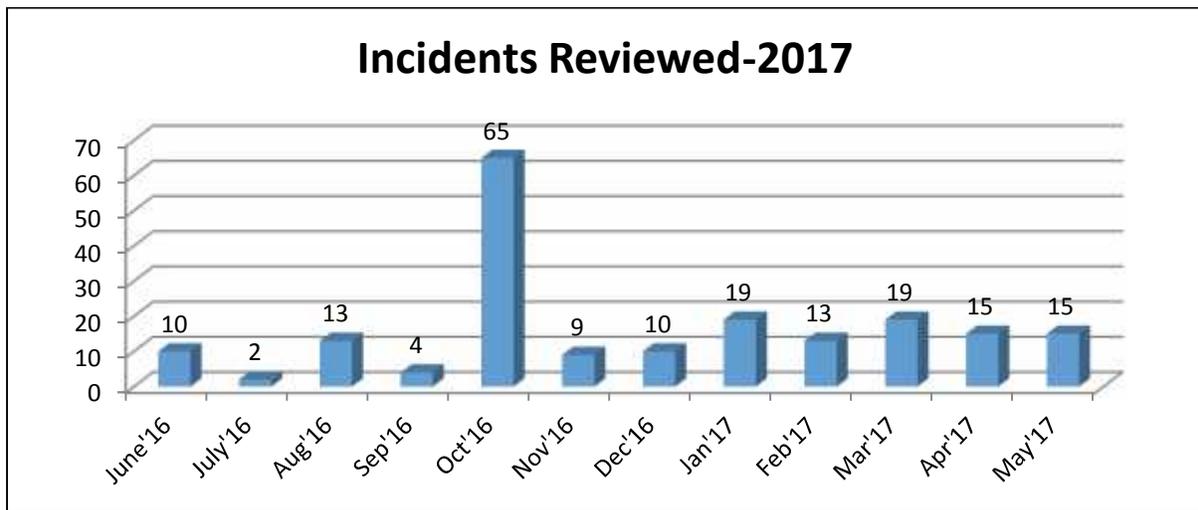
RAIL CROSSINGS AND ENGINEERING BRANCH – RCEB

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

	New During Period	Closed During Period
Crossing Incident Reviews	15	15
Informal Complaints Investigations	0	1
Safety Assessments/Quiet Zones/Reviews	24	24
Environmental Reviews	65	65
Proceedings, Resolutions and G.O. 88-B Reviews	14	9
Operation LifeSaver Presentations	3	3

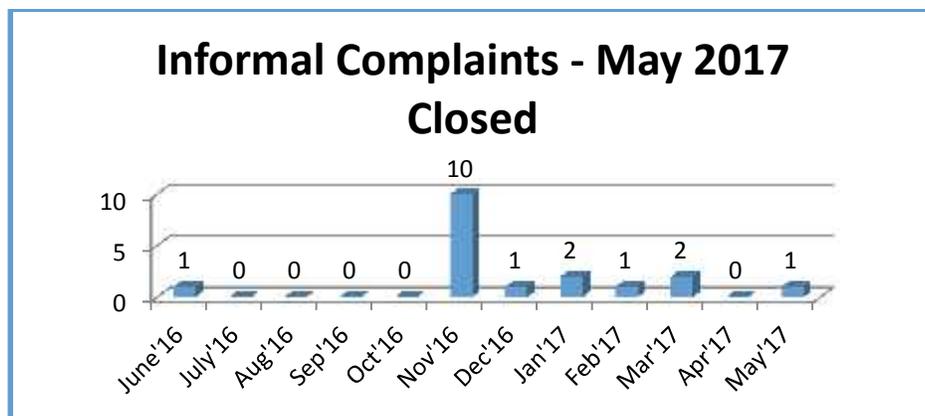
RAIL CROSSING INCIDENT INVESTIGATIONS

- In May 2017, the Rail Crossings and Engineering Branch (RCEB) engineers assigned 15 new incidents reviews at highway-rail crossings and none at highway-light rail transit (LRT) crossings (crossings). RCEB completed 15 crossing incident reviews and evaluations.



INFORMAL COMPLAINTS

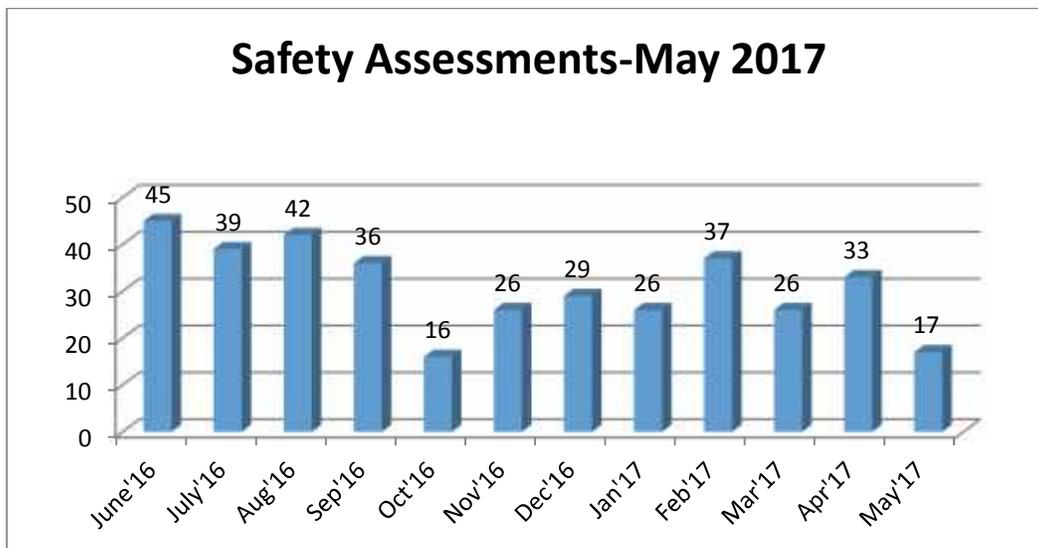
In May 2017, RCEB did not receive any new complaints and closed one past informal complaint. On May 3, 2017, RCEB staff closed a review after confirmation of railroad pavement markings and roadway surface repairs for the Avenue 424/Nebraska Avenue crossing in Tulare County.

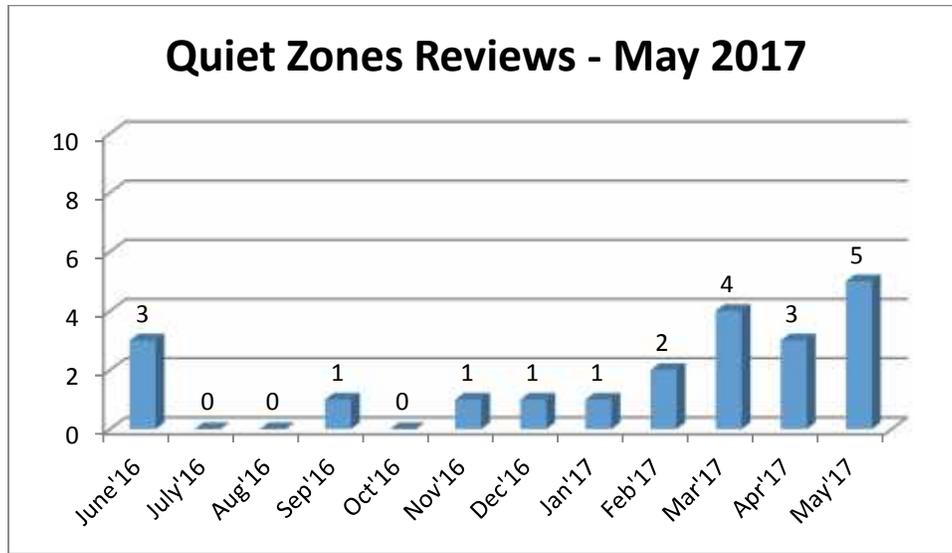


SAFETY ASSESSMENTS, QUIET ZONES AND REVIEWS

In May 2017, RCEB completed 17 rail crossing safety assessments involving communications, field inspections, and diagnostic reviews with railroads and local agencies. RCEB reviewed five Quiet Zones. Two staff members completed a traffic signal safety course to maintain engineering skills.

- QTZN 2016120002: On May 3, 2017, the City of Petaluma issued an amended notice of establishment, with a new effective date of May 24, 2017, to include the private Cedar Grove crossing (DOT 498686R).
- QTZN 2017030002, In early May 2017, the RCEB determined that no further comments are necessary for the March 28, 2017 Notice of Intent (NOI) issued by the City of Riverside for the Cridge Street crossing (DOT 026493P).
- QTZN 2017050001: On April 24, 2017, the Alameda County issued a Notice of Intent for creating its Sunol Quiet Zone of three at-grade crossings (Castle wood Drive, Bond Street and Main Street).
- QTZN 2016110001: on May 15, 2017, the City of Santa Rosa issued a Notice of Establishment for a quiet zone with the effective date of June 7, 2017.
- QTZN 2017030001: On May 16, 2017, the Sonoma County issued a response letter to the RCEB comment letter on the March 17, 2017 Notice of Intent (NOI). The response letter withdrew the initial March 14, 2017 NOI and acted as a new NOI for creating two separate quiet zones because the original NOI covered two separate groups of continuous at-grade crossings.

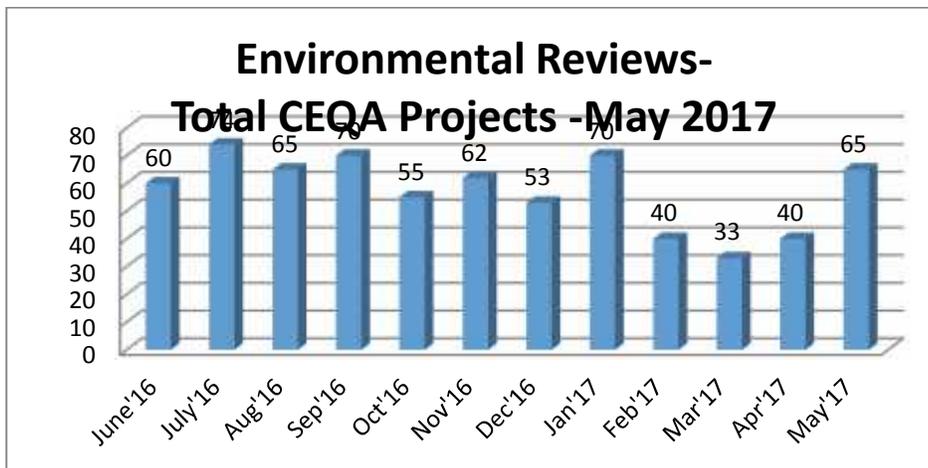


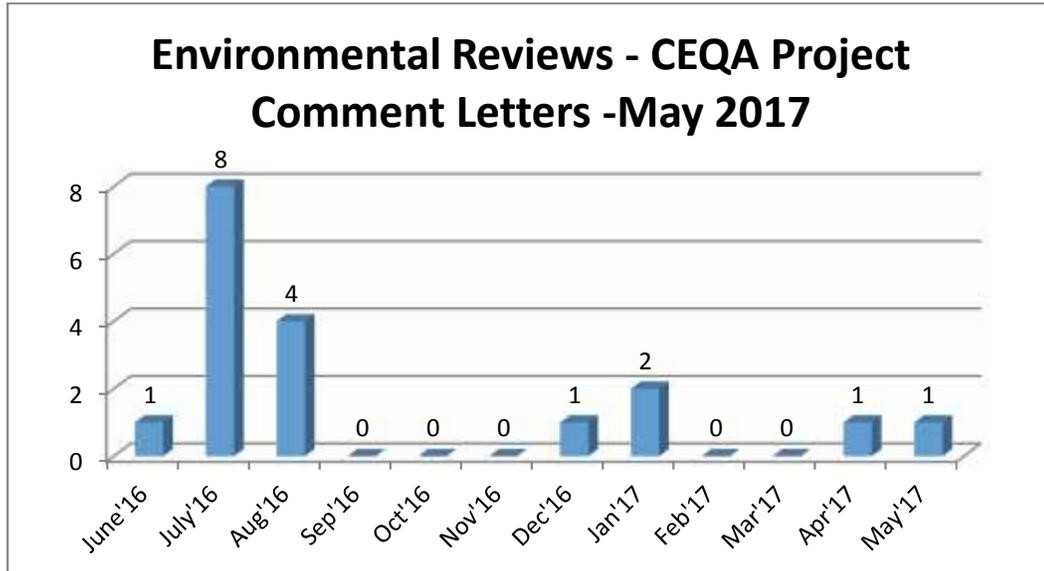


ENVIRONMENTAL REVIEWS

In May 2017, RCEB reviewed 65 CEQA reports and issued two comment letters. In April 2017, RCEB reviewed 40 CEQA reports not “one” as previously reported in the April 2017 report. When railroads and local agencies plan new projects or developments, staff reviews the documents for safety impacts to crossings. The review addresses safety issues in highway-rail crossing design and nearby intersections during the design phase of the projects.

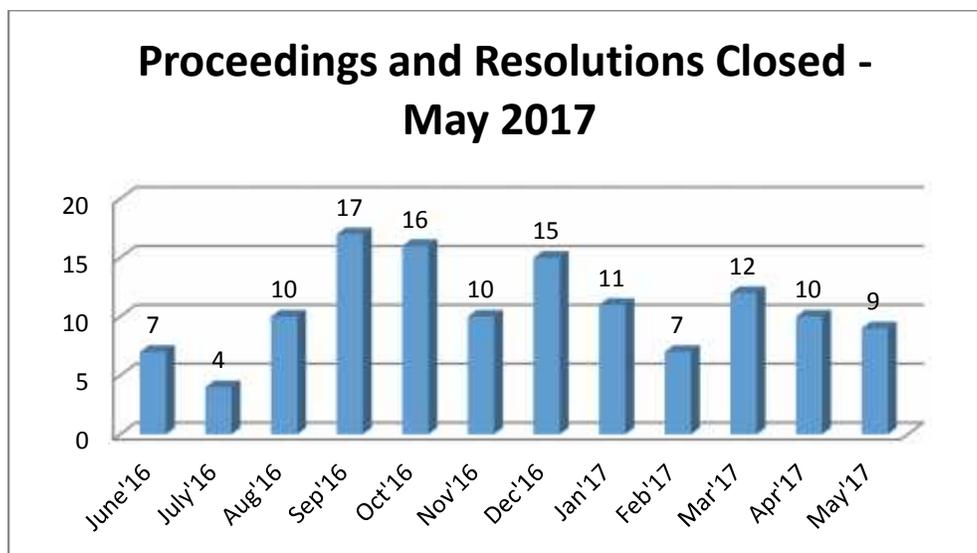
- The City of Pittsburg filed a Notice of Completion for the Dow Modernization Draft Project located in the Burlington Norton Santa Fe Stockton Subdivision mainline. RCEB staff requested the agency to ensure that the nearby crossings and track within the facility comply with applicable federal and state requirements.





PROCEEDINGS, RESOLUTIONS AND G.O. 88B REVIEWS

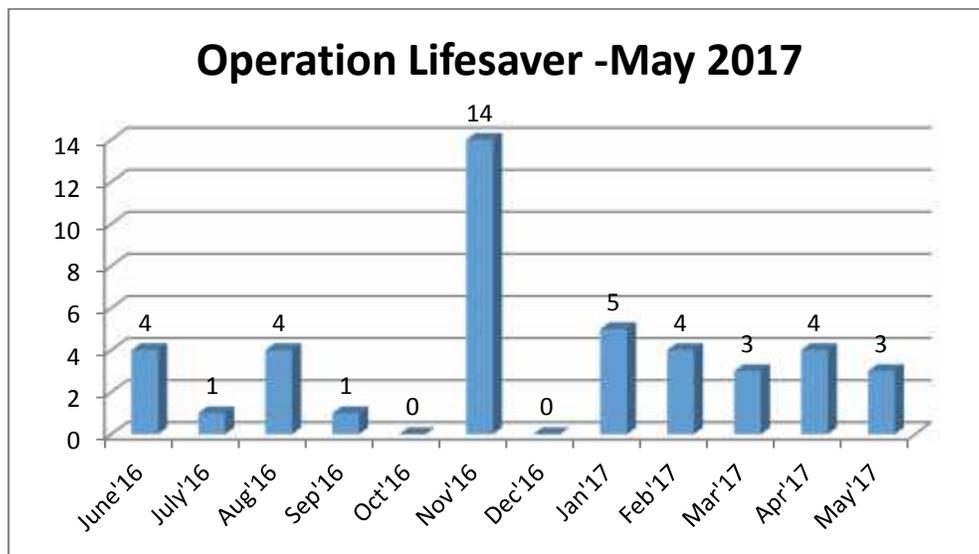
In May 2017, RCEB staff received two major proceedings requiring Administrative Law Judge review, and 12 new General Order 88-B applications for changes to existing crossings. In this month, RCEB approved nine General Order 88-B applications.



OPERATION LIFESAVER INC.

In May 2017, RCEB completed one Operation LifeSaver Inc. (OLI) activity that resulted in three presentations. As time permits, RCEB staff continues to volunteer and participate in OLI events and activities.

- On May 5, 2017, staff presented the OLI Rail Safety message to the Great Valley School Ag Day K-8 students. Three presentations to 100 students received the rail safety message. The elementary school is in the city of Stockton, San Joaquin County.



RAIL TRANSIT - RTSB

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

CORRECTIVE ACTIONS PLANS

- Twenty-five CAPs were opened for May 2017.
- Nineteen CAPs were closed this month.

INCIDENT INVESTIGATIONS

- In May 2017, 17 incidents were reported by RTAs.⁴
- 63 incident investigations were closed by RTSB in May 2017.

PROCEEDINGS / RESOLUTIONS

- **I.16-06-010 Order Instituting Investigation (OII) (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. Additionally, both parties were ordered to file another joint Case Management Statement, which they did on January 13, 2017.

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.

Evidentiary hearings were held February 13-15, 2017; ALJ is preparing final exhibits and exhibit list. BART separately filed a motion to seal a portion of the evidentiary record. ALJ Kim requested parties, within five working days of March 1st, to review, meet and confer, and file one set of jointly prepared list of proposed corrections or amendments to exhibit list. Closing briefs were filed by both SED and BART on March 28, 2017. Briefs and responses from parties were filed including in regards to the exhibit with the in-cab video from the BART vehicle involved in the accident, subject to this proceeding and closing briefs. BART also filed a brief requesting that the Commission sanction SED for allegedly releasing the in-cab video to the media. In its filings, SED indicates it did not distribute the video to the media as suggested by BART. ALJ ruling is pending.

- **R.09-01-020:** - On January 29, 2009, the Commission instituted 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 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 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 GO 175-A: Rules And Regulations Governing Roadway Worker Protection Provided By Rail Transit Agencies And Rail Fixed Guideway Systems language and the proposed GO language. Staff proposed changes to GO 172 only. Pending ALJ ruling.

SAFETY CERTIFICATION AND OVERSIGHT OF RAIL TRANSIT AGENCY PROJECTS

- **AirTrain Extension:** The San Francisco International Airport (SFO) AirTrain Extension 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 may have multiple Safety Certification Verification Reports, as it has multiple phases and will start revenue services accordingly, from October 2018 to June 2019. Safety Certification Plan review is underway. Staff attends progress meetings.

- **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 Safety Certification Verification Report (SCVR) for these first 10 vehicles in June 2017. The 10-car pilot train should be ready for revenue service in mid to late July 2017. Engineering tests, qualification tests, and safety-related testing is on-going. Mainline tests are being conducted during blanket hours (1-3am). Safety-related tests currently in progress are friction break tests.
- **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. Track work is completed. 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. This manager will report directly to BART's Chief Safety Officer. Also, this manager will notify the RTSB's BART representative 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 was submitted unofficially to RTSB staff to review and provide feedback.

- **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 are currently three open items that should all be completed by July 28, 2017.
- **Silicon Valley Berryessa Extension:** 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 & FLSSC meetings related to the SVBX project on May 18, 2017. On May 22 & 23, 2017, Staff observed SHO TPSS functional testing from field. There were some discrepancies noted and BART engineers will have it on the punch list items. Staff attended and participated in the FTA Quarterly meeting at the SVBX Office in Milpitas, May 24, 2017.
- **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 2019, is in the construction phase and is being monitored by both Central Subway (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. Staff periodically provides verification documentation for any construction certification items that are completed to members of the CSP Safety and Security Certification Review Committee (SSCRC) including RTSB and SFMTA system safety staff as time goes on for verification review. Whenever RTSB or SFMTA Safety staff has any questions with such document submittals, they will communicate them to CSP to be addressed. 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.

- **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 12, 2017, seventy-one (71) P3010 vehicles have so far 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.
- **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 track and seven stations, is planned to be constructed in three sections, and is currently in the 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.

- **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. Discussions and crossing diagnostics have occurred, however, no construction has begun. **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 early construction phase and is being monitored by RTSB through regular meetings. The project is due to be completed in 2019.
- **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 Safety and Security Certification Plan (SSCP) was approved at the Commission Meeting on April 27, 2017, as Resolution ST-191.

- **San Francisco Municipal Transportation Agency (SFMTA) LRV4 Procurement to Expand and Replace the Rail Fleet:** In September 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 2017, with two added in February and March, respectively, for a total of three cars received. The cars are now undergoing qualification testing on site to ensure integration with the existing and newly installed systems of 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, and participation in witness point activities (e.g. vehicle testing). Recently, 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, etc., from SFMTA staff. Staff participated in a testing of the new prototype vehicle on May 17, 2017, 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.

- **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

California Public Utilities Commission | Safety and Enforcement Division

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 is planned for late 2016 and revenue service begins late 2021. 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-186 accepting the SSCP for consideration. The Safety and Security Certification Plan (SSCP) was approved at the Commission Meeting on January 19, 2017, as Resolution ST-186.

- **Other SoCal Safety Certification Projects:** Several projects are in various phases of early design and engineering in the Southern California region: LA Streetcar Project (in City of Los Angeles), and LAX Automated People Mover (for Los Angeles International Airport). Safety upgrades to the Angels Flight Railway (in City of Los Angeles) are currently under review. RTSB staff regularly attends Fire Life Safety Committee meetings, Safety Certification Team meetings, etc., to monitor and track any safety related issues.

STATISTICS SUMMARY

Investigations	
Incidents Reported	17
Incident Investigations Closed	63
Complaints Investigated	0
Rail Transit Inspections	49
Triennial Audits	0

Corrective Action Plans	
New Corrective Action Plans	25
From Triennial Audits	0
From Incidents	0
From Internal Safety/Security Audits	0
From Rail Transit Inspections	25
Closed Corrective Action Plans	19
From Triennial Audits	1
From Incidents	0
From Internal Safety/Security Audits	0
From Rail Transit Inspections	18

ONGOING DATA / TRENDS

